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Cedar Grove Beach Rehabilitation Staten Island, New York

Draft Environmental Impact Statement

November 3, 2011

Site:
Block 4108, p/o Lot 45
Block 4105, p/p Lot 50
Staten Island, New York

Lead Agency:
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A public hearing on the Draft Environmental Impact Statement (DEIS) will be held on Thursday, November 17, 2011, between the hours of 7:00 p.m. and 9:00 p.m. at Community Board 2, Lou Caravone Community Service Building, 460 Brielle Avenue, Staten Island, New York, 10301. Written comments on the DEIS are requested and will be received and considered by the Lead Agency through Friday, December 2, 2011.

Table of Contents

Figures

Tables

APPENDICES

1.0 EXECUTIVE SUMMARY

1.1 PROJECT DESCRIPTION

The New York City Department of Parks and Recreation (NYCDPR) proposes to rehabilitate a portion of Cedar Grove Beach, an approximately 30-acre site (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45) in the New Dorp community of Staten Island (Staten Island Community District 2).

The project site is located in Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). Although a mapped City park since 1962, the configuration of the land and beach discouraged public use. The site contains a collection of approximately 42[1] seasonal beach bungalows that pre-date the park mapping, a clubhouse, a barn, a guardhouse and five ancillary garage structures (50 total structures). The New York State Office of Parks Recreation and Historic Preservation (OPRHP) recently determined that the project area is also eligible for listing on the State and National Registers of Historic Places (S/NR eligible).

The proposed action involves the rehabilitation of a portion of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. The project site currently contains a number of structures, which had been used for private seasonal summer occupancy by members of the Cedar Grove Beach Club. Pursuant to a written agreement between the Parks Department and the Cedar Grove Beach Club, the bungalows were vacated by or before September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition. In addition to the opening of the beach area for public swimming, the existing pick-up sports play area would be opened for public use. New fencing would be installed along Ebbitts Street and the existing playground would be removed and replaced with new children's play equipment.

The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has determined that the Cedar Grove Beach Club at Cedar Grove Beach constitutes a State/National Register of Historic Places (S/NRHP)-eligible historic district. Known as the Cedar Grove Beach Club Historic District, it is eligible for listing as the last beach colony surviving on Staten Island with a collection of early-20th century bungalows/cottages that have retained their original design and construction detail. Although the New York City Landmarks Preservation Commission (NYCLPC) has determined that the historic district does not qualify as local historic district, the NYCLPC concurs with OPRHP that it is S/NRHP-eligible. As part of the Proposed Action, which was developed in consultation with the OPRHP, seven resources within the eligible Cedar Grove Beach Club Historic District would be retained, rehabilitated, and adaptively reused for public and ancillary park use for NYCDPR uses, including five bungalows (Buildings 1, 4, 7, 9A and 71), the Club House (Building 78) and the Barn, with surrounding landscapes stabilized and developed for NYCDPR beach and recreation programs.

As a result of the proposed action, 43 structures on the project site would be demolished in order to restore the beach in these areas, and improve public access to the coastal area. The structures to be demolished include 37 bungalows, five garages, and the guard house. Construction of the project is divided into two phases[2]: Phase one includes demolition of a majority of the structures on site and adaptive reuse of some structures for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will restore the

[1] A July 7, 2010 OPRHP "Resource Evaluation" references "…38 primarily one-story frame cottages, or bungalows…" However, NYCDPR site reconnaissance has indicated that there are approximately 42 such bungalows in the project area.

[2] Rehabilitation of building #4 was contemplated as part of a separate project undergoing separate review (11DPR011R) in consultation with NYSOPRHP and NYCDPR. Steiner Studios/HBO performed minor rehabilitation of the building for use in its television series Boardwalk Empire.

demolition sites with beach grass and other native plantings. Phase one will include installation of a new bike path/greenway, installation of fencing and consolidation of parking on site into an overflow parking area near Ebbitts Street (parking would be amalgamated to the overflow lawn parking area closest to the park entrance at Ebbitts Street). Phase two involves construction of a new playground, minor rehabilitation of the existing pick up sport play area, and adaptive reuse of other structures on site. Renovations on the project site are anticipated to be complete in the year 2014.

A portion of the beach was opened to the public in May 2011. Temporary mobi mats were placed along the beach for access to the water. Also on a temporary basis two trailers were placed along the beach. One trailer was used as a summer lifeguard headquarters and the other served as a seasonal comfort station for the 2011 beach season. As part of a separate review, foundation remains and debris on the beach off Ebbitts Street and Cedar Grove Court are being removed. The removal of the foundation remains, a project of independent utility to the adjacent New Dorp Beach, is scheduled to be completed by the fall of 2011, prior to the build year of the Cedar Grove Beach Rehabilitation project.

1.2 PURPOSE AND NEED

Great Kills Park is a 307 acre park, the majority of which is dedicated to passive recreation with wooded areas and sandy beaches. The rehabilitation of the Cedar Grove Beach section of Great Kills Park will allow this stretch of beach to be improved, providing necessary active recreation areas and beach space along with the equally important goal of enhancing the area's natural resources.

Although a mapped City park since 1962, the land and beach have not generally been publicly accessible. The redevelopment of Cedar Grove Beach is intended to expand public access and improve recreational resources on this site. A number of buildings on the site are proposed to be demolished in order to restore the beach in these areas, and improve public access to the coastal area. Bike path striping would be painted and greenway signage and bicycle improvements would be implemented, further improving access to and through the site. A number of structures that have been selected to remain on site would be adaptively reused for public and ancillary park use. In addition to the opening of the beach area for public swimming, the existing pick-up sport play area would be made available for public use. The existing children's play equipment would be removed, relocated and replaced with new children's play equipment. New fencing would be installed and parking on site would be consolidated and made more efficient by relocating parking spaces to one area. Instead of one to two parking spots along roadways directly in front of each structure, parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street.

1.3 REQUIRED APPROVALS

In order to implement the removal of existing structures and rehabilitation of the Cedar Grove Beach project site, the Proposed Action requires the following public approvals, consultation, and review procedures:

<u>New York City</u>

- NYC Department of Buildings (DOB) approval for demolition plans.
- Coastal Zone consistency determination.

<u>New York State/Federal</u>

- New York State Department of Environmental Conservation (NYSDEC) Freshwater and/or Tidal Wetlands Permit.
- NYS DEC Coastal Erosion Hazard Areas Approval.
- NYS DEC State Pollution Discharge Elimination System (SPDES) permit for stormwater discharges associated with construction activities.
- NYS DEC must consult with the New York State Office of Parks Recreation and Historic Preservation (OPRHP) pursuant to § 1409 of the Parks, Recreation and Historic Preservation Law.

- Letter of Resolution between NYSDEC, OPRHP, and NYCDPR to document the alternatives to retain the district, the process to minimize harm and mitigation measures to be included in the project

The proposed project does not require a US ACOE § 404 Clean Water Act Permit, as determined by the Army Corps of Engineers.

Under the State Environmental Quality Review Act (SEQRA), the NYCDPR must undertake a review of the possible environmental impacts of the proposed project. This DEIS has been prepared to assist and guide decision makers in reaching their conclusions and to ensure that they have a full understanding of the environmental consequences of the proposed action and its alternatives. The regulations are intended to permit the analysis of environmental factors and to clarify social and environmental issues in the early planning and decision-making stage of major projects. This assessment provides a way to systematically consider environmental effects with other aspects of project planning and design.

The proposed action is subject to SEQRA and its implementing regulations set forth in Title 6 of the New York Codes, Rules and Regulations (6 NYCRR) Part 617. Actions determined not to have a significant impact on the environment, or Type II actions as promulgated by 6 NYCRR Part 617.5, are not subject to environmental review. Actions that are subject to environmental review are Type I actions and Unlisted actions. Type I actions are those actions that are listed in 6 NYCRR Part 617.4. Unlisted actions are all other actions not listed as Type I or Type II. The project site is located in the State/National Register-eligible Cedar Grove Beach Club Historic District and within publicly owned parkland. For this reason, the proposed action is classified as a Type I action, pursuant to the New York State Environmental Quality Review Act (SEQRA), 6 NYCRR Part 617.4 (b) (9) and (b) (10).

1.4 POTENTIAL IMPACTS OF THE PROPOSED PROJECT

Land Use, Zoning and Public Policy

No significant adverse land use or zoning impacts would occur as a result of the Proposed Action. Zoning is not applicable to lands under the jurisdiction of NYCDPR. Additionally, the type of land use is not changing, as the area is currently parkland and will remain parkland in the future. The project is located within the Waterfront Revitalization Program (WRP) boundaries and, therefore, was assessed for consistency with New York City's Waterfront Revitalization Program. As discussed in this DEIS, the proposed action would not conflict with the WRP policies. In addition, the proposed action would not conflict with the policies of the PlaNYC and the Staten Island Growth Management Plan. Thus, no significant adverse impacts to public policy are expected as a result of the Proposed Action.

Open Space

The proposed project would revitalize and enhance existing open space by rehabilitating Cedar Grove Beach and by formalizing existing recreation areas within the park. Furthermore, the proposed project would establish a beachfront recreational area for the enjoyment of the general public and year round recreational areas. The proposed project would not result in significant adverse impacts on open space and no further open space analysis is warranted by the Proposed Action.

Historic and Cultural Resources

The Historic and Cultural Resources analysis presented in the DEIS concluded that the Proposed Action would lead to a significant adverse effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District. The Proposed Action would however, allow for seven resources within the eligible historic district, including five bungalows (Buildings 1, 4, 7, 9A and 71), Club House (Building 78), and the Barn, to be adaptively reused and the surrounding landscape to be restored and upgraded for public beach and recreation uses. As the Proposed Action would lead to a significant adverse effect on the eligible Cedar Grove Beach Club Historic District, mitigation measures would need to be explored and implemented, in coordination with OPRHP.

With regard to archaeological resources, the DEIS concluded that if final designs for the Proposed Action involve ground disturbance in areas within the Cedar Grove Beach property noted as moderately or highly sensitive for archaeological resources in the *Phase IA Archaeological Documentary Study* NYCDPR will coordinate with OPRHP and NYCLPC to determine if and how limited Phase IB field testing would be undertaken once the degree of disturbance to the ground surface in these locations is identified.

To mitigate the significant adverse effect of the Proposed Action on the eligible historic district, it is anticipated that NYCDPR and OPRHP would coordinate to select the appropriate mitigation measures. This agreement, documented in a Letter of Resolution (LOR) between NYCDPR, OPRHP, and New York State Department of Environmental Conservation (DEC) will describe the actions to be undertaken by NYCDPR. First, NYCDPR will record the eligible historic district and, second, protect the resources to remain while rehabilitating them according to OPRHP and NYC Department of Buildings standards. Potential mitigation measures are described in **Chapter 3.3**, "Historic and Cultural Resources."

Natural Resources

Under the proposed action, there would be some modification of the existing habitats. Most of the habitats would remain unchanged; however, areas of grass lawns and grass lawns with trees near the bungalows would be converted to parking spaces, a playground, and a footpath. Also, many of the existing bungalows would be removed and the areas replanted with native dune vegetation. These actions would result in a net positive increase of ecological value for the site. Moreover, the maritime dune vegetation would provide increased habitat areas for the state endangered species, beach sandbur, to exist. Most of the fauna that utilize the site now are species common to urban and suburban environments. During construction, some of these species may be displaced; however, the large tracts of undeveloped land adjacent to the site could accommodate any displacement. Once construction is completed, the new habitats, especially the maritime dune communities, would provide attractive habitat to various fauna.

The proposed action would not have any impact on Bird Conservation Areas, Critical Environmental Areas, or Significant Coastal Fish and Wildlife Habitats, as these resources do not occur on and/or immediately adjacent to the site. It is anticipated the project would have a net positive impact on the Coastal Erosion Hazard Area (CEHA). The project would remove existing man-made structures within the CEHA and replace those areas with planted dune vegetation.

As the Proposed Action would involve work within New York State's freshwater and tidal wetlands and/or regulated adjacent areas, the Project Sponsors would coordinate with the NYSDEC pursuant to the state's Freshwater Wetlands Regulatory Program and Tidal Wetlands Permit Program. In addition, the NYSDEC likely would require authorization of a Section 401 Water Quality Certification to ensure that proposed work under the Proposed Action within state regulated waters and/or wetlands do not contravene state water quality standards. Best management practices for the control of sedimentation and erosion would be required to control potential silt and sediment releases to surface waters and wetlands. The United States Army Corps of Engineers (USACE) indicated that a USACE permit would not be required, as the rehabilitation of Cedar Grove Beach is not anticipated to involve dredging, placement of any dredged or fill material, or construction activities over any navigable waters or waterbodies of the United States. Based on the final construction plans prepared under the Proposed Action, the Project Sponsors will continue to coordinate with NYSDEC and USACE and all applicable permits will be sought as needed.

It is anticipated that the Proposed Action would not adversely impact tidal wetland areas and/or regulated adjacent areas. Nor would it adversely impact freshwater wetland areas and/or regulated adjacent areas. The Proposed Action primarily involves removal of manmade structures and impervious surfaces within regulated areas and replacement of these impervious materials with native plantings and landscaping. Thus, the Proposed Action would not have a significant negative effect upon the ecological value of the tidal or freshwater wetlands.

Hazardous Materials

Based on the findings of the Phase I Environmental Site Assessment (ESA) prepared for the project site, no known recognized environmental conditions (RECs) associated with the project site were identified. Further, based on field observations made during the site reconnaissance and a review of available documents, no evidence of underground storage tanks were identified on the project site. There is potential, based on the age of the buildings on the project site, that lead-based paints and/or asbestos containing material (ACM) are present. As part of the overall rehabilitation of the project site, the New York City Department of Parks and Recreation is committed to the proper removal of lead-based paints and/or ACM on the project site, in accordance with all applicable federal, state and city standards. Therefore, no significant adverse hazardous materials impacts are expected as part of the proposed action.

Transportation

The result of the traffic analysis shows that the westbound approach to the signalized Mill Road and Ebbitts Street intersection is projected to experience potentially significant traffic impacts during both weekend peak hours under the future action condition. During the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase from 38.9 seconds per vehicle (LOS “D”) under future without the proposed action conditions, to 81.2 seconds per vehicle (LOS “F”) under future action conditions. During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase from 32.1 seconds per vehicle (LOS “C”) under future without the proposed action conditions, to 90.4 seconds per vehicle (LOS “F”) under future with the proposed action conditions. No significant traffic impacts are projected to occur at the stop-controlled intersection of Cedar Grove Avenue and Ebbitts Street during either analysis peak hour as a result of the proposed action.

Neighborhood Character

The proposed action is not expected to result in a significant adverse neighborhood character impact. In the future with the action, the Cedar Grove Beach project site would be rehabilitated and public accessibility would be improved, including the preservation and adaptive reuse of select historic resources. The project site’s natural features would be enhanced by the proposed action, including views of the beach and waterfront. Therefore, although the proposed action would alter the character of the neighborhood by removing some resources on site, the change would not constitute a significant adverse impact to the overall surrounding neighborhood character.

Construction Impacts

Although some temporary construction-related impacts would occur during demolition of existing structures and the restoration of the Cedar Grove Beach project site, it is not expected that construction activities would result in any significantly adverse construction-related impacts. Construction protection plans would be developed to mitigate the adverse effects caused by construction, specifically for the historic structures that are proposed to remain on the project site, and to ensure the integrity of high and moderately sensitive archeological areas during construction activities. Further, significant adverse construction-related impacts are not expected on natural resources, hazardous materials, transportation, open space, socioeconomic conditions, community facilities, land use and public policy, neighborhood character or infrastructure. Any construction impacts related to air quality or noise would be of limited duration and measures would be followed to minimize fugitive dust or construction noise levels. Thus, no significant adverse construction impacts are expected as a result of the proposed action.

Alternatives

The DEIS considered three alternatives to the proposed action, to examine reasonable and practicable options that avoid or reduce action-related significant adverse impacts and may still allow for the achievement of the stated goals and objectives of the Proposed Action. The DEIS includes the analysis of a No-Action Alternative which examines future conditions within the project site assuming the absence of the Proposed Action. In addition to the No-Action Alternative, the DEIS assessed two alternatives to the

Proposed Action and considered their ability to achieve the goals and objectives of the Proposed Action. The first alternative assessed is the Complete Demolition and Rebuild Alternative, under which all resources within the eligible Cedar Grove Beach Club Historic District would be demolished, landscapes would be restored and stabilized, and a new facility to support beach and recreation operations would be constructed. The second alternative assessed is the Full Restoration Alternative under which all resources within the eligible Cedar Grove Beach Club Historic District would be retained and rehabilitated, including the stabilization and restoration of surrounding landscapes for beach and recreation uses.

No-Action Alternative

Under the No-Action Alternative all resources that comprise the eligible S/NRHP-eligible Cedar Grove Beach Historic District would be retained, it is anticipated that the No-Action Alternative would likely have a negative effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District because the resources within it would be exposed to the elements. Exposure to the elements may ultimately result in possible deterioration of resources within the eligible historic district, which in turn would have a negative effect on neighborhood character. In addition, the No-Action Alternative does not meet the purpose and need of the project, which is to rehabilitate Cedar Grove Beach through expansion of public access, improvement of recreational resources, and preservation of select resources within the S/NRHP-eligible Cedar Grove Beach Historic District. The No-Action alternative would reduce public access by fencing off approximately 19 acres of open space. The restoration of select bungalows would not occur under the No-Action Alternative. Thus, the resources needed by NYCDPR for maintenance and operations purposes and the public in the form of public amenities typically provided at public beaches, such as a food concession and comfort station, would not be provided and trailers would be brought in seasonally to serve as both lifeguard and comfort stations.

Complete Demolition and Rebuild Alternative

The Complete Demolition and Rebuild Alternative would serve the programmatic goals of the project it would result in an adverse effect on the eligible Cedar Grove Beach Historic District, as all structures that comprise the district would be demolished. Historic landscape elements such as plantings, trees, paths and recreation features would be retained, but their presence alone would not contribute to the beach colony environment identified in the S/NRHP eligibility determination. Thus, the Complete Demolition and Rebuild Alternative would not meet the preservation goals as set forth in the project purpose and need for the Proposed Action.

Full Restoration Alternative

The Full Restoration Alternative would be beneficial to the eligible historic district, as it would retain the resources that contribute to the historic character of the eligible historic district. However, it is not a feasible alternative to the Proposed Action, due to the size, complexity and significant cost required to implement this alternative. NYCDPR does not have the financial capacity or appropriate park related programmatic uses needed to sustain the resources within the historic district under this alternative, or to justify the expense of public funding. Furthermore, 11 of the resources are in a highly compromised area of the CEHA, south of the southern jetty (buildings 27, 28, 29, 30, 31, 32, 33, 33A, 34, 35, and 36) leaving them especially vulnerable to being damage or destruction by future storm events and sea-level rise. It would not be fiscally responsible or in the public's best interest to rehabilitate those structures. The site is exceedingly vulnerable to future storm damage, as witnessed by the degradation of the beach and the structures as a result of historic storms, most recently Tropical Storm/Hurricane Irene in August, 2011. Given the lack of appropriate park related programmatic needs, the vulnerability of the site to future storm damage and the high costs associated with this alternative, it was concluded that the Full Restoration Alternative would not meet the goals of the project.

Mitigation

Traffic and Parking

To mitigate potential traffic impacts identified in the DEIS, a signal-phasing improvement is recommended. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period.

This improvement is designed to accommodate the future traffic volumes projected to occur on the roadway network during critical periods of peak traffic activity under the future with the proposed action condition; specifically, during the peak 15-minute period of the weekend midday and PM peak hours. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated.

Natural Resources

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005).

Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit. In order to offset losses of tidal wetlands, mitigation would be required. A component of this proposed project is the potential removal of bungalows and impervious structures from the regulated adjacent areas. These structures would be replaced with native dune vegetation; thus, a net positive ecological benefit to the regulated adjacent area would occur through implementation of the Proposed Action.

Historic and Cultural Resources

To mitigate the significant adverse effect of the Proposed Action on the eligible Cedar Grove Beach Club Historic District, it is anticipated that NYCDPR and OPRHP would coordinate to select the appropriate mitigation measures. This agreement, documented in a Letter of Resolution (LOR) between NYCDPR, OPRHP, and New York State Department of Environmental Conservation (DEC) will describe the actions to be undertaken by NYCDPR. First, NYCDPR will record the eligible historic district and, second, protect the resources to remain while rehabilitating them according to OPRHP and NYC Department of Buildings standards.

<u>Documentation</u>

The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the proposed action. The scope and content of the HABS documentation was defined in coordination with OPRHP. HABS documentation typically includes a physical description of the overall historic district, including setting; brief physical descriptions of the interior and exterior of buildings and structures, including significant alterations; historic context illustrated by historic photographs and/or maps; and large-format black-and-white photographs of the historic district. OPRHP would also assist NYCDPR in identifying adequate repositories for copies of the documentation.

<u>Construction Protection Plan</u>

The first phase of implementation of the Proposed Action requires removal of 43 buildings and structures from the eligible Cedar Grove Beach Club Historic District. Because seven buildings would be adaptively reused, a construction protection plan should be developed to protect them during the building demolition phase. As indicated in the *CEQR Technical Manual*, the plan should be developed in coordination with

OPRHP and professional engineers appointed by NYCDPR. Elements of the plan may include the following:

- Existing foundation and structural condition information for the seven buildings to be reused.
- Protection from falling objects.
- Monitoring during construction using tell-tales, and horizontal and lateral movement scales (MOEC, May 2010).

Several reference documents also provide useful information on the development of construction protection plans, including "Technical Policy and Procedures Notice No. 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction" prepared by NYCDOB, and "Protecting a Historic Structure During Adjacent Construction" prepared by National Park Service. NYCDPR could also prepare a means and methods plan for how the demolition and construction will proceed on site to ensure that elements to remain (e.g. buildings, structures, trees, landscaping paths) are protected during construction.

Mothballing

It is anticipated that the seven buildings would be adaptively reused. In order to ensure that the seven buildings are adequately preserved prior to renovation, they should be mothballed in general accordance with *Preservation Brief 31*: "Mothballing Historic Buildings," available through NPS. Key elements of mothballing are noted below:

- Document the architectural and historical significance of the building, including character-defining features.
- Prepare a condition assessment of the building.
- Structurally stabilize the building, based on the condition assessment.
- Exterminate or control pests.
- Protect the exterior from moisture penetration.
- Secure the building and its component features to reduce vandalism or break-ins.
- Provide adequate ventilation to the interior.
- Secure or modify utilities and mechanical systems.
- Develop and implement a maintenance and monitoring plan for protection (Park, 1993).

Context-Sensitive Design

As needed, the seven buildings will be rehabilitated in coordination with OPRHP. It is anticipated that the adaptive reuse will be done in a manner that preserves their historic character-defining features.

Unavoidable Adverse Impacts

The demolition of the 43 resources on the project site constitutes a significant adverse impact. Recommended mitigation measures include HABS documentation, construction protection plan, mothballing, and context-sensitive design. Although such actions would document the eligible historic district for posterity and guide the rehabilitation of the remaining seven buildings in a historically appropriate manner, the eligible historic district would cease to exist in its present form. Thus, despite the mitigation measures, the significant adverse impact to historic and cultural resources as a result of the Proposed Action would not be completely eliminated. Therefore, the Proposed Action would result in an unavoidable adverse impact to the eligible Cedar Grove Beach Club Historic District.

Growth Inducing Aspects of the Proposed Action

The proposed action could also lead to nominal growth due to the employment and fiscal effects generated during the construction phase of the proposed project. Finally, the proposed action would not introduce or

expand infrastructure capacity as most of the buildings on site would be removed, and the buildings that remain would be adaptively reused, including the reuse of the existing sewage and water supply systems.

Irreversible and Irretrievable Commitment of Resources

The proposed action would require the irreversible and irretrievable commitment of energy, construction materials, human effort, and funding. The buildings and structures removed in the State/National Register-eligible historic district may be considered a resource loss and potential impacts are in the DEIS. The rehabilitation of the Cedar Grove Beach under the proposed action constitutes a long-term commitment to the operation of the project site as a beach and open space resource, rendering land use for other purposes improbable. Further, funding committed to the design, construction, and operation of the Cedar Grove Beach project site as part of the proposed action would not be available for other projects.

2.0 PROJECT DESCRIPTION

2.1 PROJECT SITE

The New York City Department of Parks and Recreation (NYCDPR) proposes to rehabilitate a portion of Cedar Grove Beach, an approximately 30-acre site (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45) in the New Dorp community of Staten Island (Staten Island Community District 2).

The project site is located within Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). **Figures 1-1** through **1-4**, provided at the end of this chapter, illustrate the project site. Although a mapped City park since 1962, the configuration of the land and beach discouraged public use. The site contains a collection of approximately 42[3] seasonal beach bungalows that pre-date the park, a clubhouse, a barn, a guardhouse and five ancillary garage structures (50 total structures). The New York State Office of Parks Recreation and Historic Preservation (OPRHP) recently determined that the project area is also eligible for listing on the State and National Registers of Historic Places (S/NR eligible).

Cedar Grove Beach is part of a total of 208.7 acres which were title vested to the City of New York on December 27, 1962 with funding provided under the New York State Park and Recreation Land Acquisition Act (NYSPRLAA) and Chapter 523 of the Laws of New York of 1960. Following City approvals for the change to the City Map for the establishment of park additions and for the acquisition of property, as per resolutions adopted by the Board of Estimate on August 23, 1962 (Calendar Numbers 477A thru 477C), an application was made by the City of New York for a grant of state aid through the Park and Recreation Land Acquisition Bond Act Program to acquire Cedar Grove Beach, of which the project area is a part. The Board of Estimate intended, in its 1962 application for state aid, to effectuate the goal of the 1960 law by acquiring an addition to Great Kills Park for "[expanding] the existing bathing facilities in Great Kills Park when the need arises. Aside from providing additional shorefront facilities, the inland portions of this site can be developed with playgrounds to serve the neighboring community." A project known as Shore Front Drive was proposed to link the park sites along the southern and eastern shores.

The NYSPRLAA and additional funds provided through Chapter 491 of the Laws of New York of 1963, created the State's Park and Recreation Land Acquisition Bond Act Program to meet the needs of the growing population of the state through acquisition of predominantly open or natural lands for park, conservation, and outdoor recreation purposes. The addition of Cedar Grove as parkland, which was formally designated as an addition to Great Kills Park, was one of four parks on Staten Island funded through the State's Park and Recreation Land Acquisition Bond Act Program. The City acquired Cedar Grove through condemnation and affected owners were compensated for the fair market value of their land. The other Staten Island parks funded through the program were High Rock Park, Lemon Creek Park, and the South Shore Golf Course.

2.2 DESCRIPTION OF THE PROPOSED ACTION

2.2.1 Future With-Action Condition

The Proposed Action involves the rehabilitation of a portion of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. The project site currently contains a number of structures, which had been used for private seasonal summer occupancy by members of the Cedar Grove Beach Club. Pursuant to a written agreement between the Parks Department and the Cedar Grove Beach Club, the bungalows were vacated by or before September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition. In addition to the opening of the beach area for public swimming, the existing pick-up sports play area would be opened for public use.

[3]A July 7, 2010 OPRHP "Resource Evaluation" references "…38 primarily one-story frame cottages, or bungalows…" However, NYCDPR site reconnaissance has indicated that there are approximately 42 such bungalows in the project area.

New fencing would be installed along Ebbitts Street and the existing playground would be removed and replaced with new children's play equipment.

The New York State Office of Parks, Recreation and Historic Preservation (NYSOPRHP) has determined that the Cedar Grove Beach Club at Cedar Grove Beach constitutes a State/National Register of Historic Places (S/NRHP)-eligible historic district. Known as the Cedar Grove Beach Club Historic District, it is eligible for listing as the last beach colony surviving on Staten Island with a collection of early-20th century bungalows/cottages that have retained their original design and construction detail. Although the New York City Landmarks Preservation Commission (NYCLPC) has determined that the historic district does not qualify as local historic district, the NYCLPC concurs with NYSOPRHP that it is S/NRHP-eligible. As part of the Proposed Action, which was developed in consultation with the NYSOPRHP, seven resources within the Cedar Grove Beach Club Historic District would be retained, rehabilitated, and adaptively reused for public and ancillary park use for NYCDPR uses, including five bungalows (Buildings 1, 4, 7, 9A and 71), Building 78 (the Club House) and the Barn, with surrounding landscapes stabilized and developed for NYCDPR beach and recreation programs. Four of the seven resources (Buildings 1, 4, 71 and 78) possess high architectural integrity, according to NYSOPRHP.

The S/NRHP eligibility determination references the layout of the bungalows along the shoreline as an important development pattern that is integral to the significance of the Cedar Grove Beach Club Historic District. The Proposed Action retains this pattern by rehabilitating Buildings 1, 4, 7, and 9A at the north end of the historic district. This cluster is located adjacent to public parking and the historic entrance to the beach club, and its location lends itself to adaptive reuse by NYCDPR. Building 78 (Club House) is also proposed for adaptive reuse, and contributes to social history patterns of the beach club as a communal gathering location. Building 71 is proposed for reuse because it is located upland at a distance from the Coastal Erosion Hazard Line, while still close to the main entrance. The Barn is proposed for reuse because it is in relatively good condition as compared to the other 49 resources within the historic district, and its upland location would allow it to function well as a storage resource for NYCDPR.

The seven resources could require upgrades to current New York City Building Codes to obtain a Certificate of Occupancy (C of O) for their intended programs and uses. Typical upgrades could include:

- ADA accessible ramps and entry doors.
- Utilities and weather insulation for energy efficiency.
- Structural reinforcements.
- Life safety improvements.

Proposed uses are indicated in **Table 2-1** for each resource with corresponding analysis of the effect on historic integrity. Further details on the reuse rationale and general schemes of each resource are provided in **Chapter 3.3** (*Historic and Cultural Resources*). Although alterations would be required to meet programming and code standards, where possible, character-defining features would be retained, and alterations would be designed in a context-sensitive manner.

Table 2-1 Historic Resources to be Rehabilitated Under Proposed Action

Building Number	Building Type	Proposed Use	Reuse Rationale and General Scheme
1	Bungalow	Staten Island Borough District Office and Parks Enforcement Patrol (PEP) Office	Its architectural integrity and its upland location near public parking makes Building 1 suitable choice for reuse as office; existing interior arrangement facilitates conversion; alterations would be minimal, and general layout and character-defining features would be retained.
4	Bungalow	Public Concession	Largest bungalow to be adaptively re-used; recently partially renovated in coordination with OPRHP, and retains most historic integrity and character in eligible historic district; reuse as concession would retain historic materials and features.
7	Bungalow	Lifeguard Station	Reuse based on fair condition rating, central location, open floor plan, and large windows that provide beach visibility; protrudes furthest onto beach toward water, allowing for best access from beach; interior would need to be made fully handicap accessible and modernized; exterior retains moderate historic integrity, and could be rehabilitated in a historically appropriate manner.
9A	Bungalow	Comfort Station	Proposed use as comfort station is based on central location along beach and its fair condition rating; retains moderate historic integrity; interior would require full renovation to accommodate the proposed adaptive reuse.
71	Bungalow	Caretaker	Proposed use as upland caretaker's building is based on its architectural integrity and location away from beach at west end of eligible historic district; would require restoration of existing historic finishes with minor design modifications and upgrades.
78	Club House	Visitors Center	Proposed use as visitors center is based on building's historic use as Cedar Grove Beach Club House and central common meeting space; largest building within eligible historic district; building is modern and moderate historic features.
N/A	Barn	Staten Island Borough Supply Storage	Proposed use as supply building; building is modern and has no historic features.

Note: * Architectural integrity according to NYS OPRP.

As a result of the Proposed Action, 43 structures on the project site would be demolished in order to restore the beach in these areas, and improve public access to the coastal area. The structures to be demolished include 37 bungalows, five garages, and the guard house. Of the 43 structures proposed to be demolished, eight bungalows (Buildings 15, 16, 18, 21, 30, 32, 70, and 74), which vary in overall condition ratings from poor to very poor, are historic resources possessing a high architectural integrity to the NYSOPRHP.

The proposed restoration of the natural landscape would result in minor modifications to the topography of the site, with the removal of the bungalows and creation of sand dunes in their place resulting in a rolling topography near the beach, replanted with native dune vegetation. While the Proposed Action would result in some modification of the existing habitats, most of the habitats would remain unchanged. Existing parking on the site would be used for beach patrons. A playground, and a footpath could be included as part of the Proposed Action, and replanted maritime dune vegetation would provide increased habitat areas for select species. No dredging or construction would take place inwater.

Construction of the project is divided into two phases[4]: Phase one includes demolition of a majority of the structures on site and adaptive reuse of some structures for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase one will include installation of a new bike path/greenway signage, installation of fencing and consolidation of parking on site into an overflow parking area near Ebbitts Street (parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street). Phase two involves construction of a new playground, minor rehabilitation of the existing pick up sport play area, and adaptive reuse of other structures on site. Renovations on the project site are anticipated to be complete in the year 2014.

A portion of the beach was opened to the public in May 2011. Temporary mobi mats were placed along the beach for access to the water. Also on a temporary basis, two trailers were placed along the beach. One trailer was used as a summer lifeguard headquarters and the other serves as a seasonal comfort station for the 2011 beach season. As part of a separate review, NYCDPR will remove foundation remains and debris on the beach off Ebbitts Street and Cedar Grove Court. The removal of the foundation remains a project of independent utility to the adjacent New Dorp Beach is scheduled to be completed by the fall of 2011, prior to the build year of the Cedar Grove Beach Rehabilitation project.

2.2.2 Future No-Action Condition

In the Future No-Action Condition scenario (i.e., the future without the Proposed Action), it is expected that all of the bungalows and other structures on site would remain subject to the natural elements and would be cordoned off from public access.[5] The beach area would remain in its current state with temporary trailers being brought in to allow for seasonal beach operations. The structures on site would remain and the upland areas would not be otherwise restored and available for public and ancillary park use.

2.3 REQUIRED APPROVAL AND REVIEW PROCEDURES

In order to implement the removal of existing structures and rehabilitation of the Cedar Grove Beach project site, the Proposed Action requires the following public approvals, consultation, and review procedures:

<u>New York City</u>

- NYC Department of Buildings (DOB) approval for demolition plans.
- Coastal Zone consistency determination.

[4] Rehabilitation of Building #4 was contemplated as part of a separate project undergoing separate review (11DPR011R) in consultation with OPRHP and NYCDPR. Steiner Studios/HBO has performed minor rehabilitation of the building for use in its television series Boardwalk Empire.

New York State/Federal

- New York State Department of Environmental Conservation (NYSDEC) Freshwater and/or Tidal Wetlands Permit.
- NYS DEC Coastal Erosion Hazard Areas Approval.
- NYS DEC State Pollution Discharge Elimination System (SPDES) permit for stormwater discharges associated with construction activities.
- NYS DEC must consult with the New York State Office of Parks Recreation and Historic Preservation (NYSOPRHP) pursuant to § 1409 of the Parks, Recreation and Historic Preservation Law.
- Letter of Resolution between NYSDEC, NYSOPRHP, and NYCDPR to document the alternatives to retain the district, the process to minimize harm and mitigation measures to be included in the project

The proposed project does not require a US ACOE § 404 Clean Water Act Permit, as determined by the Army Corps of Engineers.

Under the State Environmental Quality Review Act (SEQRA), the NYCDPR must undertake a review of the possible environmental impacts of the proposed project. This environmental assessment has been prepared to assist and guide decision makers in reaching their conclusions and to ensure that they have a full understanding of the environmental consequences of the Proposed Action and its alternatives. The regulations are intended to permit the analysis of environmental factors and to clarify social and environmental issues in the early planning and decision-making stage of major projects. This assessment provides a way to systematically consider environmental effects with other aspects of project planning and design.

The Proposed Action is subject to SEQRA and its implementing regulations set forth in Title 6 of the New York Codes, Rules and Regulations (6 NYCRR) Part 617. Actions determined not to have a significant impact on the environment, or Type II actions as promulgated by 6 NYCRR Part 617.5, are not subject to environmental review. Actions that are subject to environmental review are Type I actions and Unlisted actions. Type I actions are those actions that are listed in 6 NYCRR Part 617.4. Unlisted actions are all other actions not listed as Type I or Type II. The project site is located in the State/National Register-eligible Cedar Grove Beach Club Historic District and within publicly owned parkland. For this reason, the Proposed Action is classified as a Type I action, pursuant to the New York State Environmental Quality Review Act (SEQRA), 6 NYCRR Part 617.4 (b) (9) and (b) (10).

The Proposed Action is subject to the City Environmental Quality Review (CEQR) procedures and the NYCDPR has assumed the role as lead agency.

2.4 PURPOSE AND NEED

Great Kills Park is a 307 acre park, the majority of which is dedicated to passive recreation with wooded areas and sandy beaches. The rehabilitation of the Cedar Grove Beach section of Great Kills Park will allow this stretch of beach to be improved, providing necessary active recreation areas and beach space along with the equally important goal of enhancing the area's natural resources.

Although a mapped City park since 1962, the land and beach have not generally been publicly accessible. The redevelopment of Cedar Grove Beach is intended to expand public access and improve recreational resources on this site. A number of buildings on the site are proposed to be demolished in order to restore the beach in these areas, and improve public access to the coastal area. Bike path striping would be painted and greenway signage and bicycle improvements would be implemented, further improving access to and through the site. A number of structures that have been selected to remain on site would be adaptively reused for public and ancillary park use. In addition to the opening of the beach area for public swimming, the existing pick-up sport play area would be made available for public use. The existing children's play equipment would be removed, relocated and replaced with new children's play equipment. New fencing would be installed along Ebbitts Street and parking on site would be consolidated and made more efficient by relocating parking spaces to one area. Instead of one to two parking spots along

roadways directly in front of each structure, parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street.

2.5 ENVIRONMENTAL REVIEW PROCESS

This Environmental Impact Statement (EIS) has been prepared to assess the potential impacts of the proposed Cedar Grove Beach Rehabilitation. The EIS was prepared in conformance with all applicable laws and regulations, including Executive Order No. 91 of 1977 and the New York City Environmental Quality Review (CEQR) regulations and followed the guidelines of the *CEQR Technical Manual*. An Environmental Assessment Statement (EAS) was completed on February 10, 2011. It is appended to this EIS as Appendix C. Acting as the lead agency, the NYCDPR determined that the Proposed Action would not have the potential for significant adverse environmental impacts in thirteen impact categories set forth in the *CEQR Technical Manual*, as described below, and would have the potential for significant adverse environmental impacts in seven of the impact categories. . Therefore, detailed assessments of the likely effects in these seven impact categories were prepared and are disclosed in this targeted EIS.

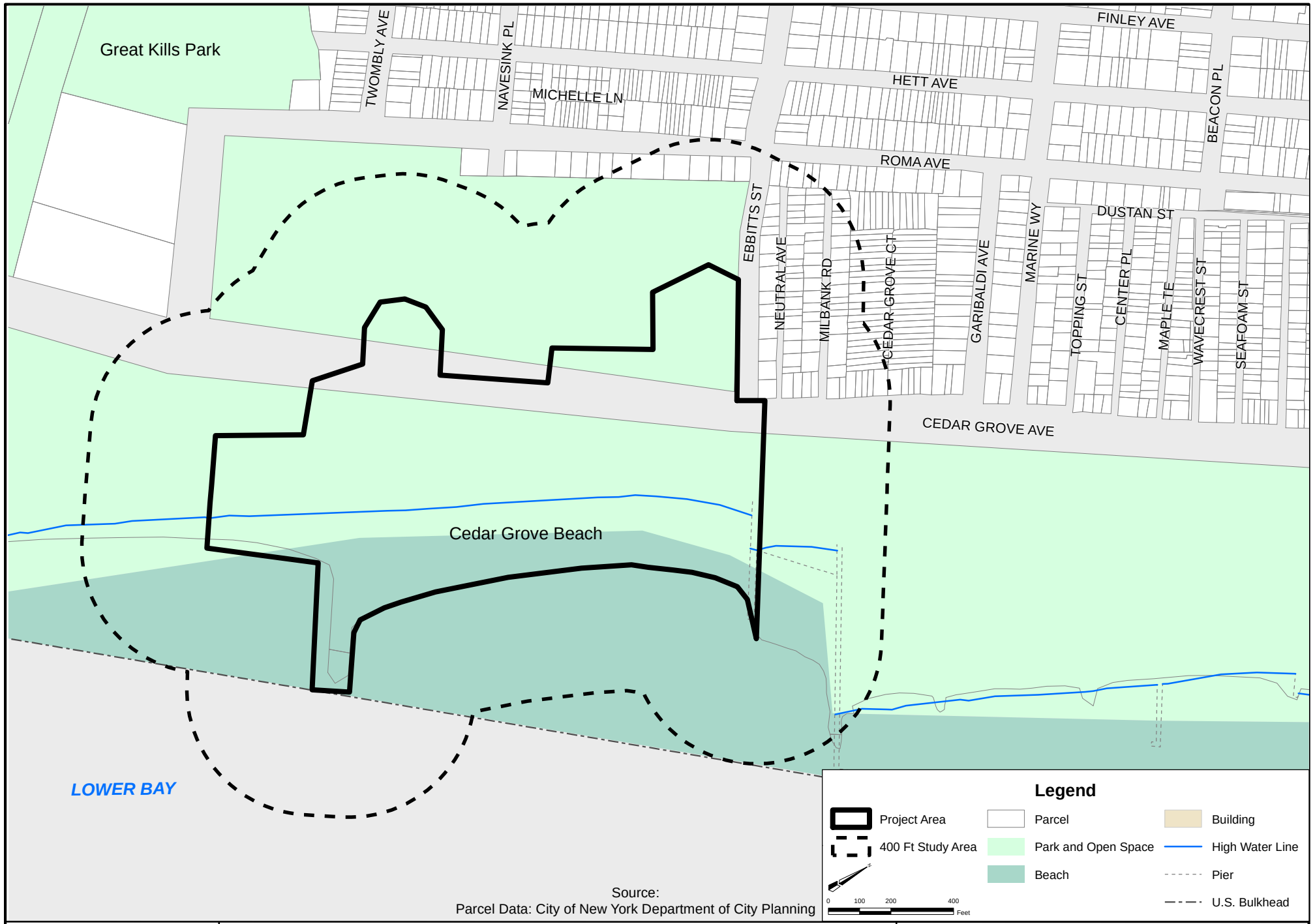
A draft scoping document that sets forth the analyses and methodologies proposed for the EIS was issued on Thursday, February 10, 2011. The public, involved and interested agencies, Staten Island Community Board 2 and elected officials were invited to comment on the scope, either in writing or orally, at a public scoping meeting held on Wednesday, March 16, 2011, between the hours of 7:00 PM and 9:00 PM at Community Board 2, Lou Caravone Community Service Building, 460 Brielle Avenue, Staten Island, NY 10301. Comments received during the public meeting, and written comments received up to 10 days after the hearing, were considered and incorporated as appropriate into a final scope of work. The final scope of work was used as a framework for preparing the EIS for the Proposed Action. The final scoping document was issued on August 19, 2011.

This EIS includes a review and analysis targeted to the seven identified potential impact categories including: Land Use, Zoning and Public Policy; Historic and Cultural Resources; Hazardous Materials; Natural Resources; Transportation; Neighborhood Character and Construction Impacts. In addition, the document includes analyses of Alternatives to the Proposed Action.

The remaining CEQR impact categories have undergone a screening analysis as part of the Environmental Assessment Statement (EAS) for the Proposed Action. Under guidelines specified in the *CEQR Technical Manual*, it was determined that for these remaining categories, no significant adverse impacts are anticipated and a detailed analysis is not required. Consequently, these environmental categories are not assessed in the EIS. The environmental categories that were not assessed are: Socioeconomic Conditions; Community Facilities and Services; Shadows; Urban Design and Visual Resources; Water and Sewer Infrastructure, Solid Waste and Sanitation Services; Energy; Air Quality; Greenhouse Gas Emissions; Noise; and Public Health.

The EIS contains a description and analysis of the Proposed Action and its environmental setting; the environmental impacts of the Proposed Action, including its short and long term effects, and typical associated environmental effects; identification of any adverse environmental effects that can be avoided through incorporation of corrective measures into the Proposed Action; a discussion of alternatives to the Proposed Action; the identification of any irreversible and irretrievable commitments of resources that would be involved in the Proposed Action should it be implemented and a description of any necessary mitigation measures proposed to minimize adverse environmental impacts.

The projected conditions under each future scenario are described in Section 2.2 of this chapter. The impact analyses on the EIS are based on a build year of 2014, when renovations on the project site would be completed.



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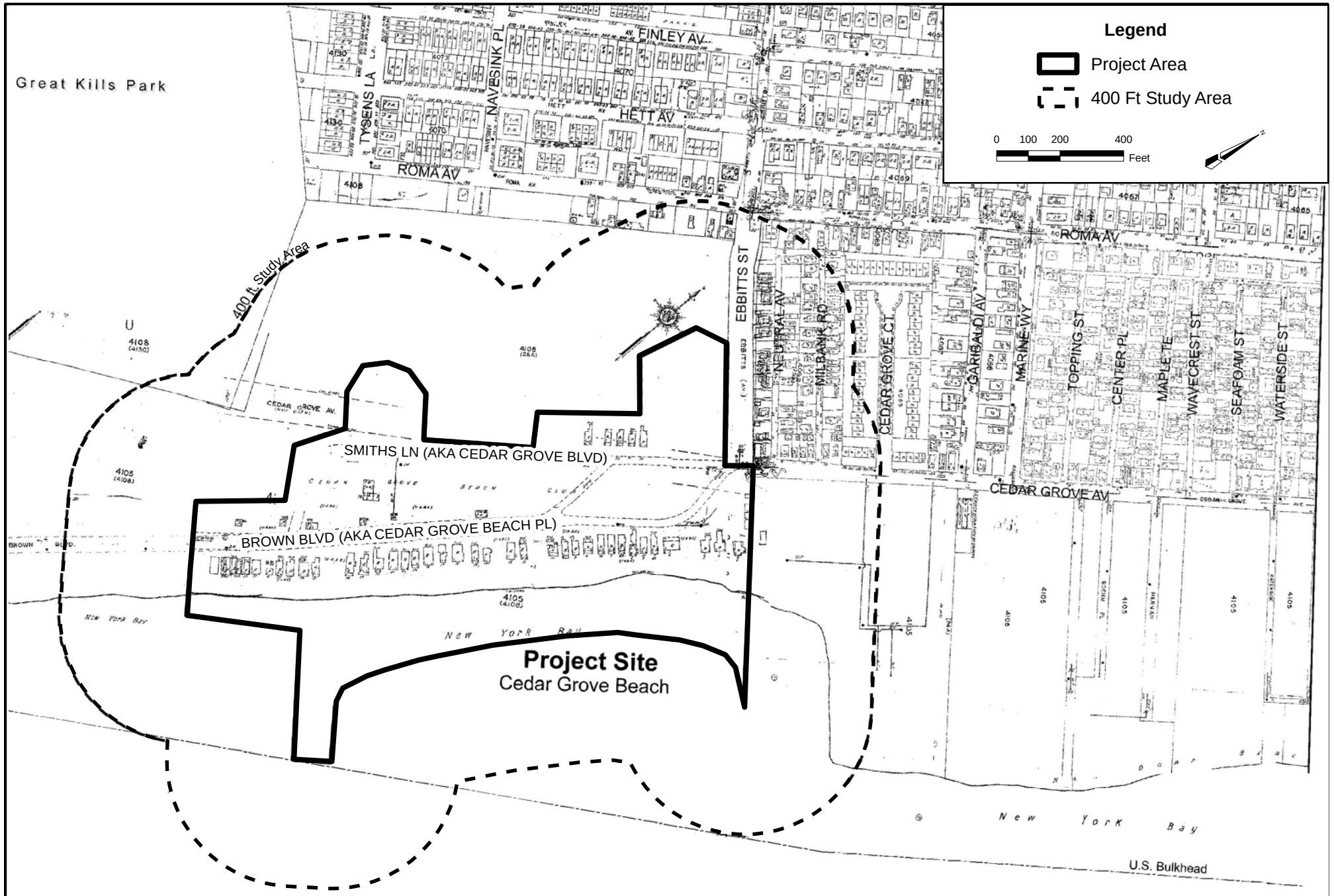
Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Site Map

Figure 2.1-1



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Environmental Impact Statement
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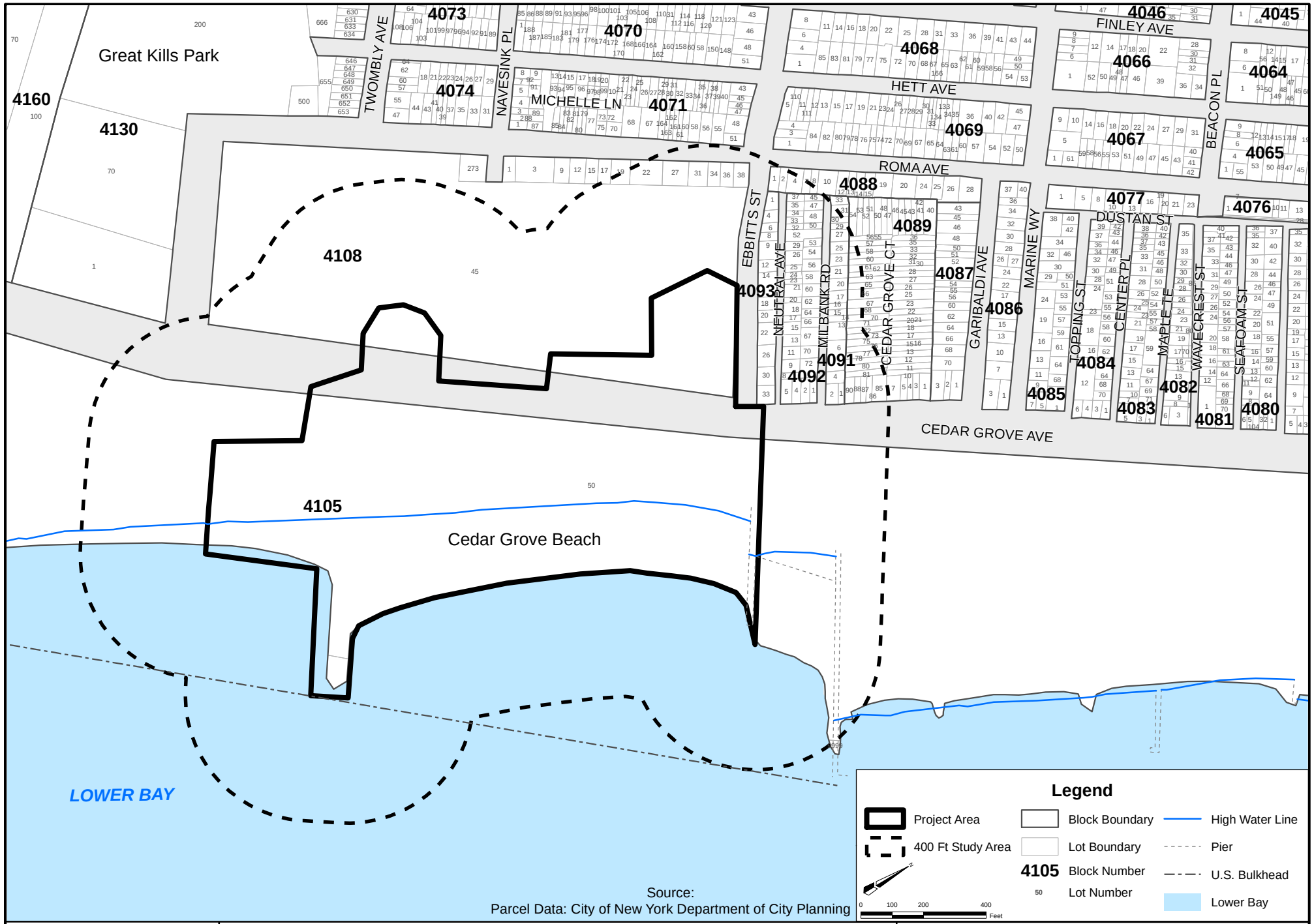
Sanborn Map

Figure 2.1-2



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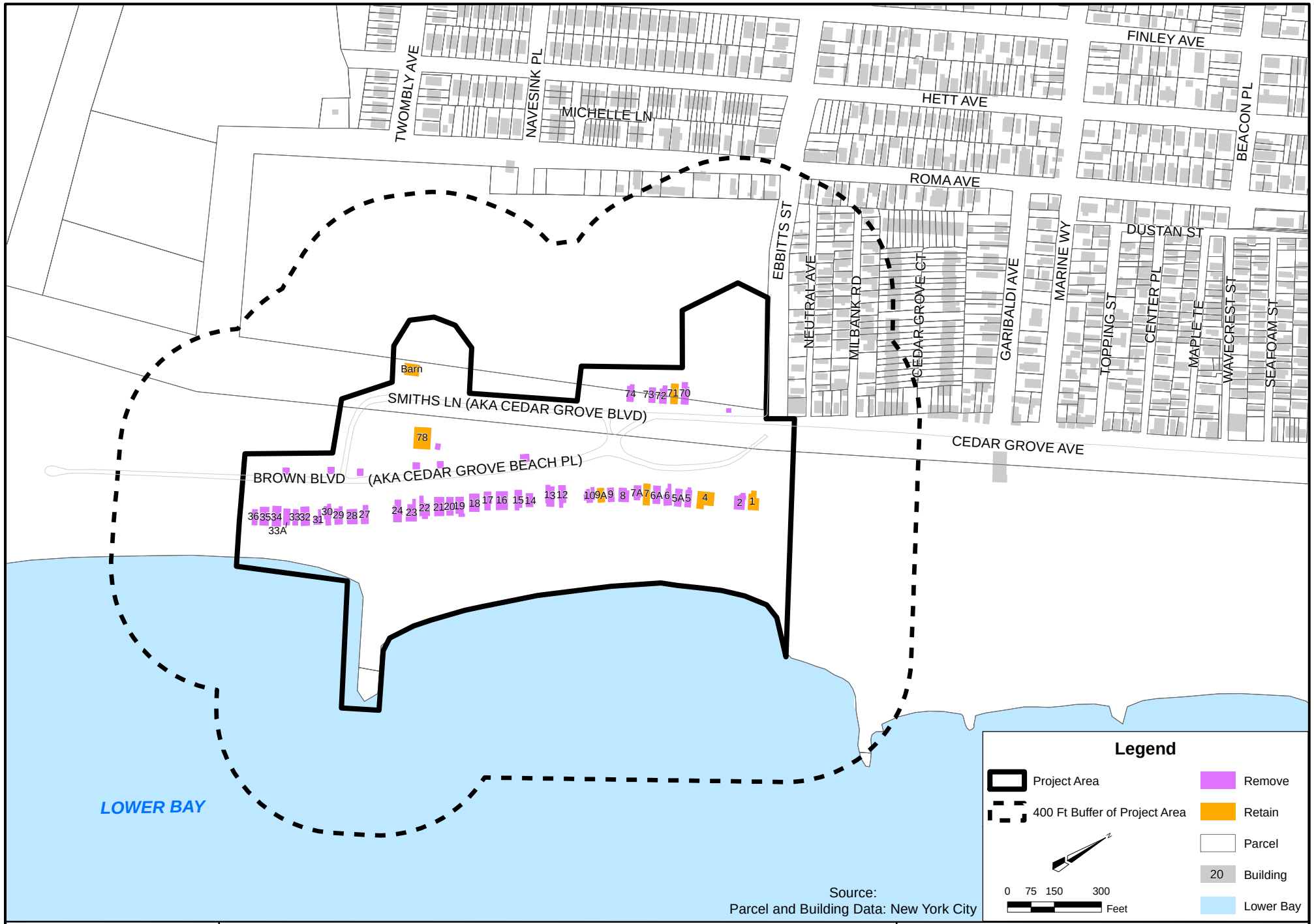
Environmental Impact Statement
NYC Department of Parks and Recreation

Tax Map

Figure 2.1-3



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Proposed Action Development Scenario

Figure 2.1-4

3.0 POTENTIAL IMPACTS OF THE PROPOSED ACTION

3.1 LAND USE, ZONING AND PUBLIC POLICY

Introduction

A detailed assessment of land use, zoning, and public policy is appropriate if a Proposed Action has the potential to result in a significant change in land use or zoning, or would substantially affect regulations or public policies governing land uses. A land use analysis characterizes the uses and development trends in the study area and assesses whether a Proposed Action is compatible with, or may affect land use conditions. Consistent with *CEQR Technical Manual* guidelines, an assessment of zoning is performed in conjunction with a land use analysis when the Proposed Action would change the zoning on the site or result in the loss of a particular use. An assessment of public policy typically accompanies the land use and zoning assessments to address the compatibility of the project with relevant public policies.

The Cedar Grove Beach project site is located in Great Kills Park, a 307-acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). Since 1962, the beach has been mapped as a city park; however, the configuration of the land and beach discouraged public use. The site contains a collection of approximately 42 seasonal beach bungalows that pre-date the park mapping, a Clubhouse, a Barn, a Guard House and five ancillary garage structures (50 total structures). The New York State Office of Parks Recreation and Historic Preservation (OPRHP) recently determined that the project area is eligible for listing on the State and National Registers of Historic Places (S/NR eligible).

The Proposed Action involves the rehabilitation of Cedar Grove Beach and the provision of improved public access is a primary goal of the project. As stated, the project site currently contains a number of structures, which had been used for private seasonal summer occupancy by the Cedar Grove Beach Club. Pursuant to a written agreement between the New York City Department of Parks and Recreation (NYCDPR) and the Cedar Grove Beach Club, the bungalows were vacated on or before September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition. The project is divided into two phases: Phase one includes demolition of a majority of the structures on site and adaptive reuse of some structures for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase one will include installation of a new bike path/greenway signage, installation of fencing and consolidation of parking on site into an overflow parking area near Ebbitts Street (parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street). Phase two involves construction of a new playground, minor rehabilitation of the existing pick up sport play area, and adaptive reuse of other structures on site. Renovations on the project site are anticipated to be complete in the year 2014.

The Proposed Action includes the rehabilitation of Cedar Grove Beach. The project would expand and enhance the beach, the active and passive recreation areas on site, and the surrounding natural areas. The rehabilitation of the beach and surrounding area would also include removing some historic structures within the beach area to make the project site more accessible to the public. The type of land use is not changing as a result of the Proposed Action. The area currently exists as parkland and will remain parkland in the future. Zoning regulations are not applicable to lands under the jurisdiction of NYCDPR. This section of the EIS will therefore only consider the project's compatibility with existing public policy. The consistency and compatibility of the proposed project with State and City policies and programs will be evaluated.

3.1.1 Existing Conditions

Public Policy

Public polices can affect the allowable land uses within a proposed project site. The public policies applicable to the project site are PlaNYC 2030, the Staten Island Growth Management Plan, and the Waterfront Revitalization Plan (WRP). A discussion of these public policies is provided below.

PlaNYC 2030

PlaNYC 2030 develops strategies to manage the City's growing needs given the fixed amount of available land. This plan seeks to create a greater and more environmentally-friendly New York City. This project seeks to facilitate public access to a park area that has been, for the most part, closed to the public for over 50 years. This project would create access to more park recreational uses within a 10-minute walking distance for most New Dorp Beach and Oakwood area residents.

Staten Island Growth Management Plan

The Staten Island Growth Management Task Force was established in July of 2003. It is responsible for reviewing issues of land development and for identifying solutions related to over-building through legislative changes and planning initiatives that seek to protect the existing residential character in order to maintain and enhance Staten Island's quality of life. The Task Force recommended changes to the zoning regulations in order to control over-development by increasing the parking requirements and putting additional zoning controls in place, in order to preserve existing contextual character and thus improve overall quality of life. The changes, adopted in 2004, apply to the areas designated as Lower Density Growth Management Areas. However, in 2007 the Department of City Planning designated all of Staten Island as a Lower Density Growth Management Area.

Waterfront Revitalization Program (WRP)

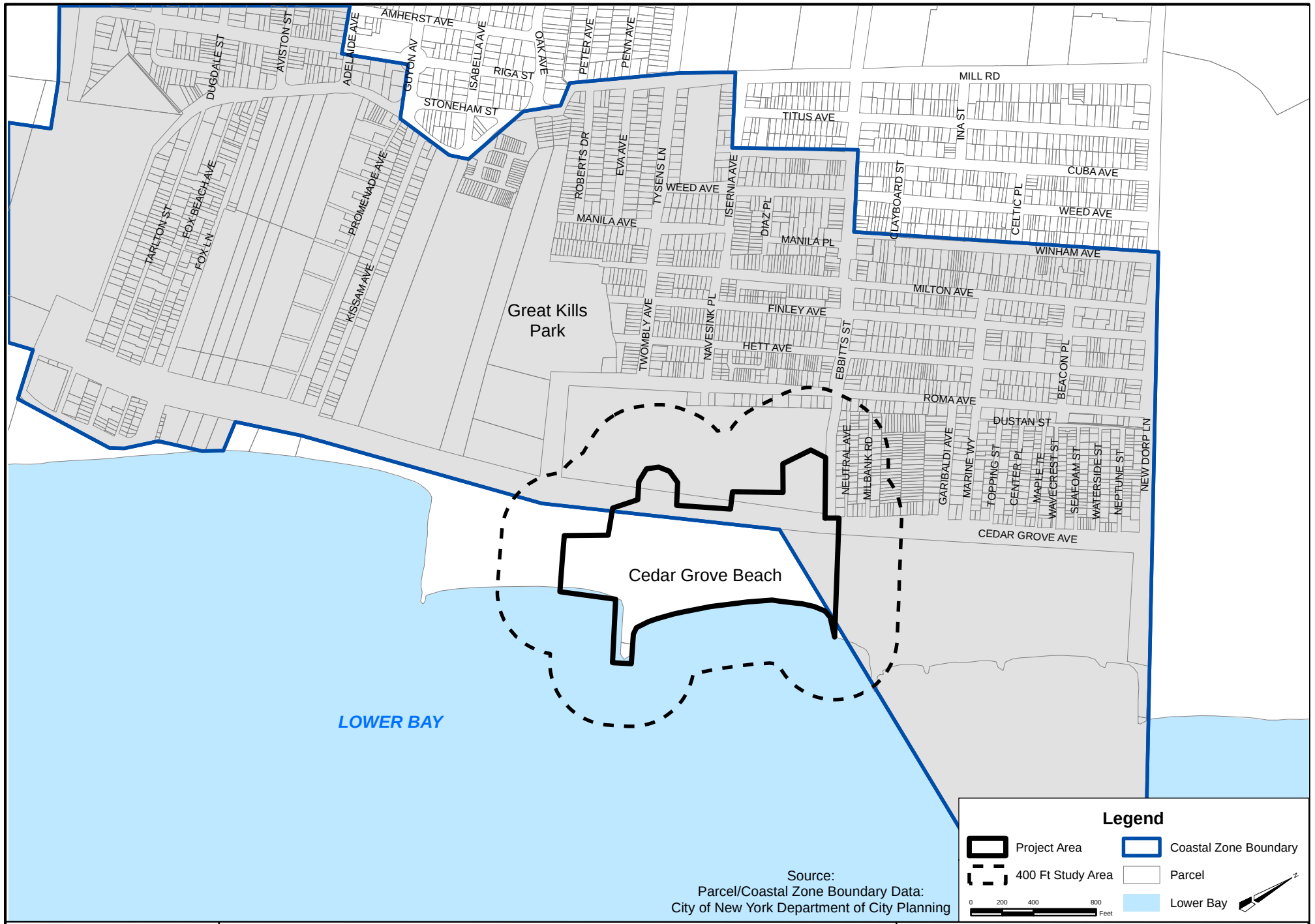
The project site is located within New York City's coastal zone boundary as outlined in the Department of City Planning's (DCP) Coastal Zone Boundary of New York City (see **Figure 3.1-1**). The WRP applies to all discretionary actions in the designated Coastal Zone Management Area. These coastal zone boundaries are delineated on Coastal Zone Boundaries maps published by the Department of City Planning. The proposed project site is within the Coastal Zone Management Area and is therefore subject to New York City's Waterfront Revitalization Program consistency assessment. The New York City Waterfront Revitalization Program Consistency Assessment Form (as revised January 2003), contained in the *CEQR Technical Manual*, has been prepared for the proposed project and is appended to this document. (see **Appendix A)**

3.1.2 Future No-Action Condition (Future Without the Action)

In the future without the action, it is expected that all of the bungalows and other structures on site would remain and be subject to the natural elements and be cordoned off from public access. The beach area would remain in its current state with temporary trailers being brought in to allow for seasonal beach operations. The upland areas would not be otherwise restored.

Public Policy

There are no anticipated public policy actions that would have an effect on conditions in the study area in the future without the Proposed Action. All city public policies, as described in Existing Conditions above, are expected to remain unchanged in the Future No-Action Condition.



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Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Coastal Zone Boundary Map

Figure 3.1-1

3.1.3 Future Action Condition (Future With the Action)

In the future with the action, a number of buildings on the site are proposed to be demolished in order to restore the beach in these areas and to improve public access to the coastal area. Bike path striping would be painted and greenway signage and bicycle improvements would be implemented, further improving access to and through the site. A number of structures that have been selected to remain on site would be adaptively reused for public and ancillary park use. In addition to the opening of the beach area for public swimming, the existing pick-up sport play area would be made available for public use. The existing children's play equipment would be removed, relocated and replaced with new children's play equipment. New fencing would be installed along Ebbitts Street and parking on site would be consolidated and made more efficient by relocating parking spaces to one area. Instead of one to two parking spots along roadways directly in front of each structure, parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street.

Under the Proposed Action, which was developed with OPRHP's consultation, seven resources within the Cedar Grove Beach Club Historic District, including five bungalows, the Clubhouse (Building 78) and the Barn, would be retained and rehabilitated for NYCDPR uses. Of the five bungalows to be retained, four are part of the series of bungalows along the beach (Buildings 1, 4, 7, and 9A). The remaining bungalow to be retained is Building 71, which is located further upland near the entrance to the project site at the intersection of Ebbitts Street and Cedar Grove Avenue. Surrounding landscapes would be stabilized and developed for NYCDPR beach and recreation programs. As a result of the Proposed Action, 43 structures would be demolished. The resources to be demolished include 33 bungalows that are aligned along the beach, the four bungalows upland near the entrance to the site, five garages, and the guard house.

Public Policy

The Proposed Action is not anticipated to create significant adverse impacts to public policy. The Proposed Action would be consistent with the public policies set forth to guide development of the study area. The project would create additional passive and active park areas to serve the public. Thus, the proposed project would rehabilitate the Cedar Grove Beach area and would be consistent with the goals of PlaNYC and the Staten Island Growth Management Plan, discussed in the Existing Conditions section above.

As discussed in the Existing Conditions section above, the project site is located within New York City's coastal zone boundary as outlined in the Department of City Planning's (DCP) Coastal Zone Boundary of New York City. The New York City Waterfront Revitalization Program Consistency Assessment Form (as revised January 2003), contained in the *CEQR Technical Manual*, has been prepared for the proposed project and is appended to this document. For policies found to be relevant to the Proposed Action (i.e. those checked "yes" on the WRP form), a discussion of the effects of the Proposed Action and its consistency with the policies is presented below.

WRP Policy 1: *Support and facilitate commercial and residential development in areas well-suited to such development.*

The Proposed Action would rehabilitate the Cedar Grove Beach site and improve public access to the site. The project site is mapped parkland and is not an area well-suited for commercial or residential development. Thus, the Proposed Action would not conflict with WRP Policy 1.

WRP Policy 2: *Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.*

The Proposed Action would rehabilitate the Cedar Grove Beach site and improve public access. The site is mapped parkland and therefore well-suited for the continued operation of the site, including water-dependant beach activities. The proposed project would therefore be consistent with this policy.

WRP Policy 3: *Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.*

The project will open up a 400-yard stretch of beach for swimming and other beach activities. Commercial water-dependent transportation uses are typically not appropriate for parkland. Although recreational boating is not planned on this site at this point in time, should public desire develop for formalized recreational boating on site, NYCDPR would consider working with the community to explore its feasibility.

WRP Policy 4.1: *Protect and restore the ecological quality and component habitats and resources within the Special Natural Waterfront Areas, Recognized Ecological Complexes, and Significant Coastal Fish and Wildlife Habitats.*

The project site is not within a Special Natural Waterfront Area, a Recognized Ecological Complex or within a Significant Coastal Fish and Wildlife Habitat area. The project will avoid activities that may cause or contribute to permanent adverse changes to ecological complexes and their natural processes. The project is intended to improve existing natural area connections and decrease fragmentation of natural communities. The action includes restoration of ecological complexes through the removal of a number of small structures and the incorporation of native grasses and other native beach species. This project is therefore consistent with this policy.

WRP Policy 4.2: *Protect and restore tidal and freshwater wetlands.*

The project will require NYSDEC Tidal and/or Freshwater Wetlands Permitting as well as approval for working within the Coastal Erosion Hazard Area. The action includes restoration of ecological complexes through the removal of a number of small buildings and the incorporation of native grasses and other native beach species, which will be conducted in consultation with appropriate agencies. The potential for erosion impacts will be minimized through design, a Stormwater Pollution Protection Plan (SWPPP) and best management practices. Therefore, the proposed project would be consistent with this policy.

WRP Policy 4.3: *Protect vulnerable plant, fish and wildlife species, and rare ecological communities. Design and develop land and water uses to maximize their integration or compatibility with the identified ecological community.*

Beach sandbur (*Cenchrus tribuloides*), considered a vulnerable wildlife species, is present on the project site. The creation of the areas of maritime dune vegetation in the areas of the former bungalows would provide a potential habitat for the beach sandbur. Thus, the proposed project would be consistent with this policy.

WRP Policy 6: *Minimize loss of life, structures and natural resources caused by flooding and erosion.*

Though some areas of the project site are within a Coastal Erosion Hazard Area, the rehabilitation of Cedar Grove Beach park facilities will result in a net decrease of impervious surface within the CEHA. The proposed project would not lead to development within a dune area or other sensitive location in which development would increase the likelihood of erosion or flooding, and will include planting of native grasses and other native beach species that will help to stabilize the beach. Therefore, the proposed project would be consistent with this policy.

WRP Policy 6.1: *Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area.*

Though some areas of the project site are within a Coastal Erosion Hazard Area, the reconstruction of park facilities would result in a net decrease of impervious surface within the CEHA. Therefore, the proposed project would be consistent with this policy.

WRP Policy 6.2: *Direct public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit.*

Reducing the amount of impervious surface within the Coastal Erosion Hazard Area will benefit flood prevention and erosion control. In addition, opening up the beach to the public will yield significant public benefit, therefore this proposed project would be consistent with this policy.

WRP Policy 7: *Minimize environmental degradation from solid waste and hazardous substances.*

Asbestos containing materials and lead based paint are potentially present in the historic structures on site, due to their age. An abatement plan would be prepared and carried out in accordance with all applicable federal, state and city regulations. Thus, the proposed project would be consistent with this policy**.**

WRP Policy 7.2: *Prevent and remediate discharge of petroleum products.*

There are no petroleum off-loading, handling, or major storage facilities involved with this project. Therefore, the proposed project would be consistent with this policy.

WRP Policy 7.3: *Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources.*

The proposed project would not involve a solid waste facility. Asbestos containing materials and lead based paint are potentially present in the historic structures on site, due to their age. An abatement plan would be prepared and carried out in accordance with all applicable federal, state and city regulations. Thus, the proposed project would be consistent with this policy**.**

WRP Policy 8: *Provide public access to and along New York City's coastal waters.*

The proposed project would preserve, protect and enhance visual and recreational access to the waterfront by cleaning up and restoring the existing beach infrastructure, while also improving public access. The proposed project would be consistent with this policy.

WRP Policy 8.4: *Preserve and develop waterfront open space and recreation on publicly owned land at suitable locations.*

The proposed project would preserve and restore the existing beach area and recreation facilities, while improving public access, and therefore would be consistent with this policy.

WRP Policy 8.5: *Preserve the public interest in and use of lands and waters held in public trust by the state and city.*

The proposed project would improve public access on public land, and therefore the proposed project would be consistent with this policy.

WRP Policy 9: *Protect scenic resources that contribute to the visual quality of the New York City coastal area.*

The removal of buildings on the site under the Proposed Action would improve waterfront views and vistas provided by the project site, thus this proposed project would be consistent with this policy.

WRP Policy 9.1: *Protect and improve visual quality associated with New York City's urban context and the historic and working waterfront.*

Given the low density residential setting in the immediate area of Cedar Grove beach, along with the lack of urban context and working waterfront at this site, this policy is not applicable to the proposed project.

WRP Policy 9.2: *Protect scenic values associated with natural resources.*

The Proposed Action would directly protect scenic values associated with natural resources by restoring the existing beach area and planting native vegetation in areas where structures are demolished. The Proposed Action would be consistent with this policy.

WRP Policy 10: *Protect, preserve and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.*

The Proposed Action includes the removal of some historic buildings on the project site and would lead to potentially significant adverse historic and cultural resources impacts. Mitigation measures are proposed that would serve to mitigate these impacts, including documentation of historic resources prior to their removal.

Conclusion

The proposed project would revitalize existing open space by rehabilitating Cedar Grove Beach and by formalizing existing recreation areas within the park. Further, the proposed project would establish a beachfront recreational area for the enjoyment of the general public and improved access. The project site is mapped parkland and the bulk and use requirements of the New York City Zoning Resolution are not applicable to land uses under the jurisdiction of NYCDPR. The Proposed Action would not conflict with the WRP polices as assessed. In addition, the Proposed Action would not conflict with the policies of the PlaNYC and the Staten Island Growth Management Plan. Thus, no significant adverse impacts to public policy are expected as a result of the Proposed Action.

3.2 OPEN SPACE

Open space is defined as publicly or privately owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment. According to the CEQR Technical Manual, an analysis of open space is conducted to determine whether or not a proposed project would have a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from overtaxing available open space. An open space analysis focuses on officially designated existing or planned public open space. An open space assessment may be necessary if a project potentially has a direct or indirect effect on open space.

For the majority of new projects in New York City, an open space assessment is conducted if the proposed project would generate more than 200 residents or 500 employees. However, the need for an open space assessment may vary in certain areas of the city that are considered by CEQR as either "underserved" or "well-served" by open space. The project site is located in an area of Staten Island that is not considered by CEQR as underserved or a well-served by open space area. As the project site is neither located within an underserved or a well-served area, and as the Proposed Action would not generate 200 residents or 500 employees, a detailed open space analysis is not warranted.

The Proposed Action involves the rehabilitation of Cedar Grove Beach. The project would expand and enhance the beach, the active and passive recreation areas on site, and the surrounding natural areas. The rehabilitation of the beach and surrounding area would also include altering structures within the beach area to make the project site more accessible to the public. These structures were determined to be part of a historically eligible historic district by New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) as stated in their letter dated July 7, 2010. A description of the proposed changes to the Cedar Grove Beach project site is provided below.

3.2.1 Existing Conditions

The Cedar Grove Beach project site is located in Great Kills Park, a 307-acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). Although the project site has been a mapped as a city park since 1962, the configuration of the land and beach discouraged public use. The main goal of the rehabilitation of Cedar Grove Beach is to provide improved access to this area for the general public. The project site currently contains a number of structures, which traditionally were used for seasonal summer occupancy by the Cedar Grove Beach Club. Pursuant to a written agreement with the Cedar Grove Beach Club, the bungalows were vacated by September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition (See **Chapter 2.0**, Project Description). As stated in their July 7, 2010, letter OPRHP determined the structures were part of a historically eligible historic district.

3.2.2 Future No-Action Condition (Future Without the Action)

In the future without the Proposed Action, it is expected that all of the bungalows and other structures on site would remain subject to the natural elements and be sealed off from public access. The beach area would remain in its current state with temporary trailers being brought in to allow for seasonal beach operations. The structures on site would remain and the upland areas would not be otherwise restored.

3.2.3 Future Action Condition (Future With the Action)

The proposed rehabilitation of the Cedar Grove Beach would allow this stretch of beach to be improved, providing necessary recreation areas and beach space for the public, along with the equally important goal of enhancing the area's natural resources. Although a mapped City park since 1962, the land and beach has generally not been accessible by the public. The redevelopment of Cedar Grove Beach is intended to expand public access to the inland portion of the beach (comprising approximately 19 acres) and improve recreational resources on the project site. The New York State Office of Parks Recreation and Historic Preservation has determined that the project site is eligible for listing on the State and National Registers of

Historic Places (S/NR eligible) as a historic district. Parks sought OPRHP approval on the structures that would be demolished and those that would remain.

In the future with the action, a number of buildings on the site are proposed to be demolished in order to restore the beach in these areas, and improve public access to the coastal area. Bike path striping would be painted and greenway signage and bicycle improvements would be implemented, further improving access to and through the site. A number of structures that have been selected to remain on site would be adaptively reused for public and ancillary park use. In addition to the opening of the beach area for public swimming, the existing pick-up sport play area would be made available for public use. The existing children's play equipment would be removed, relocated and replaced with new children's play equipment. New fencing would be installed along Ebbitts Street and parking on site would be consolidated and made more efficient by relocating parking spaces to one area. Instead of one to two parking spots along roadways directly in front of each structure, parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street.

The proposed project would revitalize existing open space by rehabilitating Cedar Grove Beach and by formalizing existing recreation areas within the park. Furthermore, the proposed project would establish a beachfront recreational area for the enjoyment of the general public and year round recreational areas. The proposed project would not result in significant adverse impacts on open space and no further open space analysis is warranted by the Proposed Action.

3.3 HISTORIC AND CULTURAL RESOURCES

Introduction

This chapter considers the potential for the proposed redevelopment of Cedar Grove Beach to affect historic and cultural resources. Historic and cultural resources include both archaeological and historic architectural resources, and are defined in the *CEQR Technical Manual* as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes resources listed in the State/National Registers of Historic Places (S/NRHP), resources determined eligible for listing in the S/NRHP by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP), landmarks designated or under consideration for designation by the New York City Landmarks Preservation Commission (LPC), National Historic Landmarks (NHL), and previously unidentified resources that meet the S/NRHP and/or LPC eligibility requirements.

The *CEQR Technical Manual* recommends that a historic and cultural resources impacts assessment be conducted for projects that would result in ground disturbance, new construction, physical alterations to existing structures, and/or change in scale, visual prominence or visual context of buildings, structures, or landscape features, among others.

OPRHP has determined that the Cedar Grove Beach Club at Cedar Grove Beach constitutes a S/NRHP-eligible historic district, known as the Cedar Grove Beach Club Historic District. LPC has determined that the historic district does not qualify as a local historic district, but concurs with OPRHP that it is S/NRHP-eligible (Santucci, November 17, 2010). According to OPRHP, the historic district is eligible under National Register Criterion A "in the areas of social history, recreation, and community planning/development as the last beach colony surviving on Staten Island from the heyday of beach tourism and summer entertainments from South Beach to Great Kills" (Howe, July 7, 2010). In addition, the historic district is eligible under National Register Criterion C "for its collection of early-20th century bungalows. As a group, the cottages have substantially retained their original design and construction detail." (Howe, July 7, 2010). As of September 30, 2010, all buildings within the project area were vacated and the Cedar Grove Beach Club's private use of the bungalows was terminated. Because the Proposed Action may result in potential significant adverse effects to the S/NRHP-eligible historic district, a full City Environmental Quality Review (CEQR) analysis is being undertaken.

Study Area

As per CEQR guidelines, for archaeological resources, the study area is the area which would be directly impacted by the Proposed Action. The study area for historic architectural resources is defined as the area in which resources may be affected by the project, and includes both direct impacts, such as physical alteration to all or part of a resource, and indirect impacts, such as visual intrusions, or changes in the resource's setting that may impact its historic significance. The *CEQR Technical Manual* guidelines indicate that the standard study area for most projects is defined by a 400-foot radius from the border of the Proposed Action. Impacts of the proposed redevelopment of Cedar Grove Beach, the project site, are not anticipated to extend beyond the standard 400-foot radius. Therefore, the historic resources study area is defined as the proposed project area plus an approximate 400-foot radius around the proposed project area.

3.3.1 Existing Conditions

Prehistoric and Historic Context

Precontact and Contact period overviews are excerpted from the Phase IA Archaeological Documentary Study prepared for this project in 2010 (HPI, 2010). The history of the development of the Cedar Grove Beach Club is excerpted from the 2010 Phase IA report, and the S/NRHP eligibility evaluation prepared by the New York State Historic Preservation Office (OPRHP) in 2010 (HPI, 2010; Howe, July 7, 2010).

Pre- European Contact Period

The Paleo Indian Period (circa [ca.] 10,500 Before Christ [BC] - ca. 8000 BC) represents the earliest known human occupation of Staten Island. Approximately 14,000 years ago the Wisconsin Glacier retreated from the area leading to the emergence of a cold dry tundra environment. Sea levels were considerably lower than modern levels during this period. As such, Staten Island was situated much further inland from the Atlantic Ocean shore than today, and was characterized by higher ground amid glacial lakes and rivers (Boesch, 1994). Paleo-Indian materials have been recovered at several sites on Staten Island including Port Mobil, the Cutting site, Smoking Point, and along the beach in the Kreischerville area.

During the Archaic Period (ca. 8000 BC - 1000 BC) a major shift occurred in the subsistence and settlement patterns of Native Americans. Settlements consisted of small bands that occupied larger and relatively more permanent habitation sites along the coast of Staten Island, its estuaries, streams, and inland areas (Boesch, 1994). Typically such sites are located on high ground overlooking water courses. This period has been divided up into four smaller periods, the Early, Middle, Late and Terminal Archaic.

The Woodland Period (ca. 1000 BC - 1600 Anno Domini [AD]) is generally divided into Early, Middle and Late Woodland on the basis of cultural materials and settlement-subsistence patterns. The Early Woodland was essentially a continuation of the tool design traditions of the Late Archaic. However, clay pottery vessels gradually replaced the soapstone bowls during the Early Woodland Period (ca. 1000 BC to 1 AD). A large number of Woodland Period archaeological sites have been found on Staten Island in a variety of environmental settings. A favored setting for occupation during this period was well-drained ground near stream drainages and coastal waterways.

Contact Period

During the early Contact Period (1500 to 1700 AD) there was a continuation of the Late Woodland settlement patterns of the coastal Algonquians. By the 17th century, the Dutch settlers of lower New York were in frequent contact with the many Native Americans. Through at least the 1650s, Native Americans, known as the Raritans, occupied portions of Staten Island and New Jersey's Raritan Valley (Ruttenber, 1872). As the European population increased, and internecine warfare due to increased competition for trade with the Europeans intensified, the Raritans, and the Delaware in general, retreated inland. By the 1800s their migration had scattered them across the Midwest and even into Canada where they have continued living to the present day (Weslager, 1972). Only a few historic Contact Period sites have been found on Staten Island such as Wards Point, Old Place, Corsons Brook, Travis, New Springfield, and at the PS56R Site in Woodrow (Boesch, 1994; HPI, 1996).

Development of Cedar Grove Beach Club and Environs

In 1881, St. John's Guild, an organization for the relief of sick and poor children, which had been organized in 1866 and incorporated in 1877, built the Sea Side Nursery on property east of present-day Cedar Grove Avenue along the shoreline, and north of the project site. In 1887 the facility became Seaside Hospital, and construction expanded to include additional buildings. By the early-20th-century, the hospital spanned the east and west sides of present-day Cedar Grove Avenue in a bulk-headed, land- filled area. Cedar Grove Beach Club was eventually developed south of the hospital (HPI, 2010).

Similar to other waterfront communities in New York City such as Coney Island and Brighton Beach in Brooklyn, and the Far Rockaways in Queens, Staten Island has a long history of summer beach tourism as a destination for urban dwellers. Beginning in the 1890s, the east and south shores of Staten Island became host to three primary beach recreation areas popular with Manhattan and Brooklyn residents: South Beach, Midland Beach, and New Dorp Beach (Howe, July 7, 2010).

The primary access road from the New Dorp community to the beachfront during the 1890s was New Dorp Lane, a north-south oriented road, which terminated at the beach. Running parallel to the shoreline, and providing access to beaches further west from New Dorp Lane was Cedar Grove Road, now known as

Cedar Grove Avenue. However, based on historic maps, the development of New Dorp does not appear to have extended as far south as the project site during this period (Bien and Vermeule, 1891).

Hotels and boarding houses were erected in the vicinity of the beaches. In addition, between 1900 and 1910, campgrounds established near fashionable locations offered alternative lodging for short-term tourists who camped in tents. Eventually, these tourists began taking up longer residential stays each year until the camp sites became fixed enough to allow for semi-permanent tent platforms and some temporary shacks. Between 1910 and 1920, several campsites evolved into modest beach cottage colonies (Barrier, 2010).

Between 1917 and 1924, the Cedar Grove Beach Club transformed from a tent to a cottage colony. These cottage colonies were distinctly different from surrounding conventional seaside bungalows. The colonies were located immediately on the beach, not separated by roads or amusement facilities, and did not adhere to the gridded street plan. The vernacular bungalows were often owned by individuals, and were built with improvised construction methods. Although the bungalows were individually owned, the parcel of land that each colony was situated upon appears to have been held by a single person or family to whom the bungalow owners paid rent. Each year, people from Staten Island and other boroughs returned to the bungalows to "summer" at the beach (Howe, July 7, 2010; Barrier, 2010).

The beach tourist industry was negatively affected by the Great Depression (1929 to 1941), and by the mid-20th century, many of the beach colonies, amusement facilities, and boardwalks had succumbed to fire, storms, or demolition. However, during the period of the 1930s to 1950s, the Cedar Grove Beach Club developed into a social organization that transcended the summer season, with members organizing dinners in Manhattan during the winter months. By this time, the beach club was composed of more than 80 bungalows that stretched along the shoreline (Barrier, 2010; Howe, July 7, 2010).

While the beach club thrived during the early-to-mid 20th century, its location along the southern shore of Staten Island rendered it susceptible to tidal inundation during severe extra-tropical storms, nor'easters, and hurricanes, with damage from wave action, erosion and storm surges. The United States Army Corps of Engineers (USACE) has documented more than 90 such storms that significantly impacted the New York City area during the 30 years prior to the 1960's. In fact, the area which encompasses the Cedar Grove Beach Club was subjected to serious storm damage and flooding during a hurricane in November 1950.

By 1958, much of the shoreline near Cedar Grove Beach Club was condemned for a proposed seaside expressway. The expressway effectively cleared the remains of South Beach, Midland Beach, and New Dorp Beach, and the beach colonies and campgrounds around them.

In 1962, 304 acres between Miller Field and Great Kills/Gateway National Recreation Area, of which the 30-acre project site is a part, was mapped as a New York City public park. Cedar Grove Beach is part of a total of 208.7 acres which were title vested to the City of New York on December 27, 1962 with funding provided as per the New York State Park and Recreation Land Acquisition Act (NYSPRLAA) and Chapter 523 of the Laws of New York of 1960. The NYSPRLAA and additional funds provided through Chapter 491 of the Laws of New York of 1963, created the State's Park and Recreation Land Acquisition Bond Act Program to meet the needs of the growing population of the state through acquisition of predominantly open or natural lands for park, conservation, and outdoor recreation purposes. The addition of Cedar Grove as parkland, which was formally designated as an addition to Great Kills Park, was one of four parks on Staten Island funded through the State's Park and Recreation Land Acquisition Bond Act Program. The other Staten Island parks funded through the program were High Rock Park, Lemon Creek Park, and the South Shore Golf Course. The City of New York acquired Cedar Grove through condemnation and affected owners were compensated for the fair market value of their land. Following acquisition and payment by the City of New York, the Cedar Grove Beach Club board negotiated an agreement with New York City that enabled the club to lease back the cottages to individual members (Barrier, 2010; Howe, July 7, 2010).

In 1964, Seaside Hospital was removed and its remains were documented in a 1978 archaeological study of the Gateway National Recreation Area (HPI, 2010).

In December 1992, a severe nor'easter resulted in the loss of 22 bungalows along the shoreline at Cedar Grove Beach that were collapsed or partially collapsed, and subsequently demolished. Following the storm, former New York Governor Mario Cuomo requested further study of the Staten Island southern shore which the USACE expects to complete in December 2012. For the vicinity of Cedar Grove, based on the draft report, the study is expected to conclude that without major changes to the shoreline, the level of natural protection will decline as sea level rises, and that a large storm event will cause extensive damage (NYCDPR, June 2011). In addition, it should be noted that the 42 bungalows along the Cedar Grove Beach shoreline are located within the New York State-designated Coastal Erosion Hazard Area making them particularly susceptible to damage by storms (NYCDPR, June 2011). Indeed, several bungalows recently sustained damage from Hurricane Irene in August 2011.

Pursuant to a written agreement with the Cedar Grove Beach Club, and as detailed in the Project Description chapter, the bungalows were vacated by September 30, 2010. Cedar Grove Beach was opened to the public on a limited basis in the Summer of 2011.

Archaeological Resources Within Study Area

Historical Perspectives, Inc., conducted a Phase IA Archaeological Documentary Study for NYCDPR in December 2010. The Phase IA details the archeological sites that were recorded in the vicinity of Cedar Grove Beach, while also noting that the locations and descriptions of those sites are often vague and, at times, their narrative based upon anecdotal evidence. No field testing was done nor is there any evidence of significant findings in the area.

The *Phase IA Archaeological Documentary Study* prepared for the project site concluded that the project site can be divided into three basic zones of disturbance, which translate into areas of potential archaeological sensitivity. These areas are mapped on **Figure 3.3-1**.

Generally:

1. The area southeast of Cedar Grove Beach Place (also known as Brown Boulevard), where the majority of the bungalows are located with the beach area immediately south, is clearly disturbed from building construction, utility installations, and modifications to the beach area, including the addition of new sand to extend the beach further into the water, and the creation of stone piers. There is low-to-no archaeological sensitivity in this area.

2. The area located between Cedar Grove Beach Place and Cedar Grove Boulevard (also known as Smiths Lane) has been disturbed from building construction, demolition, and utility installation in discrete, but not in all areas. Some locations show evidence of erosion. Areas that are clearly disturbed have low-to-no archaeological sensitivity, but areas that are less obviously disturbed may have moderate archaeological sensitivity.

3. The area located northwest of Cedar Grove Boulevard has been disturbed in areas where buildings are or were present, but not in historically undeveloped areas. Locations that are clearly disturbed have low-to-no archaeological sensitivity, but areas that are less obviously disturbed may have a high archaeological sensitivity, as these locations were situated farthest inland from the shore, on highest ground, and adjacent to marshlands.

Based on these conclusions, and because no previous soil borings have been completed on the project site that might reveal soil conditions, the study recommended that if subsurface development as part of the proposed project will impact any areas within the Cedar Grove Beach property noted as moderately or highly sensitive for archaeological resources, that limited Phase IB field should be undertaken to assess the degree of disturbance to the ground surface in these locations. Both OPRHP and LPC concur with these recommendations and NYCDPR will coordinate with both agencies to determine if and how limited Phase IB field testing would be undertaken once the degree of disturbance to the ground surface in these locations is identified. (Sutphin, February, 28, 2011; Mackey, March 4, 2011). Copies of correspondence are included in **Appendix B**.

AECOM

Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Areas of Archaeological Sensitivity

Figure 3.3-1

Historic Architectural Resources Within Study Area

S/NRHP-Eligible Resources

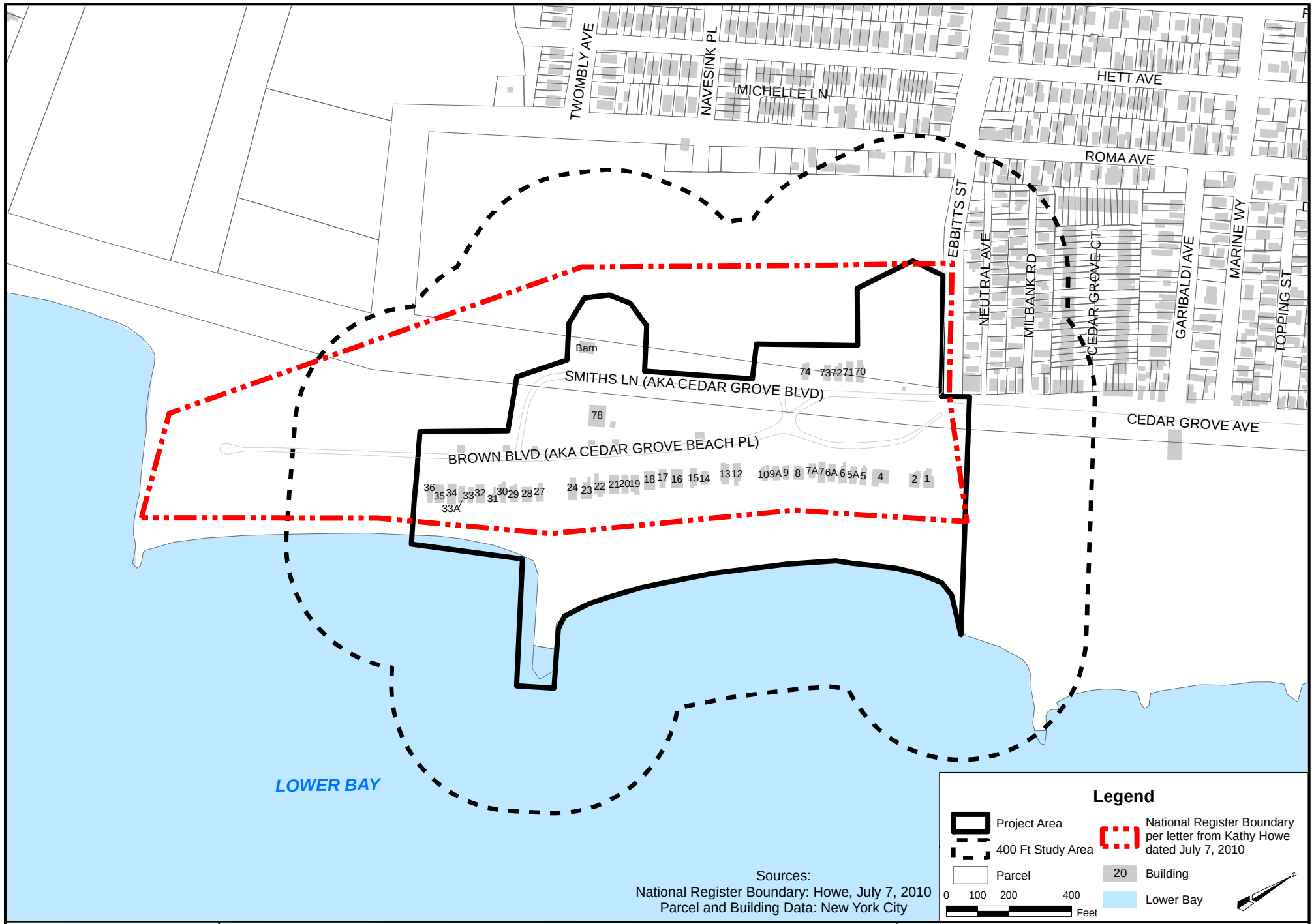
One historic architectural resource was identified by OPRHP in the study area, the S/NRHP-eligible Cedar Grove Beach Club Historic District (Howe, July 7, 2010). LPC has determined that the eligible historic district does not qualify as local historic district, but concurs with OPRHP that it is S/NRHP-eligible (Santucci, November 17, 2010). According to OPRHP, the historic district is eligible under National Register Criterion A "in the areas of social history, recreation, and community planning/development as the last beach colony surviving on Staten Island from the heyday of beach tourism and summer entertainments from South Beach to Great Kills" (Howe, July 7, 2010). In addition, the historic district is eligible under National Register Criterion C for its collection of early-20th century bungalows. As a group, the cottages have substantially retained their original design and construction detail. The significance is further reinforced by the fact that it continues to be used as a seasonal beach retreat with no intrusive incompatible development or usage" (Howe, July 7, 2010). The S/NRHP-eligible historic district is featured in **Figure 3.3-2**, and photos of the district, are featured in **Figure 3.3-3**. Copies of correspondence are included in **Appendix B**.

The S/NRHP-eligible historic district consists of 42 frame beachfront bungalows, accessory buildings (Barn, Guard House, Club House, and five garages), and sports courts laid out on Staten Island's southern shore, in a manner that reinforces the beach edge as a location for seasonal bungalows. Interior roads and paths within the eligible historic district connect the bungalows and other amenities. Most of the bungalows within the eligible historic district appear to have been built between 1907 and 1924, although a few may date to the 1930s or 1940s due to replacement of those lost to storms, fires, or public works. However, the majority of the bungalows have been altered over time.

The seasonal residences are examples of vernacular seashore bungalow design, typically of light, wood-framed construction, with hipped or gable-front roofs, exposed roof rafters, porches, and stone fireplaces. Most are rectangular in plan, of modest size, and placed with minimal setbacks from adjacent residences. The majority are oriented toward the shore. The Club House (Building 78) is located within the grassy loop west of the majority of the beachfront-facing bungalows, and the Barn and sports courts are located west of Cedar Grove Boulevard.

On December 2, 2010, a site visit was held on site with NYCDPR and OPRHP. The purpose of the meeting was to view the eligible historic district and discuss the eligibility determination. The definition of historic integrity was discussed in relationship to materials, landscape, and layout. Resources defined as having historic integrity were initially identified based on historic patterns of development within the eligible historic district (bungalow groupings) and extant building fabric from the time of original construction (siding, windows, doors, porches, interior elements). While not a conclusive list, eleven resources were initially identified as having high historic integrity (buildings 1, 4, 15, 16, 18, 21, 30, 32, 71, 74, 78), based on this preliminary discussion with OPRHP.

Following the site visit, NYCDPR with HAKS Engineers, Architects & Land Surveyors, PC (HAKS) completed a structural survey of 45 resources, including the 42 bungalows, Barn, Guard House, and the Club House (Building 78). The five garages were excluded from the survey. The survey, entitled *Structural Survey Report, Cedar Grove Beach Park*, was conducted from November 22, 2010 to March 9, 2011, and included a checklist inspection that noted existing conditions and identified defects. The inspection focused on masonry foundations; rough framing of the walls and roofs; masonry chimneys; siding; doors; and windows. Each element was assessed as fair, poor, or very poor and was assigned a corresponding numerical score. The survey also included research to determine whether the buildings and structures were compliant with New York City Building Codes, and handicap accessible in conformance with the Americans with Disabilities Act (ADA). The survey concluded that no Certificates of Occupancy (C of O) are on file at the New York City Department Of Buildings for the 45 resources, none of the resources are compliant with NYCDOB codes, and none are ADA-compliant in terms of ingress/egress and bathroom facilities (HAKS, May 27, 2011).



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Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Cedar Grove Beach Club Historic District

Figure 3.3-2

Photo 1: Looking southwest along Cedar Grove Beach Club Historic District beach front. Note residences generally share similar form and massing typical of early-to-mid-20th century bungalows.

Photo 2: Looking southwest toward Building 1 which may be reused as the Borough District Office and Parks Enforcement Patrol Office under the Proposed Action.

AECOM	Cedar Grove Beach Rehabilitation Environmental Impact Statement NYC Department of Parks and Recreation	**Photos of Cedar Grove Beach Club Historic District** Figure 3.3-3

Photo 3: Looking southeast toward Building 4 which may be reused as the Public Concessions Building under the Proposed Action.

Photo 4: Looking east toward Building 6A (left) and Building 7 (right). Building 7 may be reused as the Lifeguard Station under the Proposed Action.

Photo 5: Looking west toward Building 9A which may be reused as Comfort Station under the Proposed Action.

Photo 6: Looking west toward Building 71 (left) and Building 70 (right). Building 71 may be reused as the Caretaker Building under the Proposed Action.

Photo 7: Looking north toward Building 78 (Club House) which may be reused as the Visitors Center under the Proposed Action.

Photo 8: Looking north toward the Barn which may be reused as the Storage Building under the Proposed Action.

Photo 9: Looking north along Cedar Grove Avenue within the Cedar Grove Beach Club Historic District. Note road is flanked by mature trees which contribute to the historic feeling and setting of the district.

Photo 10: Looking east toward towards rear of bungalows which face Cedar Grove Beach Place. Note mature trees that contribute to the historic feeling and setting of the Cedar Grove Beach Club Historic District.

Table 3.3-1 provides a list of key resources within the S/NRHP-eligible Cedar Grove Beach Club Historic District, and indicates the 11 resources that retain high architectural integrity, and their overall condition rating according to the HAKS report.

It should also be noted that as per the New York State Department of Environmental Conservation (DEC), 11 bungalows are in a highly compromised area of the coastal erosion hazard zone south of the southern jetty. Buildings 27 through 36 (including buildings 30 and 32 which possess high architectural integrity according to a December 2, 2010 informal discussion with OPRHP) are located on a stretch of beach which leaves them highly vulnerable to being damaged or destroyed by future storm events and sea level rise.

Table 3.3-1 Buildings & Structures in S/NRHP-Eligible Cedar Grove Beach Club Historic District

Building Number	Building Type[1]	Possesses High Architectural Integrity[2]	Overall Condition Rating[3]
1	Bungalow	√	Poor
2	Bungalow		Very Poor
4	Bungalow	√	Poor
5	Bungalow		Poor
5A	Bungalow		Poor
6	Bungalow		Poor
6A	Bungalow		Poor
7	Bungalow		Fair
7A	Bungalow		Poor
8	Bungalow		Poor
9	Bungalow		Poor
9A	Bungalow		Fair
10	Bungalow		Very Poor
12	Bungalow		Very Poor
13	Bungalow		Very Poor
14	Bungalow		Poor
15	Bungalow	√	Very Poor
16	Bungalow	√	Poor
17	Bungalow		Poor
18	Bungalow	√	Poor
19	Bungalow		Poor
20	Bungalow		Poor
21	Bungalow	√	Poor
22	Bungalow		Very Poor
23	Bungalow		Poor
24	Bungalow		Very Poor
27	Bungalow		Poor
28	Bungalow		Poor
29	Bungalow		Very Poor
30	Bungalow	√	Poor
31	Bungalow		Very Poor
32	Bungalow	√	Poor
33	Bungalow		Poor
33A	Bungalow		Poor
34	Bungalow		Very Poor
35	Bungalow		Very Poor
36	Bungalow		Very Poor
70	Bungalow		Poor
71	Bungalow	√	Poor

72	Bungalow		Poor
73	Bungalow		Poor
74	Bungalow	√	Poor
78	Club House	√	Poor
N/A	Barn		Good
N/A	Guard House		Fair

Notes: [1] Five ancillary garage structures were not examined.
[2] While not a conclusive list, preliminary discussions with OPRHP during a December 2, 2010 site visit led to the identification of several buildings that possess high architectural integrity
[3] HAKS *Structural Survey Report: Cedar Grove Beach Park*. May 27, 2011.

Other Resources

Consultation with OPRHP and LPC reveals that other than the S/NRHP-eligible Cedar Grove Beach Club Historic District, no other historic architectural resources were identified for the 400-foot radius study area. Although it is unlikely that the Proposed Action would impact the area within the 400-foot radius study area because it is visually buffered by vegetation, a survey was conducted to determine the presence of historic architectural resources that may meet the S/NRHP and/or LPC eligibility criteria. The area, which consists of a residential neighborhood along Cedar Grove Avenue, Ebbits Street, Roma Avenue, and three cul-de-sacs, including Neutral Avenue, Milbank Road, and Cedar Grove Court, is characterized by a mixture mid-to-late 20th-century and 21st-century residences and associated outbuildings. None of the residences appear to meet S/NRHP or LPC eligibility criteria, in part because many are modern, and those that are historic have been altered, lacking major historic and/or architectural significance.

Assessment Methodology

According to the *CEQR Technical Manual*, significant adverse effects to historic and cultural resources could potentially result if a Proposed Action affects those characteristics that make a resource eligible for LPC designation or S/NRHP listing. This section assesses the potential for project actions to result in significant adverse effects on identified historic and cultural resources. **Table 3.3-2** provides information about possible direct and indirect impacts to historic and cultural resources according to *CEQR Technical Manual* Chapter 9 – Historic and Cultural Resources.

Table 3.3-2 Possible Impacts to Historic and Cultural Resources

• Construction resulting in ground disturbance, including construction of temporary roads and access facilities, grading, and landscaping.
• Below-ground construction, such as excavation or installation of utilities.
• Physical destruction, demolition, damage, alteration or neglect of all or part of an historic property
• Changes to the architectural resource that cause it to become a different visual entity, such as a new location, design, materials, or architectural features.
• Isolation of the property from, or alteration of, its setting or visual relationship with the streetscape. This includes changes to the resource's visual prominence so that it no longer conforms to the streetscape in terms of height, footprint, or setback; is no longer part of an open setting; or can no longer be seen as part of a significant view corridor.
• Introduction of incompatible visual, audible, or atmospheric elements to a resource's setting.
• Replication of aspects of the resource so as to create a false historical appearance.
• Elimination or screening of publicly accessible views of the resource.

• Construction-related impacts such as falling objects, vibration, dewatering, flooding, subsidence, or collapse.
• Introduction of significant new shadows, or significant lengthening of the duration of existing shadows, over an historic landscape or an historic structure to the extent that the architectural details that distinguish that resource as significant are obscured.

Source: Mayor's Office of Environmental Coordination (MOEC). Chapter 9 – Historic and Cultural Resources in *CEQR Technical Manual.* May 2010.

The effects of the project action on historic and cultural resources were assessed in accordance with **Table 3.3-2** to determine (a) whether there would be a physical change to any designated resource or its setting, and (b) if so, is the change likely to diminish the qualities of the resource that make it important (including non-physical changes such as context or visual prominence).

3.3.2 Future No-Action Condition (Future Without the Action)

Pursuant to a written agreement with the Cedar Grove Beach Club, the property was vacated and private occupancy of the bungalows was terminated by September 30, 2010. Without the Proposed Action, it is expected that the S/NRHP-eligible Cedar Grove Beach Club Historic District would remain subject to the natural elements, and would be sealed off from public access. The resources within the eligible historic district would remain largely unoccupied and would be subjected to the natural elements, and the upland areas would not be otherwise restored. The beach area would also remain in its current state with temporary trailers for lifeguard and comfort stations possibly being brought in to allow for seasonal beach operations.[6]

Archaeological Resources

It is anticipated that the Future No-Action Condition would not adversely impact areas of high and moderate archaeological sensitivity identified in the *Phase IA Documentary Study*. Therefore, this action would have no significant adverse effect on potential archaeological resources in the study area.

Historic Architectural Resources

OPRHP determined the Cedar Grove Beach Club area as S/NHRP-eligible on July 7, 2010 given the incidence in the district of "examples of vernacular seashore bungalow design." Overall, it is anticipated that the Future No-Action Condition would have a negative effect on the eligible district because the structures within it would not be improved and would likely be exposed to the elements, which may result in possible further deterioration of resources. This deterioration of the existing structures could have the potential to diminish the qualities of the district, detracting from its significance, including the early-to-mid-20th-century materials, design of the structures, and cohesive layout of the bungalows along the shoreline.

The Future No-Action Condition does not meet the purpose and need of the project which is to rehabilitate Cedar Grove Beach through expansion of public access, improvement of recreational resources, creation of continuous beachfront and adaptive re-use of select resources within the S/NRHP-eligible Cedar Grove Beach Historic District.

3.3.3 Future Action Condition (Future With the Action)

The Future Action Condition (Future with the Action) includes implementation of the Proposed Action. The Proposed Action was refined by NYCDPR through an alternatives analysis that examined various scenarios for the reuse of the buildings and structures of Cedar Grove Beach. The alternatives analysis was devised in consultation with OPRHP.

[6] Building 4 was recently partially renovated, in consultation with OPRHP, for its limited use in the HBO series *Boardwalk Empire*. However, Building 4 would not be publicly accessible in the under the Future No-Action Condition due to the lack of structural improvements that render it publicly unusable and uninhabitable.

Following OPRHP's identification of the S/NRHP-eligible Cedar Grove Beach Club Historic District on July 7, 2010, NYCDPR analyzed several alternative scenarios that would enable the agency to program the site as a public beach and recreation area with related user amenities and staff-support facilities while preserving select resources within the S/NRHP-eligible historic district. The alternatives included the Complete Demolition & Rebuild Alternative and Full Restoration Alternative (both described in **Chapter 3.9**), and the Proposed Action described below. Copies of correspondence are included in **Appendix A**.

Under the Proposed Action, seven resources within the S/NRHP-eligible Cedar Grove Beach Club Historic District, including five bungalows (Buildings 1, 4, 7, 9A and 71), the Club House (Building 78) and the Barn, would be retained and rehabilitated for NYCDPR uses. Four of the seven resources possess elements of high architectural integrity according to OPRHP (as determined during an informal site visit on December 2, 2010). Surrounding landscapes would be stabilized and developed for NYCDPR beach and recreation programs. Forty-three resources would be demolished. The resources to be demolished include 37 bungalows, five garages, and the guard house. **Table 3.3-3** provides a list of the seven resources to be retained. The Proposed Action is featured in **Figure 3.3-4.**

Table 3.3-3 Resources in S/NRHP-Eligible Cedar Grove Beach Club Historic District to be Rehabilitated under Proposed Action

Building Number	Building Type	Possesses High Architectural Integrity[1]	HAKS Overall Condition Rating
1	Bungalow	√	Poor
4	Bungalow	√	Poor
7	Bungalow		Fair
9A	Bungalow		Fair
71	Bungalow	√	Poor
78	Club House	√	Poor
N/A	Barn		Good

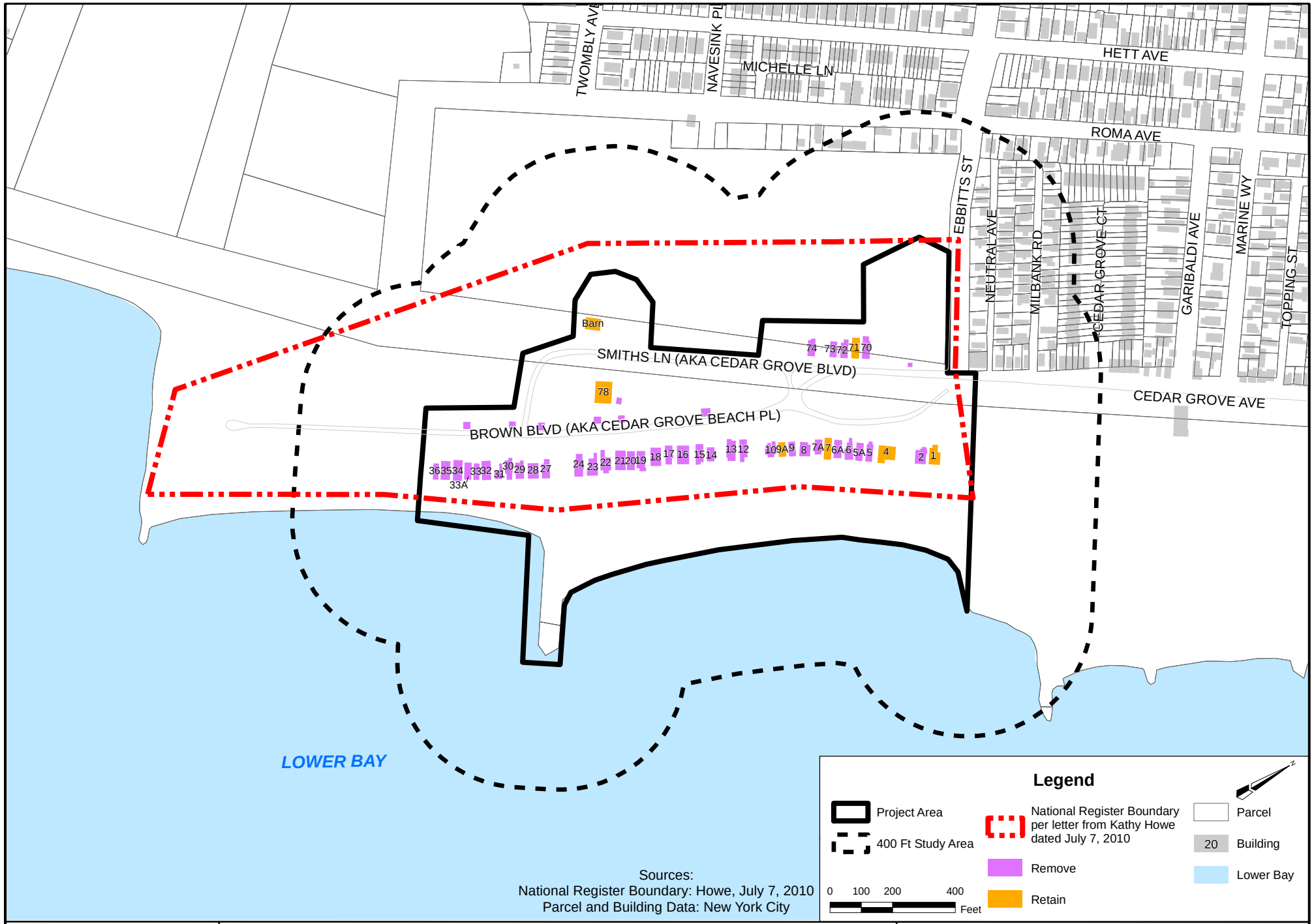
[1]While not a conclusive list, preliminary discussions with OPRHP during a December 2, 2010 site visit led to the identification of several buildings as containing high historical integrity.

NYCDPR took into account historic integrity, structural stability, location, building layout, programmatic needs and usability layout for adaptive reuse to aid in the selection of the seven resources to be rehabilitated under the Proposed Action.

Archaeological Resources

It is anticipated that the Proposed Action would likely be implemented in a manner that does not disturb areas of high and moderate archaeological sensitivity identified in the study area in the *Phase IA Documentary Study*. Therefore, provided the Proposed Action does not disturb these sensitive areas, it would have no effect on potential archaeological resources in the study area. However, as described in **Chapter 3.8** (Construction Impacts), which addresses construction impacts, to ensure the integrity of high and moderately sensitive areas during implementation of this alternative, a construction protection plan will be developed by NYCDPR and its contractors, in consultation with OPRHP and LPC, to safeguard the areas from ground disturbance.

Furthermore, it should be noted that in the event final designs for the Proposed Action involve ground disturbance in areas noted as moderately or highly sensitive for archaeological resources, and in coordination with OPRHP and LPC to determine if and how limited Phase IB field testing would be undertaken to assess the degree of disturbance to the ground surface in these locations.



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Environmental Impact Statement
NYC Department of Parks and Recreation

Proposed Action Development Scenario

Figure 3.3-4

Historic Architectural Resources

The Proposed Action would have a direct effect on the S/NRHP-eligible Cedar Grove Beach Historic District because it would result in direct physical removal of 43 of the 50 resources within it. Although seven resources would be retained, including five bungalows (Buildings 1, 4, 7, 9A and 71), Club House (Building 78), the Barn, and the landscape would be stabilized and upgraded for use as a public beach, the location, design, setting, materials, workmanship, feeling, and association of the eligible historic district would be permanently altered. The significance of the eligible historic district is tied, in part, to the interrelationship of the 42 beachfront bungalows and other buildings and structures with the shoreline and surrounding landscape. Modification of this layout would permanently compromise the appearance of the eligible historic district. This type of modification would also result in an indirect effect on the eligible historic district because its context, or setting as an early-20th-century beach colony, would be changed.

Historic Integrity

The materials, location and setting for each of the bungalows were considered as part of the historic-integrity evaluation criteria.

Structural Stability

The condition of the seven resources proposed for rehabilitation and adaptive reuse under the Proposed Action were identified in the HAKS *Structural Survey Report* in mostly poor-to-fair condition as indicated in **Table 3.3-3** (HAKS, May 27, 2011).

Location

The S/NRHP eligibility determination references the layout of the bungalows along the shoreline as an important development pattern that is integral to the significance of the S/NRHP-eligible Cedar Grove Beach Club Historic District. The Proposed Action retains this pattern by rehabilitating Buildings 1, 4, 7, and 9A at the north end of the eligible historic district. This cluster is located adjacent to public parking and the historic entrance to the beach club, and their location lends themselves to adaptive reuse by NYCDPR. The Club House (Building 78) is also proposed for adaptive reuse, and contributes to social history patterns of the beach club as a communal gathering location. Building 71 is proposed for reuse because of its architectural integrity and its location upland and outside of wetland areas, while still close to the main entrance. The Barn is proposed for reuse because it is in relatively good condition as compared to the other 49 resources within the eligible historic district, and its upland location would allow it to function well as a storage facility for NYCDPR. The beachfront setting and the surrounding landscape would also be stabilized and developed for public use.

Usability

The seven resources would likely require upgrades to current Building Codes to obtain Certificates of Occupancy for their intended programs and uses. Typical upgrades could include:

- ADA accessible ramps and entry doors.
- Utilities weather insulation for energy efficiency.
- Structural reinforcements.
- Life safety improvements.

Proposed uses are indicated in **Table 3.3-4** for each resource with corresponding analysis of the effect on historic integrity. Although alterations would be required to meet programming and code standards, where possible, character-defining features would be retained, and alterations would be designed in a context-sensitive manner and in consultation with in coordination with OPRHP.

Implementation of Program

The first phase would begin with demolition of 43 resources that were not considered viable for rehabilitation based on structural condition, historic integrity and/or location. The landscape would then be restored and upgraded for public beach and recreation uses. The remaining seven resources would be rehabilitated in coordination with OPRHP. Depending on the level of repair and upgrade needed, this could require mothballing of select resources and installation of temporary NYCDOB code-compliant facilities for lifeguard and comfort station uses during the summer beach season.

Table 3.3-4 Proposed Uses for Seven Resources to be Rehabilitated in S/NRHP-Eligible Cedar Grove Beach Historic District

Building Number	Building Type	Proposed Use	Reuse Rationale and General Scheme
1	Bungalow	Staten Island Borough District Office and Parks Enforcement Patrol (PEP) Office	Its architectural integrity and its upland location near public parking makes Building 1 suitable choice for reuse as office; existing interior arrangement facilitates conversion; alterations would be minimal, and general layout and character-defining features would be retained.
4	Bungalow	Public Concession	Largest bungalow to be adaptively re-used; recently partially renovated in coordination with OPRHP, and retains most historic integrity and character in eligible historic district; reuse as concession would retain historic materials and features.
7	Bungalow	Lifeguard Station	Reuse based on fair condition rating, central location, open floor plan, and large windows that provide beach visibility; protrudes furthest onto beach toward water, allowing for best access from beach; interior would need to be made fully handicap accessible and modernized; exterior retains moderate historic integrity, and could be rehabilitated in a historically appropriate manner.
9A	Bungalow	Comfort Station	Proposed use as comfort station is based on central location along beach and its fair condition rating; retains moderate historic integrity; interior would require full renovation to accommodate the proposed adaptive reuse.
71	Bungalow	Caretaker	Proposed use as upland caretaker's building is based on its architectural integrity and location away from beach at west end of eligible historic district; would require restoration of existing historic finishes with minor design modifications and upgrades.
78	Club House	Visitors Center	Proposed use as visitors center is based on building's historic use as Cedar Grove Beach Club House and central common meeting space; largest building within eligible historic district; building is modern and moderate historic features.
N/A	Barn	Staten Island Borough Supply Storage	Proposed use as supply building; building is modern and has no historic features.

Source: NYCDPR. "Cedar Grove Beach Alternatives Analysis." June 2011.

The seven resources that would be retained for adaptive reuse may be subject to direct construction impacts when the 43 resources are removed from the eligible historic district. Specifically, the seven resources may be subject to several effects, including, but not limited to construction-related vibrations; foundation undermining; and falling objects when adjacent buildings are removed. These actions may have the potential to impact the historic integrity of the seven resources, including their material, layout, form, and

massing. **Chapter 3.8** (Construction Impacts), describes elements of a potential construction protection plan, which will be developed by NYCDPR and reviewed by OPRHP.

3.3.4 Mitigation

The Proposed Action would have a significant adverse effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District. Seven resources within the eligible historic district, including five bungalows (Buildings 1, 4, 7, 9A and 71), Club House (Building 78), and the Barn would be adaptively reused, and the surrounding landscape would also be restored and upgraded for public beach and recreation uses. The remaining 43 resources within the historic district would be removed, and this would permanently alter the location, design, setting, materials, workmanship, feeling, and association of the historic district.

To mitigate the significant adverse effect of the Proposed Action on the eligible Cedar Grove Beach Club Historic District, it is anticipated that NYCDPR and OPRHP would coordinate to select the appropriate mitigation measures. This agreement, documented in a Letter of Resolution (LOR) between NYCDPR, OPRHP, and New York State Department of Environmental Conservation (DEC) will describe the actions to be undertaken by NYCDPR. First, NYCDPR will record the eligible historic district and, second, protect the resources to remain while rehabilitating them according to OPRHP and NYC Department of Buildings standards.

Documentation

The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the proposed action. The scope and content of the HABS documentation will be defined in coordination with OPRHP. HABS documentation typically includes a physical description of the overall historic district, including setting; brief physical descriptions of the interior and exterior of buildings and structures, including significant alterations; historic context illustrated by historic photographs and/or maps; and large-format black-and-white photographs of the historic district. OPRHP would also assist NYCDPR in identifying adequate repositories for copies of the documentation.

Construction Protection Plan

The first phase of implementation of the Proposed Action requires removal of 43 buildings and structures from the eligible Cedar Grove Beach Club Historic District. Because seven buildings would be adaptively reused, a construction protection plan should be developed to protect them during the building demolition phase. As indicated in the *CEQR Technical Manual*, the plan should be developed in coordination with OPRHP and professional engineers appointed by NYCDPR. Elements of the plan may include the following:

- Existing foundation and structural condition information for the seven buildings to be reused.
- Protection from falling objects.
- Monitoring during construction using tell-tales, and horizontal and lateral movement scales.

Several reference documents also provide useful information on the development of construction protection plans, including “Technical Policy and Procedures Notice No. 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction” prepared by NYCDOB, and “Protecting a Historic Structure During Adjacent Construction” prepared by NPS. NYCDPR could also prepare a means and methods plan for how the demolition and construction will proceed on site to ensure that elements to remain (e.g. buildings, structures, trees, landscaping paths) are protected during construction.

Mothballing

It is anticipated that the seven buildings would be adaptively reused. In order to ensure that the seven buildings are adequately preserved prior to renovation, they should be mothballed in general accordance

with *Preservation Brief 31*: "Mothballing Historic Buildings," available through NPS. Key elements of mothballing are noted below:

- Document the architectural and historical significance of the building, including character-defining features.
- Prepare a condition assessment of the building.
- Structurally stabilize the building, based on the condition assessment.
- Exterminate or control pests.
- Protect the exterior from moisture penetration.
- Secure the building and its component features to reduce vandalism or break-ins.
- Provide adequate ventilation to the interior.
- Secure or modify utilities and mechanical systems.
- Develop and implement a maintenance and monitoring plan for protection (Park, 1993).

Context-Sensitive Design

As needed, the seven buildings will be rehabilitated in coordination with OPRHP. It is anticipated that the adaptive reuse will be done in a manner that preserves their historic character-defining features.

3.3.5 Conclusion

In conclusion, it is anticipated that the Future No-Action Condition would have a negative effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District, because the resources within it would be exposed to the elements which may ultimately result in deterioration of resources within the eligible historic district. Deterioration of the resources may have the potential to diminish the qualities of the district which contribute to its significance, including the early-to-mid-20th-century materials, design of the bungalows and other buildings and structures, and cohesive layout of the residences along the shoreline. In contrast, while the Proposed Action would lead to a significant adverse effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District, it would allow for seven resources within the eligible historic district, including five bungalows (Buildings 1, 4, 7, 9A and 71), Club House (Building 78), and the Barn, to be adaptively reused and the surrounding landscape to be restored and upgraded for public beach and recreation uses. However, as the Proposed Action would lead to a significant adverse effect on the eligible Cedar Grove Beach Club Historic District, mitigation measures, as described above and in **Chapter 3.10, "**Mitigation," would need to be explored and implemented, in coordination with OPRHP.

In addition, in terms of archaeological resources, if final designs for the Proposed Action involve ground disturbance in areas within the Cedar Grove Beach property noted as moderately or highly sensitive for archaeological resources in the *Phase IA Archaeological Documentary Study* OPRHP will be coordinated with to determine if and how limited Phase IB field testing would be undertaken assess the degree of disturbance to the ground surface in these locations.

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3.4 NATURAL RESOURCES

3.4.1 Existing Conditions

This chapter provides information on the habitats, wildlife, and other ecological resources within and immediately adjacent to the site. The information presented in the chapter is based on available regulatory agency data, maps and information, as well as field observations, habitat mapping, and wildlife observations that were conducted by NYCDPR staff in 2007, 2010, and 2011 and site investigations conducted by AECOM staff on June 5 and 6, 2011.

The project site is located along the east coast of Staten Island (see **Figure 2.1-1**). Urban development, parking lots, and a municipal park bound the northern boundary of the site. The site's east boundary abuts the Lower New York Bay. The western and southern boundaries of the site abut undeveloped areas

The site is situated within the northeast portion of a larger undeveloped natural area that continues for approximately 0.3 miles (mi) to the west and 0.8 mi to the south, respectively. The larger natural area contains areas of tidal and freshwater marshes and woodlands. The perimeter of the larger natural area is surrounded by urban developments. Within the site, much of the habitats are actively maintained to be consistent with a park-like setting.

3.4.1.1 Geology and Topography and Soils.

Geology and Topography

Staten Island's geology exhibits a wide range of rock types and ages. The central portion of the island is dominated by serpentine rocks from the lower Ordovician period, which was formed approximately 430 million years ago. Running north-south along the west coast of Staten Island is the Palisades diabase, which consists of a diabase sill formed approximately 200 million years ago. Sedimentary rocks of the Stockton, Lockatong, Raritan and Magothy formations which formed between approximately 200 – 80 million years ago comprise the other bedrock types on the island.

The geology of the site is largely dominated by materials deposited during the last Ice Age. As the ice began to retreat, approximately 20,000 years ago, a layer of loose, unconsolidated, poorly sorted material was deposited by glacial meltwater across coastal portions of Staten Island. During the site investigations in June 2011, no outcrops of underlying bedrock or other notable geologic features were observed on site.
The site is relatively flat with elevations generally ranging between approximately 10 and 20 ft above mean sea level (AMSL). Along the beach, elevations range from sea level to 10 ft AMSL.

Soils

The New York City Soil Survey (NRCS, 2005) was reviewed to identify the mapped soils on site. The soil survey indicated that the following three soils types are present on the site:

- Beaches, tide flooded - Nearly level to gently sloping areas of sand or sand and gravel adjacent to the Lower New York Bay, inundated by saltwater twice each day at high tide. Frequently reworked by wave and wind action, these areas do not support vegetation (NRCS, 2005). This soil was mapped along the beach within the eastern portions of the site.

- Ipswich-Pawcatuck-Matunuck mucky peats, tide flooded - Low lying areas of tidal marsh that are inundated by salt water twice each day at high tide, with a mixture of very poorly drained soils which vary in the thickness of organic materials over sand (NRCS, 2005). This soil was mapped in the extreme southwest portion of the site.

- Pavement & buildings, wet substratum-Laguardia-Ebbets complex, 0 to 8 percent slopes - Nearly level to gently sloping urbanized areas filled with a mixture of natural soil materials and construction debris over swamp, tidal marsh, or water; a mixture of anthropogenic soils which vary in coarse

fragment content, with up to 80 percent impervious pavement and buildings covering the surface (NRCS, 2005).This soil series was mapped throughout most of the site.

Soils on site vary from well-drained sandy soils near the beach to areas of periodic saturation and irregular ponding in the western portion of the site. Saturated areas occur near a large wetland complex west and south of the site.

3.4.1.2 Habitats

In order to identify the terrestrial habitats within the project site, AECOM ecologists traversed the site on June 5 and June 6, 2011, and mapped and identified the onsite habitats in accordance with the, *Ecological Communities of New York State* (Edinger et al., 2002). Eleven habitats were mapped on site (**Figure 3.4-1**). These habitats are the following:

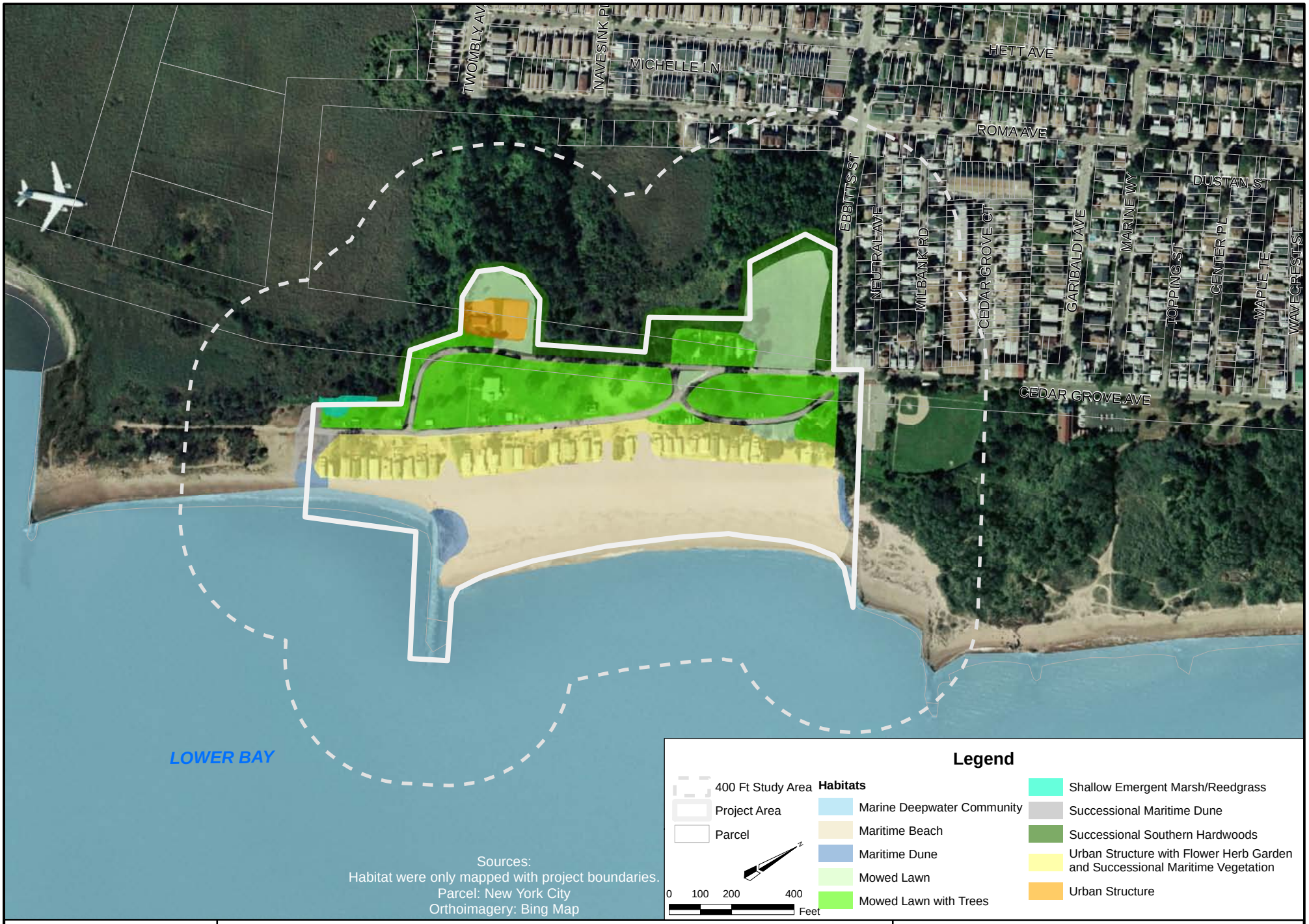
- Flower/herb garden
- Marine deepwater community
- Maritime beach
- Maritime dunes
- Mowed lawn
- Mowed lawn with trees
- Paved road/path
- Reedgrass/Purple loosestrife
- Shallow emergent marsh
- Successional southern hardwoods
- Urban structure exterior

Flower/herb garden: residential, commercial, or horticultural land cultivated for the production of ornamental herbs and shrubs. This community includes gardens cultivated for the production of culinary herbs. Landward of the bungalows, flower and herb gardens communities are present. These communities were the former cultivated backyards and gardens of the bungalows often dominated by remnant ornamental vegetation (Edinger et al., 2002). During the site visit, dominant vegetation varied among and within the backyards of each bungalow.

Marine deepwater community: a broadly-defined community that includes both quiet and rough waters of the open ocean below the lowest tide level and beyond the seaward limits of rooted vascular vegetation. This community includes all benthic substrate types (ranging from rock bottom to unconsolidated bottom), as well as the overlying water column, or pelagic component (Edinger et al., 2002). This community occurs adjacent to and east of the Maritime beach and dune habitat and comprises the waters of the Lower New York Bay (see **Photo 1** of **Figure 3.4-4**).

The waters of the maritime deepwater community are utilized by a diverse array of fish and benthic invertebrates as a habitat resource. Avifauna that may use these waters would include gulls and double-crested cormorants. Marine mammals do occur within New York harbor (e.g., seals, pinnipeds, etc.) and may be present to use the waters for foraging opportunities. Review of aerial photographs and bathymetric maps (NOAA, 2011) show that the waters adjacent to the project site are similar to the shallow-water communities north and south of the site.

Maritime beach: a community with extremely sparse vegetation that occurs on unstable sand, gravels, or cobble ocean shores above mean high tide, where the shore is modified by storm waves and wind erosion (Edinger et al., 2002). On the site, the maritime beach community is located adjacent to the water. The beach is routinely groomed and devoid of vegetation (see **Photo 1** of **Figure 3.4-4**).



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Environmental Impact Statement
NYC Department of Parks and Recreation

Mapped Ecological Communities

Figure 3.4-1

Maritime dunes: a community dominated by grasses and low shrubs that occurs on active and stabilized dunes along the Atlantic coast. This community consists of a mosaic of vegetation patches. This mosaic reflects past disturbances such as sand deposition, erosion, and dune migration. The composition and structure of the vegetation is variable depending on stability of the dunes, amounts of sand deposition and erosion, and distance from the ocean (Edinger et al., 2002).

On site maritime dunes occur naturally on higher elevation near the water. These areas are not subject to beach grooming and are vegetated (see **Photo 2** of **Figure 3.4-4**). In addition, successional maritime dune vegetation has sporadically volunteered into inland sites (see **Photo 3** of **Figure 3.4-4**). Dominant species observed within the Maritime dune communities included beachgrass, *Ammophila breviligulata* and bitter panic grass, *Panicum amarum.* Although not a dominant species, beach sandbur was observed within the maritime dune community close to the ocean. For more information on threatened and endangered species, refer to **Section 3.4.1.5**. In successional maritime dune communities, beach plum, *Prunus maritima* along with beach grass and bitter panic grass dominated.

Mowed lawn: residential, recreational, or commercial land, or unpaved airport runways in which the groundcover is dominated by clipped grasses and there is less than 30% cover of trees. Ornamental and/or native shrubs may be present, usually with less than 50% cover. The groundcover is maintained by mowing. Characteristic birds include American robin, *Turdus migratorius*, upland sandpiper, *Bartramia longicauda*, and killdeer, *Charadrius ociferus* (Edinger et al., 2002).

On the site, this habitat type is comprised of the ball field and buffer areas in between structures and the undeveloped large habitats to the west (see **Photo 4** of **Figure 3.4-4**). This habitat is dominated by mowed grasses (Gramineane), pineapple weed, *Matricaria matricarioides,* and plantains, *Plantago* sp. Active mowing prohibited the identification of some herbaceous species.

Mowed lawn with trees: residential, commercial, or recreational areas include habitat where groundcover is mostly mowed grasses and forbs; tree cover is less than 30 percent and shrub cover is less than 50 percent (Edinger et al., 2002). Within the study area, the dominant ground cover is generally cold-season grass with a mixture of mugwort, *Artemisia vulgaris*, common dandelion, *Taraxacum officinale*; common plantain *Plantago major*; English plantain, *Plantago lanceolata*; birdsfoot trefoil, *Lotus corniculatus;* clovers; Queen Anne's lace, *Daucus carota*; chicory, *Cichorium intybus*; and other weedy herbaceous species. Tree and shrub species include red maple*,* Norway maple, honeylocust, *Gleditsia triacanthos*; black locust *Robinia psuedoacacia*; pin oak, *Quercus palustris*; pines *Pinus* sp.; ornamental apples, *Malus* sp.; and dogwood *Cornus* sp.

This habitat is located in the central portion of the site and is ringed by the loop road. This habitat is dominated by mowed grasses, pineapple weed, plantains, cottonwoods and maples, *Acer* sp. (see **Photo 5** of **Figure 3.4-4**).

Paved road/path: areas that include roads or pathways of paved asphalt, concrete, brick, stone, etc. Vegetation is typically limited to cracks in the paved surface (Edinger et al., 2002). The paved road/path areas on site consist of the access and loop road and small driveways (see **Photo 5** of **Figure 3.4-4**). Vegetation was limited to infrequent individuals of grasses and pineapple weed.

Reedgrass/Purple loosestrife marsh – A marsh that has been disturbed by draining, filling, road salts, etc., in which common reed, *Phragmites australis* or purple loosestrife, *Lythrum salicaria* has become dominant. This community is common along highways and railroads (Edinger et al., 2002).

This habitat type is limited to a small polygon in the extreme southwest portion of the site. A larger wetland complex predominates west of the site. The dominant vegetation in this habitat was common reed, *Phragmites australis* (see **Photo 6** of **Figure 3.4-4**).

Shallow emergent marsh – A marsh meadow community that occurs on mineral soil or deep muck soils (rather than true peat) that are permanently saturated and seasonally flooded. This marsh is better drained

than a deep emergent marsh; water depths may range from 6 inches to 3.3 feet during flood stages, but the water level usually drops by mid- to late summer and the substrate is exposed during an average year (Edinger et al., 2002).

This habitat type is limited to a small polygon in the extreme southwest portion of the site. The wetland occurs in a shallow depressional area and is associated with a larger wetland complex predominates west of the site. The dominant vegetation in this habitat was black grass, *Juncus gerardi*, and sedges, *Carex*, sp. (see **Photo 7** of **Figure 3.4-4**).

Successional southern hardwoods: habitat dominated by second-growth hardwood or mixed forest that occurs on sites that have been cleared for farming or logging or have been otherwise disturbed. The dominant vegetation includes boxelder, *Acer negundo;*, tulip tree, *Liriodendron tulipifera;* Norway maple, sassafras, *Sassafras albidum*; American elm, *Ulmus Americana*; eastern red cedar, *Juniperus virginiana*; and tree-of-heaven (Edinger et al., 2002).

This habitat type describes the wooded boundary that occupies much of the northern and western boundary of the site (see **Photo 8** of **Figure 3.4-4**). This habitat is contiguous with a larger wooded tract that is present west of the site. Dominant vegetation within this habitat type included: blackcherry, *Prunus serotina*; hackberry, *Celtis occidentalis;* maples; sassafras; arrowood, *Viburnum dentatum*; rose, *Rosa multiflora*; honeysuckle, *Lonicera* sp., poison ivy, *toxicodendron radicans*; Japanese knotweed, *Polygonum cuspidatum*; and goldenrods, *Solidago* sp.

Urban structure exterior: the exterior surfaces of metal, wood, or concrete structures (such as commercial buildings, apartment buildings, houses, bridges) or any structural surface composed of inorganic materials (glass, plastics, etc.) in an urban or densely populated suburban area. These sites may be sparsely vegetated with lichens, mosses, and terrestrial algae; occasionally vascular plants may grow in cracks. Nooks and crannies may provide nesting habitat for birds and insects, and roosting sites for bats (Edinger et al., 2002).

On site, the urban structures are largely comprised of the row of bungalows adjacent to the maritime beach and several inland isolated dwellings (see **Photo 9** of **Figure 3.4-4**). In association with the urban structure exterior habitats are flower and herb garden habitats. In some areas between the bungalows and within the flower and herb gardens, sand has begun to accumulate and maritime dune vegetation has begun to volunteer on site. Species observed in these areas often included beach plum and dune grasses (see **Photo 3** of **Figure 3.4-4**).

None of the habitats that were mapped on site are either rare or unique. In fact, many of the habitats are common to Staten Island. The mapped habitats differ in ecological value; for instance, maritime dunes and successional southern hardwoods are of higher ecological value than mowed lawns. Natural habitats offer increased species diversity, foraging opportunities and nesting opportunities than maintained habitats.

3.4.1.3 Flora

During the course of the field investigations, the scientists conducted an inventory of the plant species that occur in each mapped habitat. The scientists who conducted the plant inventory are certified arborists. A list of the plants observed during field investigations on June 5 and June 6, 2011 is provided in **Table 3.4-1**.

In addition, the scientists also considered whether any of the onsite trees were unique or specimen species. No unique or specimen trees were identified on site.

On September 15, 2010, NYCDPR staff conducted a vegetative species inventory that overlapped portions of the project site. Many of the species the NYCDPR identified were also identified in the June 2011 field visit (**Table 3.4-1**). Species observed by NYC DPR in the Fall of 2010 but not observed in June 2011 include the following: American searocket*, Cakile endentula*; hickory*, Carya sp.:* seaside sandmat, *Chamaesyce polygonifolia;* boneset, *Eupatorium serotinum;* common evening primrose, *Oenothera biennis;*

amberique-bean, *Strophostyles helvola*; Gray's flatsedge, *Cyperus grayii*; giant sunflower, *Helianthus giganteus*; cordgrass, *Spartina* sp.

3.4.1.4 Fauna

During the course of the field investigations, the scientists noted the various avifauna, herpetofauna, insect, and mammal populations that were observed in each habitat. Most of the habitats on site are actively maintained (e.g., mowed) which limits the ecological value for many fauna. A description of the fauna observed during field investigations on June 5 and June 6, 2011 are provided below.

Avifauna

The large open tracts of mowed lawns habitats on site are not attractive for many species of birds, due to the absence of cover, perching sites, foraging opportunities, and competition with other species. Many bird species would favor the large tracts of undeveloped land west of the site.

The majority of avifauna using the site were those species adapted for urban and suburban environments (e.g., American robins, house sparrows, and European starlings, etc.). The presence of grasses and wild flowers associated with the urban structures and flower gardens of the bungalows provide resources that are utilized by passerine bird species (e.g., insects for prey, seeds, etc.). Also, several of the vegetation species on site produce fruit (e.g., mulberry, beach plum, etc.) that are utilized by the birds as a food resource. Within the southern successional forested habitat, more reclusive species were observed (e.g., white-breasted nuthatch). Several larger birds: osprey, glossy ibis, and mallards were observed to fly over the site. These species flew from one off-site location to another off-site location and thus, "flew over" the site and did not actively or passively interact with site's habitats.

Within the maritime beach and dune habitats, evidence of nesting shorebirds was not observed; although, NYC DPR Natural Resource Group personnel have identified that nesting birds were previously observed in the Maritime dune community (personal conversation w/ T. Chambers, 2011). During the June 2011 site visits, only a few gulls and one sandpiper were observed using the maritime beach community.

On August 23, 2007, a site visit performed by NYCDPR sighted two bird species: Double-crested cormorant *Phalacrocorax auritus* and American goldfinch *Carduelis tristis On September 14, 2010, NYC DPR staff observed two other bird species:* sanderling, *Calidris alba* and semi-palmated plover, *Charadrius semipalmatus.*

Table 3.4-2 identifies the avifauna that were observed actively and passively using each habitat. It is likely that other bird species may utilize the habitats on site. However, due to the developed character of the site, the many habitats on site (e.g., mowed lawn, urban structure, etc.) are not attractive habits for migrating species and/or support large numbers of resident species.

Table 3.4-1 Plant Species Identified On Site

Vegetative Stratum	Common Name	Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road / Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Tree	Gray birch	*Betula populifolia*					X	
Tree	Black cherry	*Prunus serotina*	X	X			X	X
Tree	Black locust	*Robinia pseudoacacia L.*					X	
Tree	Box elder	*Acer negundo*					X	
Tree	Common cottonwood	*Populus deltoides*		X			X	
Tree	Elm	*Ulmus sp.*					X	
Tree	Hackberry	*Celtis occidentalis*					X	
Tree	Holly	*Ilex sp.*						X
Tree	Kousa dogwood	*Cornus kousa*						X
Tree	London planetree	*Platanus hybrida*					X	X
Tree	Mimosa	*Albizia julibrissin*						X
Tree	Mulberry	*Morus sp.*		X			X	
Tree	Norway maple	*Acer platanoides*		X			X	
Tree	Pin oak	*Quercus palustris*		X				
Tree	Red maple	*Acer rubrum*		X				
Tree	Russian olive	*Elaeagnus angustifolia*					X	X
Tree	Sassafras	*Sassafras albidum*					X	
Tree	Silver maple	*Acer saccharinum*		X			X	
Tree	Sycamore	*Platanus occidentalis*					X	
Tree	Tree-of-heaven	*Ailanthus altissima*					X	
Tree	Willow	*Salix sp.*		X			X	
Tree	Witch hazel	*Hamamelis sp.*					X	
Shrub	Arborvitae	*Thuja occidentalis*						X
Shrub	Arrowood	*Viburnum dentatum*					X	
Shrub	Bayberry	*Morella sp.*	X				X	X
Shrub	Beach plum	*Prunus maritima*	X					X
Shrub	Butterfly bush	*Buddleja sp.*						X
Shrub	False cypress	*Chamaecyparis obtusa*						X

Table 3.4-1 Plant Species Identified On Site

Vegetative Stratum	Common Name	Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road / Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Shrub	Hydrangea	*Hydrangea sp.*						X
Shrub	Marsh elder	*Iva frutescens*	X				X	X
Shrub	Multifloral rose	*Rosa multiflora*					X	X
Shrub	Rhododendron	*Rhododendron sp.*						X
Shrub	Rose of Sharon	*Hibiscus syriacus*						X
Shrub	Sumac sp.							X
Herbaceous	Camphorweed	*Heterotheca subaxillaris*						X
Herbaceous	Common chickweed	*Stellaria media*		X			X	
Herbaceous	Clover, red	*Trifolium pratense*		X			X	
Herbaceous	Clover, white	*Trifolium repens*		X			X	
Herbaceous	Common reed	*Phragmites australis*				X	X	
Herbaceous	Dandelion	*Taraxacum officinale*		X			X	X
Herbaceous	Dogbane	*Apocynum sp.*					X	X
Herbaceous	Dusty miller	*Artemisia stelleriana*						X
Herbaceous	Field sorrel	*Oxalis sp.*					X	X
Herbaceous	Gerber daisy							X
Herbaceous	Gill over the ground	*Glechoma hederacea*		X			X	X
Herbaceous	Goats' Beard, yellow	*Tragopogon pratensis*						X
Herbaceous	Goldenrod	*Solidago sp.*					X	X
Herbaceous	Japanese knotweed	*Polygonum japonica*					X	
Herbaceous	Lily (ornamental)							X
Herbaceous	Mallow sp.	*Hibiscus sp.*					X	
Herbaceous	Milkweed	*Asclepias sp.*					X	X
Herbaceous	Mugwort	*Artemesia vulgaris*		X			X	
Herbaceous	Mullen	*Verbascum thapsus*						
Herbaceous	Pansy (ornamental)							X

Table 3.4-1 Plant Species Identified On Site

Vegetative Stratum	Common Name	Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road / Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Herbaceous	Pigweed	*Amaranthus sp.*					X	X
Herbaceous	Pineapple weed	*Matricaria matricarioides*		X	X			X
Herbaceous	Plantain, English	*Plantago lanceolata*		X				
Herbaceous	Plantain, wide leaf	*Plantago*		X				
Herbaceous	Prickly pear	*Opuntia sp.*						X
Herbaceous	Ragweed	*Ambrosia sp.*		X			X	X
Herbaceous	Smartweed	*Polygonum pensylvanicum*		X				
Herbaceous	Spiderwort	*Tradescantia sp.*		X			X	X
Herbaceous	Thistle	*Cirsium arvense*					X	X
Herbaceous	Violet	*Viola sp.*		X			X	X
Herbaceous	Virginia creeper	*Parthenocissus quinquefolia*		X			X	X
Herbaceous	Wild carrot	*Daucus carrota*		X			X	X
Herbaceous	Wild garlic	*Allium vineale*		X			X	X
Herbaceous	Yucca	*Yucca sp.*	X					X
Grass	American beachgrass	*Ammophila breviligulata*	X					X
Grass	Bitter panic grass	*Panicum amarum*	X				X	X
Grass	Black grass	*Juncus gerardi*				X		
Grass	Bluestem grass	*Schizachyrium sp.*					X	X
Grass	Brome grasses	*Bromus sp.*						
Grass	Flat-top goldentop	*Euthamia graminifolia*	X					X
Grass	Indian grass	*Sorghastrum nutans*	X	X				
Grass	Beach sandbur	*Cenchrus tribuloides*	X					X
Grass	Purple lovegrass	*Eragrostis spectabilis*		X			X	X
Grass	Grasses	Gramineae		X	X	X	X	X
Vine	Catbriar	*Smilax sp.*		X			X	X
Vine	English Ivy	*Hedera helix*						X
Vine	Honeysuckle	*Lonicera sp.*		X			X	X

Table 3.4-1 Plant Species Identified On Site

Vegetative Stratum	Common Name	Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road / Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Vine	Nightshade	*Solanum dulcamara*					X	
Vine	Poison ivy	*Toxicodendron radicans*		X			X	X
Vine	Wild grape	*Vitis sp.*					X	X
Vine	Wild strawberry	*Fragaria sp.*					X	

X = Species observed within particular habitat.
Blank cells indicated that the species was not observed in that particular habitat.

Table 3.4-2 Observed Avifauna

Common Name	Scientific Name	Habitats					
		Maritime Beach and Dune	Mowed Lawn & Mowed lawn With trees	Paved Road/ Path	Shallow Emergent Marsh	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden & Successional Maritime Dune
American Crow	*Corvus brachyrhyncos*		X			X	
American Goldfinch	*Carduelis tristis*				X	X	X
American Robin	*Turdus migratorius*		X			X	
American Tree Sparrow	*Spizella arborea*					X	
Blue Jay	*Cyanocitta cristata*		X			X	
Canada Goose	*Branta canadensis*		X				
Cliff Swallow	*Petrochelidon pyrrhonota*		X		X		
European Starling	*Sturnus vulgaris*		X				X
Glossy Ibis*	*Plegadis falcinellus*						
Gray Catbird	*Dumetella carolinensis*					X	
Great Blue Heron	*Ardea herodias*						
Greater Black-backed Gull	*Larus marinus*	X					
Herring Gull	*Larus argentatus*	X	X				
House Sparrow	*Passer domesticus*	X					
Mallard*	*Anas platyrhynchos*						
Northern Cardinal	*Cardinalis cardinalis*					X	
Northern Flicker	*Colaptes auratus*					X	
Northern Mockingbird	*Mimus polyglottos*		X			X	X
Mourning Dove	*Zenaida macroura*		X	X		X	
Osprey*	*Pandion haliaetus*						
Red-winged Blackbird	*Agelaius phoeniceus*				X		
Ring-billed Gull	*Larus delawarensis*						
Rock Dove	*Columba livia*		X	X		X	X
Sandpiper sp.	Family Scolopacidae	X					
Song Sparrow	*Melospiza melodia*					X	
White-breasted Nuthatch	*Sitta carolinensis*					X	
White-throated Sparrow	*Zonotrichia albicollis*					X	X
Yellow Warbler	*Dendroica petechia*		X				

Notes:
* Indicates species was observed to flyover the site.
Species observed within particular habitat.

Herpetofauna (Reptiles and Amphibians)

No herpetofauna were sighted during the field investigations conducted in June 2011. Due to the developed character of the site, reptiles that may utilize the site's terrestrial habitats would be limited to snakes (e.g., garter, etc.) or possibly turtles (i.e., box), if present. In addition, no evidence of sea turtle nesting sites were observed on site.

The absence of a continuous freshwater source would make the site an unattractive habitat for some amphibian species. Salamanders and frogs that need moist conditions to exist would occur, if present, in the successional hardwoods habitats on site. This habitat has the requisite shade and cover (e.g., fallen logs, etc.) that are favored by these organisms. Amphibians (e.g., toads, etc.) that are more tolerant of drier conditions and/or open areas, may utilize portions of the site as their home range.

Arthropods

Terrestrial

The nearby marshes and the wide diversity of flowering plants on site provide habitat resources for a variety of terrestrial arthropods (e.g., chilopods, hexapods [insects], isopods) species. During the site investigation in June 2011, numerous common insects were observed (e.g., ants, bees, flies, moths, etc.). A list of the species observed and the habitats they were sighted in are provided in **Table 3.4-3**.

Previous investigations within the forest community, west of the site, observed several additional species that are identified in Table 3.8-4. It is possible some and/or all of the species in **Table 3.4-4** may transit to and/or through the habitats on site. However, none of the habitats on site would serve as critical habitat to the global or regional populations of the species listed in **Table 3.4-3** or **Table 3.4-4**.

Marine

The only marine arthropods that were observed during the two-day site visit were small crabs (decapods) along the water's edge at low tide. However, the shallow waters of Lower New York Bay are inhabited by numerous species of marine arthropods (e.g., blue crabs, shrimp, etc.). Interstitial arthropods are common to the beaches of the New York region and would be present within the beach area.

Mammals

Mammal species usage of most of the site is largely limited to small to medium sized species (e.g., mice, squirrels, rabbits, raccoons, etc.) that utilize the abandoned structures, flower and herb garden, and/or the onsite trees for nesting and foraging resources. Due to the increased cover and food resources, the diversity of mammal population is anticipated to be the highest in the southern successional hardwoods.

The observation of large mammal use of the site was limited to deer tracks, which were observed in the southern portion of the site and within the flower and herb gardens. The number of tracks suggests that the site's habitats are utilized for browsing by deer who occupy the larger undeveloped habitat west of the site. Deer are also present in the southern successional hardwoods, although heavy vegetative cover likely obscured any evidence (e.g., tracks and scat, etc.) of their presence. **Table 3.4-5** indicates that mammals that were observed on site in June 2011. **Table 3.4-5** also identifies the likelihood of a particular species to utilize each mapped habitats.

Table 3.4-3 Observed Arthropods

Common Name		Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road/Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Terrestrial Arthropods								
Ant	Sugar Ant	Formicicdae			X		X	X
	Black (Carpenter) Ant	Formicicdae		X			X	X
Bees and Wasps	Sweat bee	Halictidae					X	X
	Bumble bee	*Bombus impatiens*		X			X	X
	Yellow jacket	*Vespula maculifrons*					X	X
Beetles	Lady bug	Coccinellidae					X	X
	Ground beetle	*Pterostichus sp.*		X			X	
Butterfly	Cabbage white	*Pieris rapae*				X		
Centipede	Centipede	Chilopoda				X		X
Cricket	Cricket	Gryllinae				X		
Dragonfly	Blue dasher	*Pachydiplax longipennis*				X	X	
	Clubtail	*Cordulegaster diastatops*						X
Flies, Moquiotos and Gnats	Horsefly	Tabanidae						X
	Mosquito	family Culicidae	X	X	X		X	X
	Gnat	suborder Nematocera		X		X	X	X
Pill Bugs	Common pill bug.	Armadillidium vulgare		X		X	X	

Table 3.4-3 Observed Arthropods

Common Name		Scientific Name	Habitats					
			Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road/Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden/ Successional Maritime Dune
Marine Arthropods								
Crabs	Rock crab	*Cancer sp.*	X					
Notes: Blank Cells indicate no species sighted in the particular habitat.								

Table 3.4-4 Insect Species Previously Identified on Site

Dragonflies	**Butterflies:**
Green darner, *Anax junius* Orange sulphur, *Colias eurytheme* Rambur's forktail*, *Ischnura ramburii* (male & female) Twelve-spotted skimmer, *Libellula pulchella* Blue dasher, *Pachydiplax longipennis* Wandering glider, *Pantala flavescens* Spotted glider, *Pantala hymenaea* Broad-winged skipper, *Poanes viator* Black saddlebags, *Tramea lacerata* Red admiral, *Vanessa atalanta* American lady, *Vanessa virginiensis*	Sachem, *Atalopedes campestris* Monarch, *Danaus plexippus* Common buckeye, *Junonia coenia* Gray hairstreak, *Strymon melinus*
*The Rambur's forktail, is a NYS-designated state imperiled rare damselfly Source: DRAFT, Preliminary Assessment of Cedar Grove Project Site. September 17, 2010	

Table 3.4-5 Observed Mammals

Common Name	Scientific Name	Habitats					
		Maritime Beach / Maritime Dune	Mowed Lawn & Mowed Lawn With Trees	Paved Road/Path	Shallow Emergent Marsh/ Reedgrass	Successional Southern Hardwoods	Urban Structure with Flower Herb Garden / Successional Maritime Dune
Chipmunk	*Tamias striatus*	unlikely	Likely	unlikely	Possible	Likely	Likely
Dog	*Canis familaris*	Tracks observed	Possible	unlikely	Possible	Possible	Possible
Eastern cottontail	*Sylvilagus floridanus*	unlikely	Visually Observed	Visually Observed	Tracks observed	Visually Observed	Visually Observed
Feral cat	*Felis catus*	Possible	Visually Observed	unlikely	Possible	Visually Observed	Visually Observed
Mouse	*Peromyscus* sp.	Likely	Likely	unlikely	Tracks observed	Likely	Likely
Norway rat	*Rattus norvegicus*	Possible	Possible	unlikely	Possible	Likely	Likely
Opossum	*Didelphis marsupialis*	unlikely	Likely	unlikely	Possible	Likely	Likely
Raccoon	*Procyon lotor*	unlikely	Likely	unlikely	Tracks observed	Likely	Tracks observed
Squirrel	*Sciurus* sp.	unlikely	Visually Observed	Visually Observed	Possible	Visually Observed	Visually Observed
Whitetail deer	*Odocoileus virginianus*	unlikely	Possible	unlikely	Tracks observed	Likely	Tracks observed

Notes: * Although organisms were observed on the road and path transiting to adjacent habitats, it is doubtful any mammal would use the road/path for a considerable period of time.

Likely indicates that the particular species would often frequent the particular habitat.

Possible indicates that the particular habitat may be utilized by a particular species; although, the habitat is not preferred by the species.

Unlikely indicates that the particular habitat would be unattractive to the particular species.

3.4.1.5 Water Resources and Wetlands

This section identifies the water resources and wetlands that were observed on and/or adjacent to the site. For both the surface water resources and wetlands, the regulatory classifications are described first, followed by the identified regulated resources on site.

Water Resources

NYSDEC is charged with classifying all surface waters of the state pursuant to Article 17, Title 3, of the Environmental Conservation Law (ECL). To implement this charge, NYSDEC developed a surface-water classification system and promulgated a set of rules and regulations (6 NYCRR, Parts 800-940) under which to administer the surface water quality and purity program. Each part pertains to a specific drainage basin.

As a result, surface waters in the state are classified according to their "best usages" (e.g., drinking, bathing, level of recreational contact, and fish propagation and survival). These classifications include designations for both fresh surface waters and saline surface waters. The surface water classifications are as follows:

Class N fresh surface waters – Best usages are the enjoyment of water in its natural condition and, where compatible, as a source of water for drinking or culinary purposes, bathing, fishing, fish propagation and recreation. There shall be no discharge of sewage, industrial wastes or other wastes, waste effluents or any sewage effluents not having had filtration resulting from at least 200 feet of lateral travel through unconsolidated earth. A greater distance may be required if inspection shows that, due to peculiar geologic conditions, this distance is inadequate to protect the water from pollution. These waters shall contain no deleterious substances, hydrocarbons, or substances that would contribute to eutrophication, nor shall they receive surface runoff containing any such substance.

Class AA-Special (AA-S) fresh surface waters – Best usages are for drinking, culinary, or food-processing purposes, primary and secondary contact recreation, and fishing. The waters shall be suitable for fish propagation and survival. These waters shall contain no floating solids, settleable solids, oil, sludge, deposits, toxic wastes, deleterious substances, colored or other wastes, or heated liquids attributable to sewage, industrial wastes, or other wastes. There shall be no discharge or disposal of sewage, industrial wastes or other wastes in these waters. These waters shall contain no phosphorous and nitrogen in amounts that will result in the growth of algae, weeds, and slimes that will impair the waters for their best usages.

Class A-Special (A-S) fresh surface waters – Best usages are for drinking, culinary or food- processing purposes, primary and secondary contract recreation, and fishing. The waters shall be suitable for fish propagation and survival. This classification may be given to those international boundary waters that, if subjected to approved treatment equal to coagulation, sedimentation, filtration, and disinfection with additional treatment, if necessary, to reduce naturally present impurities, meet or will meet New York State Department of Health (NYSDOH) drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

Class AA fresh surface waters – Best usages are a source of water supply for drinking, culinary or food-processing purposes, primary and secondary contact recreation, and fishing. The waters shall be suitable for fish propagation and survival. This classification may be given to those waters that, if subjected to approved disinfection treatment, with additional treatment if necessary to remove naturally present impurities, meet or will meet NYSDOH drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

Class A fresh surface waters – Best usages are a source of water supply for drinking, culinary, or food-processing purposes, primary and secondary contact recreation, and fishing. The waters shall be suitable for fish propagation and survival. This classification may be given to those waters that, if subjected to approved treatment equal to coagulation, sedimentation, filtration and disinfection, with additional

treatment if necessary to reduce naturally present impurities, meets or will meet NYSDOH drinking water standards and are or will be considered safe and satisfactory for drinking water purposes.

Class B fresh surface waters – Best usages are primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.

Class C fresh surface waters – Best usage is fishing. These waters shall be suitable for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Class SA saline surface waters – Best usages are shellfishing for market purposes, primary and secondary contact recreation, and fishing. These waters shall be suitable for fish propagation and survival.

Class SB saline surface waters – Best usages are primary and secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.

Class SC saline surface waters – The best usage is fishing. These waters shall be for fish propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Class I saline surface waters – The best usages are secondary contact recreation and fishing. These waters shall be suitable for fish propagation and survival.

Class SD saline surface waters – The best usage is fishing. These waters shall be suitable for fish survival. This classification may be given to those waters that, because of natural or manmade conditions, cannot meet the requirements for primary and secondary contact recreation and fish propagation.

Surfacewaters – Fresh (non-tidal)

There are no naturally occurring permanent or ephemeral non-tidal waterbodies on and/or immediately adjacent to the site. It should be noted that during the field investigations, a water distribution pipe was leaking and resulted in the temporary ponding of water in the south-central portion of the site (see **Photo 10** of **Figure 3.4-4**). Observations performed in the area of ponding determined that the ponding was a recent occurrence. The vegetation in the ponded areas was dominated by upland species and no hydrophytic vegetation had yet volunteered into the area.

Approximately 550 ft to the southwest of the site there is a mosquito ditch within a marsh area. This ditch has been classified by the NYSDEC as I/C. The classification of I/C identifies that part of the ditch is tidally influenced. The classification “I” indicates that the waters best use are secondary contact and fishing. The classification of “C”, which is the lowest freshwater classification, indicates the best usage is fishing.

Surfacewater – Tidal

Lower New York Bay borders the eastern boundary of the site. The NYSDEC classifies ocean water as SB. Best usages are primary and secondary contact recreation and fishing. The waters are popular with bathers.

Located approximately 0.7 miles south of the site is the Oakwood Beach Water Pollution Control Plant. The control plant can handle up to 40 mgd of waste water and must comply will all federal, state, and local regulations regarding waste disposal and effluent discharge. Review of the NYSDEC enviromapper shows that the waters adjacent to the control plant are classified as SB.

Groundwater

The site does not occur above and/or immediately adjacent to a USEPA-identified sole source aquifer. Due to the sandy soils, low elevation, and nearby ocean, it is anticipated that ground water maybe less than 10 ft below ground surface.

Wetlands

Wetland Regulations

Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

Wetlands are regulated by both the federal agencies and state agencies. A regulatory distinction is made between freshwater and tidal wetlands. Freshwater wetlands, as the name implies, are those ecological communities whose hydrologic inputs are derived from freshwater. These wetlands generally include swamps, marshes, bogs, and similar areas. Tidal wetlands are swamps, marshes, or bogs located in areas where the land meets the ocean or a tidal estuary.

Federal

Except for certain isolated wetlands, all freshwater wetlands within the study area fall under the jurisdiction of the USACE, pursuant to Section 404 of the Clean Water Act (CWA).

New York State

Freshwater and tidal wetlands also come under the jurisdiction of NYSDEC pursuant to Articles 24 and 25 of the NYS ECL.

Freshwater wetlands are protected in New York under Freshwater Wetlands Act (FWA) (Article 24 of the Environmental Conservation Law). NYSDEC regulates wetlands larger than 5 ha (12.4 ac) or of significant local importance under 6NYCRR Part 663. The NYSDEC also regulates a regulated adjacent area to freshwater wetlands. Typically, the regulated wetland adjacent area covers a maximum of 100 foot extent from the jurisdictional freshwater wetland delineation. .

Wetlands have been classified by NYSDEC according to the system set forth in Title 6 of the New York State Codes, Rules and Regulations (6 NYCRR). The system classifies wetlands according to their ability to perform wetland functions and provide wetland benefits. Class I wetlands have the highest rank (benefit), and the ranking descends through Classes II, III, and IV. A brief summary of the differences of the four classes of wetlands follows:

Class I wetlands are wetlands that provide habitat for state threatened and/or endangered species or are adjacent to a drinking water supply.

A wetland is designated as **Class II** if:

- It provides habitat for species that are vulnerable within the state.
- It provides migratory routes for threatened and endangered species.
- It may be in an urbanized area, or
- It is one of the three largest wetlands in a community.

A wetland is designated as **Class III** if:

- It is the resident habitat of an animal species vulnerable in the major region of the state in which it is found, or

- It is the traditional migration habitat of an animal species vulnerable in the state or in the major region of the state in which it is found.

Class III wetlands may be covered by two-thirds of invasive species (e.g., purple loosestrife [*Lythrum salicaria*], common reed [*Phragmites australis*], etc.).

Class IV wetlands are those wetlands that do not have any of the characteristics of Class I, II, or III wetlands.

Tidal wetlands are protected in New York under the Tidal Wetlands Act (Article 25 of the Environmental Conservation Law). NYSDEC regulates a tidal wetlands regulated adjacent areas that is 150 ft area (landward of the tidal wetland delineation) in accordance with 6NYCRR Part 661. Regardless of size, all tidal wetlands are mapped by NYSDEC on the NYSDEC Tidal Wetlands Maps. The NYSDEC has identified and mapped littoral zone and intertidal marsh areas within the study area. The littoral zone, as defined by the NYSDEC Coastal Wetlands Regulation program, includes open-water areas covered by less than 6 feet of water at mean low water (mean low tide).

Regulatory Agency Mapped Wetlands

Preliminary investigations to determine the extent of freshwater wetlands in the study area included review of the following:

- USFWS National Wetlands Inventory (NWI) Online Mapper.
- NYSDEC Regulatory Freshwater Wetlands Maps; and
- NYSDEC Tidal Wetlands Maps.

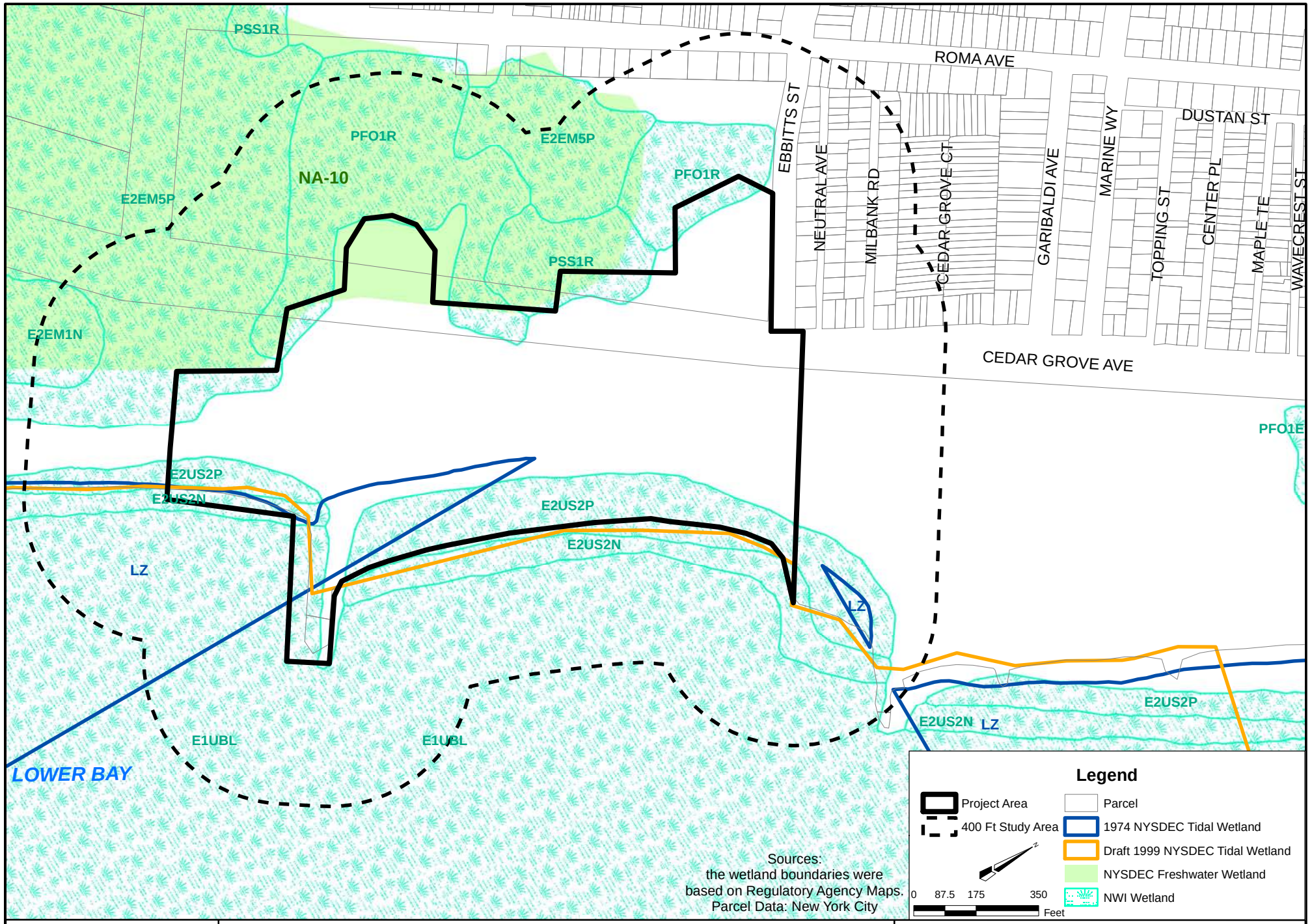
Both the NWI and NYSDEC maps have cautionary notes indicating that mapped boundaries of wetlands are approximate. NWI and NYSDEC wetland mapping is prepared from the analysis of aerial imagery. As a margin of error is inherent when using imagery to map wetlands, the mapping shows only the approximate locations of the actual boundaries. For this reason, detailed on-the-ground inspection of sites can result in revisions of wetland boundaries or classifications determined through image analysis.
Figure 3.4-2 identifies mapped federal and state wetlands on the site.

NWI Wetlands

As per the USFWS' National Wetland Inventory online mapper, the site is bordered by several palustrine and estuarine wetland polygons. Both palustrine (P) and estuarine (E) wetlands are described below (Cowardin et. al., 1979):

- Palustrine wetlands include all non-tidal wetlands that are dominated by trees, shrubs, persistent emergent, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5 percent; and

- Estuarine wetlands are those that consist of deep-water tidal habitats and adjacent tidal wetlands that are usually semi-enclosed by land but have open, partly obstructed, or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation.



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Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Mapped Wetlands

Figure 3.4-2

The wetland polygons mapped on and/or immediately adjacent to the site are as the following:

- E2US2P Estuarine, intertidal, unconsolidated shore, sand, irregularly flooded
- E1UBL Estuarine, subtidal, unconsolidated bottom
- ESEM5P Estuarine intertidal persistent emergent wetland, *Phragmites australi*s, Irregularly flooded.
- PSS1R Palustrine scrub shrub, broad-leafed deciduous, seasonal tidal
- PFO1R Palustrine forested broad-leafed deciduous, seasonal tidal

Polygons E1UBL and E2US2P classify the beach and the waters of the ocean. Polygon ESEM5P characterizes the small wetland polygon on site and the larger wetland tract located west of the site. Polygons PFO1R and PSS1R identify the forested wetlands west and south of the site.

NYSDEC Wetlands

NYSDEC Freshwater Wetland Map has a single mapped wetland labeled *NA-10*, which encompasses much of the vegetated area west of the site and small areas within the western and southern portion of the site. Wetland NA-10 is identified as a Class I wetland, thus receiving the highest regulatory consideration.

NYSDEC Tidal Wetland Maps - The NYSDEC Tidal Wetland Map from 1974 indicates that the waters adjacent to the site's shoreline are mapped as Littoral Zone (LZ). There are no marshes or other wetland types mapped on and/or immediately adjacent to the site.

3.4.1.6 Protected Resources - New York State Bird Conservation Areas, Critical Environmental Areas, NYS-Designated Coastal Fish & Wildlife Habitats, Coastal Erosion Areas, and Threatened and Endangered Species

Bird Conservation Area

There are no Bird Conservation Areas (BCAs) located on and/or adjacent to the site. The two BCA's located on Staten Island are the Harbor Herons and Clay Pit Ponds BCAs located approximately seven miles northwest and six miles southwest, respectively.

Critical Environmental Areas

Review of the NYSDEC website in June 2011 indicated that there are no Critical Environmental Areas located within Richmond County (NYSDEC, 2011).

Significant Coastal Fish and Wildlife Habitat

As per a September 16, 2010 letter, the NYS DOS indicated that " *While the Great Kills Park/Cedar Grove Beach Rehabilitation project lies inside the New York State Coastal Boundary, after review of the project area and the NYS Department of State Coastal Atlas, there are no Significant Habitats in the vicinity of the proposed center".* In August of 2011, the New York State Coastal Atlas was reviewed for any updates to NYS DOS mapping. The review indicated that there are no Significant Coastal Fish and Wildlife Habitats (SCFWH) within and/or immediately adjacent to the site.

Coastal Erosion Hazard Areas

Under the Coastal Erosion Management Program, the NYSDEC regulates setback areas from natural protective features including beaches and bluffs. A Coastal Erosion Hazard Area (CEHA) is an area in which activities are regulated to minimize or prevent damage or destruction to structures, buildings, property, natural protective features, and other natural resources, and to protect human life. Permits through the NYSDEC are required for most activities that occur in a CEHA. The CEHA for this project was identified as the area between the water and just landward of the bungalows.

Threatened and Endangered Species

To determine the presence of threatened and endangered species, previous field investigations of noted flora and fauna on site. In addition, the NYCDPR has consulted with NYSDEC New York Natural Heritage Program, National Oceanic & Atmospheric Administration HCD and MNFS, and New York State Department of State with regard to documented occurrences in agency databases of rare species or unique habitats, and endangered, threatened or special concern species known to utilize the subject site. These response letters are provided in **Appendix C**. The letters generally indicate that no known threatened and/or endangered federal or state species are known to occur on site. The findings of the field investigations and regulatory agency correspondence are provided below.

Federal

In a letter/fax dated February 7, 2011, the USFWS indicated that the shortnose sturgeon, *Acipenser brevirostrum* may be present near the project site. Although, the letter did indicate that the species primarily occurs in the Hudson River and principal responsibility of this species is vested with NOAA. The February 7th letter also indicated that due to increasing project review workloads and decreasing staff, the project applicant should consult USFWS' website to determine listed and candidate species that are known to occur in the county

The USFWS website was reviewed to determine what federally-listed threatened and/or endangered species may be present on Staten Island (USFWS, 2011). Review of the USFWS' website indicated that five species of marine turtles may occur in Staten Island. During the field visit, no evidence of turtle nesting or use of the project site was identified.

In a letter dated August 31, 2010, the NOAA NMFS indicated that "listed species (sea turtles) may seasonally occur in the project area". The letter continues to indicate that "*If no in-water work is proposed, then no further coordination with NMFS' Protected Resource Division is necessary*" (NMFS, 2010).

State

In their September 10, 2010, correspondence, the NYNHP did indicate that a protected bird species, the barn owl, *Tyto alba*, was observed approximately 0.5 miles north of the site. During the field investigation no owls were identified either actively or passively using the site. The letter also mentions that The Rambur's Forktail and the Mocha Emerald are historic sightings that have been previously observed on "Staten Island". During an August 23, 2007 site visit NYCDPR personnel sighted a Rambur's forktail during a site visit; however, no specific location of the sighting was provided. In the June 2011 field visit, neither species was observed.

Previous investigations by NYCDPR official noted the presence of beach sandbur (*Cenchrus tribuloides*), a state threatened species. Beach sandbur was observed by NYCDPR on site in Fall 2010 and Spring 2011. The species is listed as S2 in the state of New York and considered threatened/imperiled because of rarity or highly vulnerable to extirpation from New York State due to biological or human factors. See **Section 3.4.3.4,** "Regulated Resources and Threatened and Endangered Species," below for a discussion of the longterm management of this threatened species.

During the field visits of June 5 and 6, 2011, beach sandbur was observed in two maritime dune communities at the north and south end of the project area (**Figure 3.4-3**). The grass had a patchy distribution and was not the dominant grass species in the community. Also, it was noted that sandburr often favored the edge of a grass community. During the July 2011 field visit the rambur's forktail was not observed on site.

3.4.2 Future No-Action Condition (Future Without the Action)

3.4.2.1 Topography, Geology, and Soils

Under this option, there would be slight changes to the topography; although, the soils of the site would not be substantially changed. The notable change would be the formation of dunes due to dtorm surge and to Aeolian deposition between the bungalows. Aeolian deposition and colonization of maritime dune vegetation between the bungalows was observed during the June 2011 field visit. The underlying geology of Staten Island and the site would not be altered by way of implementation of this option.

3.4.2.2 Habitats, Flora, and Fauna

There would be little impact to habitats and fauna under this option as the site would continue provide the same habitats that it currently provides. Although, the abandoned buildings would likely fall into disrepair and perhaps serve as habitat for avifauna and small mammals adapted for urban environments.

The beach would continue to be utilized in the same manner as currently occurs. No impacts would occur to the oceanic habitats and associated flora and fauna under this option.

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Cedar Grove Beach Rehabilitation
Environmental Impact Statement
NYC Department of Parks and Recreation

Observed Locations of *Cenchrus Tribuloides*

Figure 3.4-3

3.4.2.3 Surface waters and Wetlands

Under this option no further disturbance is envisioned for wetlands and/or regulated adjacent areas that occur on site.

3.4.2.4 Protected Resources - New York State Bird Conservation Areas, Critical Environmental Areas, NYS-Designated Coastal Fish & Wildlife Habitats, Coastal Erosion Hazard Areas, and Threatened and Endangered Species

The project would not have any impact on BCAs CEAs, or SCFWHs as these resources do not occur on and/or immediately adjacent to the site. Also, no major adverse impact is anticipatedwithin the CEHA, as the removal of the majority of manmade structures in this area and replacement with native landscaping would be a positive impact.

Under this option, beach sandbur would continue to exist within the areas identified during the June 2011 field visit. The organisms may also volunteer into the dune areas forming between the bungalows and the proposed maritime dune vegetation planting areas. Future beach grooming efforts should take care so as not to disturb the plant individuals or potential habitat.

3.4.3 Future Action Condition (Future With the Action)

3.4.3.1 Topography, Geology, and Soils

Under this option, the topography, geology, and soils of the site would not undergo substantial modification. The removal of the bungalows and creation of sand dunes in their place would result in a rolling topography near the beach. This topography and soils would be similar to the historic materials that formed the coastline. The underlying geology of Staten Island and the site would not be altered by way of implementation of this option.

3.4.3.2 Habitats, Flora, and Fauna

Under this option there would be some modification of the existing habitats. Most of the habitats would remain unchanged; however, areas of grass lawns and grass lawns with trees near the bungalows would be converted to parking spaces, a playground, and a footpath. Also, many of the existing bungalows would be removed and the areas replanted with native dune vegetation. These actions would result in a net positive increase of ecological value for the site. Grass lawns are habitats of limited ecological value. The loss of grass lawns would be offset by the creation of maritime dune vegetation, a much more limited resource. Moreover, the maritime dune vegetation would provide increased habitat areas for the state endangered species, beach sandbur to exist.

Most of the fauna that utilize the site now are species common to urban and suburban environments. During construction, some of these species may be displaced; however, the large tracts of undeveloped land adjacent to the site could accommodate any displacement. Once construction is completed, the new habitats, especially the maritime dune communities, would provide attractive habitat to various fauna.

The NMFS during their September 30, 2010 correspondence (see **Appendix C**) indicated that the project area was identified as EFH for several species. These species are identified in **Table 3.4-6** below. . Although, the current project would not physically disturb the oceanic environment, an EFH report would need to be prepared to accompany permit applications.

Table 3.4-6 Essential Fish Habitat Species in the Project Area

Species	Eggs	Larvae	Juveniles	Adults
Atlantic butterfish *(Peprilus triacanthus)*		X	X	X
Atlantic mackerel *(Scomber scombrus)*			X	X
Atlantic salmon (Salmo salar) *			X	X
Atlantic sea herring *(Clupea harengus)*		X	X	X
black sea bass *(Centropristis striata)*			X	X
bluefish *(Pomatomus saltatrix)*			X	X
cobia *(Rachycentron canadum)*	X	X	X	X
dusky shark *(Carcharhinus obscurus)*		X	X	
king mackerel *(Scomberomorus cavalla)*	X	X	X	X
pollock *(Pollachius virens*				
red hake *(Urophycis chuss)*	X	X	X	
sand tiger shark *(Carcharias taurus)*		X		
sandbar shark *(Carcharhinus plumbeus)*		X		X
scup *(Stenotomus chrysops)*	X	X	X	X
Spanish mackerel *(Scomberomorus maculatus)*	X	X	X	X
summer flounder *(Paralichthys dentatus)*		X	X	X
windowpane flounder *(Scophthalmus aquosus)*	X	X	X	X
winter flounder *(Pseudopleuronectes americanus)*	X	X	X	X

Note: * Species is not indentified on NOAA website, but was referenced in the agency's September 30, 2010 correspondence

"X" indicates that EFH designation for the particular life stage.

Source: NOAA, 2011

3.4.3.3 Surface Waters and Wetlands

Coordination with the United States Army Corps of Engineers (USACE) was previously undertaken. As per a January 2, 2011 letter, the USACE indicated that their review determined that as the rehabilitation of Cedar Grove Beach will not involve dredging or construction activities over any navigable waters of the United States, the placement of any dredged or fill material in any waters of the United States, or the accomplishment of any work affecting the course, location, condition or capacity of such areas. It is not anticipated that fill or construction materials would affect wetlands and water bodies of the United States, thus a USACE permit would not be required.

As the Proposed Action would involve work within New York State's freshwater and tidal wetlands and/or regulated adjacent areas, the Project Sponsors would coordinate with the NYSDEC pursuant to the state's Freshwater Wetlands Regulatory Program and Tidal Wetlands Permit Program. In addition, the NYSDEC likely would require authorization of a Section 401 Water Quality Certification to ensure that proposed work under the Proposed Action within state regulated waters and/or wetlands do not contravene state water quality standards. Best management practices for the control of sedimentation and erosion would be required to control potential silt and sediment releases to surface waters and wetlands.

Based on the final construction plans prepared under the Proposed Action, the Project Sponsors will continue to coordinate with NYSDEC and USACOE and all applicable permits will be sought as needed. It is anticipated that the Proposed Action would not adversely impact tidal wetland areas and/or regulated adjacent areas. Nor would it adversely impact freshwater wetland areas and/or regulated adjacent areas. The Proposed Action primarily involves removal of manmade structures and impervious surfaces within regulated areas and replacement of these impervious materials with native plantings and landscaping. Thus, the Proposed Action would not have a significant negative effect upon the ecological value of the tidal or freshwater wetlands.

3.4.3.4 Regulated Resources and Threatened and Endangered Species

The proposed project would not have any impact on BCAs CEAs, or SCFWH as these resources do not occur on and/or immediately adjacent to the site.

It is anticipated the project would have a net positive impact on the CEHA. The project would remove existing man-made structures within the CEHA and replace those areas with planted dune vegetation. This vegetation type plays an important role in strengthening and stabilizing coastal dunes.

Under this option, beach sandbur would continue to exist within the areas identified during the June 2011 field visit. The creation of the areas of maritime dune vegetation in the areas of the former bungalows would provide potential habitat for the beach sandbur. Future beach grooming activities should not be conducted in a way that disturbs the individual plants or potential habitat.

3.4.4 Mitigation

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. Based on the final construction plans prepared under the Proposed Action, the Project Sponsors will continue to coordinate with relevant agencies and all applicable permits will be sought as needed. It is anticipated that disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and could potentially require mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005). A component of this proposed project is the potential removal of bungalows and impervious structures from the regulated adjacent areas. These structures would be replaced with native dune vegetation; thus, a net positive ecological benefit to the regulated adjacent area would occur through implementation of the Proposed Action.

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NYSDEC, 2011. http://www.dec.ny.gov/permits/6184.html Website accessed to determine the Critical Environmental Areas in New York State.

USFWS, 2011http://ecos.fws.gov/tess_public/countySearch!speciesByCountyReport.action?fips=36085. Website accessed in June 2011, to determine listed federal species in Richmond County.

Photo 1 – Maritime beach habitat. Note the groomed beach that is devoid of vegetation. In the left of the photo there is an example of the Marine deepwater community habitat.

Photo 2 – Maritime dune habitat. Note the grasses and isolated shrubs. Maritime beach habitat can be observed in the left side of the photo.

Photo 3 –Maritime dune vegetation volunteering landward of the beach

Photo 4 Mowed lawn habitat

Photo 5 Mowed lawn with trees habitat – This habitat dominates the central portion of the site and is ringed by small paved roads; an example of which is visible in the left side of the photo.

Photo 6 Reedgrass/Purple loosestrife marsh – Dominated by common reed, this vegetation represents the edge of a much larger wetland complex located west of the site.

Photo 7 – Located east and adjacent to the reedgrass marsh, the shallow emergent marsh habitat (foreground) is dominated by black grasses and sedges. Dark soil devoid of vegetation suggests long-term inundation and ponding of water.

Photo 8 – Photo depicting the southern successional hardwood habitats that border much of the mowed lawn habitat along the site's north and west borders.

Photo 9 View of the urban exterior habitat associated with the abandoned bungalows and the Flower and herb garden habitats that dominate many of the backyards of the bungalows.

Photo 10 – Water flowing from a broken distribution line observed on June 5 and 6, 2011.

3.5 HAZARDOUS MATERIALS

A hazardous material is any substance that poses a threat to human health or the environment. Substances that may be of concern include, but are not limited to, heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), methane, polychlorinated biphenyls (PCBs), pesticides, dioxins, hazardous wastes, radiation sources, etc. For hazardous materials, the goal for CEQR is to determine whether the proposed project would increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. If significant adverse impacts are identified, CEQR requires that the impacts be disclosed and mitigated or avoided to the greatest extent practicable.

Due to the age of the structures on the Cedar Grove Beach project site, the presence of lead and/or asbestos containing materials (ACM) is considered likely in most of the buildings on site. For this reason, a Phase I Environmental Site Assessment (ESA) was conducted for the project site. The purpose of the ESA is to review the general environmental conditions of the land and structures that comprise the Cedar Grove Beach project site. The ESA seeks to identify recognized environmental conditions (RECs) on or near the site that may adversely impact the subject property under existing federal, state and city environmental laws, and to recommend further actions necessary to confirm, quantify, or abate recognized environmental conditions. A summary of the findings of the Phase I ESA that was conducted for the Cedar Grove Beach project site are discussed below.

3.5.1 Phase I Environmental Site Assessment

A Phase I ESA was completed by Brinkerhoff Environmental Services, Inc. (Brinkerhoff) for the Cedar Grove Beach project site, consisting of Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45 in Staten Island, New York. The main objective of the Phase I ESA was to identify recognized environmental conditions (RECs) and environmental concerns that may affect the suitability of the project site as a beach and open space resource for public use. Recognized environmental conditions are defined in American Society of Testing and Materials (ASTM) Standard Practice E 1527-05 as the presence or likely presence, use, or release on the site of hazardous substances or petroleum products. The following activities were conducted to complete the Phase I ESA for the project site:

- **Review of Topographical and Subsurface Conditions** – A review of United States Geological Society (USGS) 7.5 Minute Topographic Maps of the project site, as well as a review of aerial photographs, fire insurance maps, property tax files, recorded land title records, local street directories, building department records, and zoning/land use records.

- **Review of Historical Land Use Data** – A review of federal and state standard environmental record sources using minimum search distances from the subject property, as defined by ASTM E 1527-05, to identify nearby sites with known environmental impairments or operations registered to handle hazardous substances and wastes.

- **Site Reconnaissance** - A physical inspection of the project site (conducted on December 17, 2010, by Brinkerhoff) to locate and identify: signs of chemical spills; visual and documented evidence of chemical storage tanks; improper use, storage and disposal of hazardous materials; and polychlorinated biphenyl (PCB)-containing electrical equipment.

3.5.2 Summary of Phase I Environmental Site Assessment Findings

An environmental database search of the project site and an area within a one-mile radius of the subject property was performed by Environmental Data Resources, Inc. (EDR). The EDR database search report generated information regarding the project site and surrounding properties that are or have been regulated, tracked, or investigated under specific federal or state environmental programs.

Database Search Results for Project Site

The Cedar Grove Beach project site was identified in the EDR database search in the Facility Index System (FINDS) database. The FINDS database located the project site in the New York Facility Information System. The subject property was assigned program system ID 2-6404-00403 as Section 404 Permitting of the Clean Water Act (CWA). Section 404 of the CWA establishes a program to regulate the discharge of dredged or fill material into waters of the United States, including wetlands. Activities in waters of the United States regulated under this program include fill or development, water resources projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill materials may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation (e.g. certain farming activities).

The New York City Department of Parks and Recreation has requested a permit from the United States Army Corps of Engineers (USACE), as per Section 404 of the CWA. In their January 3, 2011, response letter, USACE indicated that their review determined "that since the proposed work does not appear to include dredging and construction activities in or over any navigable waters of the United States, the placement of any dredged or fill material in any waters of the United States, or the accomplishment of any work affecting the course, location, condition or capacity of such areas, a Department of Army permit, in accordance with 33 CFR 320-330, will not be required provided the proposed work is executed in accordance with the referenced materials."

Database Search Results for Surrounding Sites

According to the EDR environmental database search, surrounding properties with potential hazardous conditions were identified in the federal and state databases within a one-mile search radius of the subject property. These listings included two properties with leaking storage tank incidents and a formerly used defense site property. The two properties with leaking storage tank incidents are located at 165 Roma Avenue and at 111 Milton Avenue in Staten Island. Both of the incidents were reported to and closed by the New York State Department of Environmental Conservation. Miller Field, north of the project site, was formerly used by the U.S. Army as an airfield and training for the reserves. Ownership of the Miller Field site has since been turned over to New York City and the National Park Service. However, these properties are considered too distant to likely impact the subject property, as the identified surrounding properties are either downgrade, of similar elevation, or separated by a hydrological barrier.

3.5.3 Conclusions and Recommendations

Based on the findings of the Phase I ESA, no known RECs associated with the project site were identified. Further, based on field observations made during the site reconnaissance and a review of available documents, no evidence of underground storage tanks were identified on the project site. There is potential, based on the age of the buildings on the project site, that lead based paints and/or asbestos containing material (ACM) are present. The proposed project would rehabilitate the Cedar Grove Beach for use as a public beach and open space resource. As part of the overall rehabilitation of the project site, the project sponsor, New York City Department of Parks and Recreation, is committed to the proper removal of lead based paints and/or ACM on the project site, in accordance with all applicable federal, state and city standards. Therefore, no significant adverse hazardous materials impacts are expected as part of the Proposed Action.

3.6 TRANSPORTATION

According to the *CEQR Technical Manual*, interrelationships between the key technical areas of the transportation system – traffic, transit, pedestrians, and parking – should be taken into account in any assessment, and the individual technical areas should be separately assessed to determine whether a project has the potential to adversely and significantly affect a specific area of the transportation system. The *CEQR Technical Manual* states that if an analysis is warranted, a preliminary trip generation assessment should be prepared to determine whether a quantified analysis of any technical areas of the transportation system is necessary. Except in unusual circumstances, a further quantified analysis would typically not be needed for a technical area if the proposed development would result in fewer than the following increments:

- 50 peak hour vehicle trips;
- 200 peak hour subway/rail or bus transit riders; or
- 200 peak hour pedestrian trips.

The *CEQR Technical Manual* also states that if the threshold for traffic is surpassed, a parking assessment may also be warranted. This section assesses the potential for project–generated vehicle, transit, and pedestrian trips to affect the local transportation network surrounding the Cedar Grove Beach study area, as well as an assessment of pedestrian safety in the surrounding study area.

3.6.1 Traffic

This section examines potential future traffic conditions associated with the proposed Cedar Grove Beach Rehabilitation Project. In most areas of the city, including the area of Staten Island where Cedar Grove Beach is located, if a Proposed Action is projected to result in 50 or more peak hour vehicular trip ends, there is the potential for traffic impacts and a detailed traffic assessment is recommended by CEQR. As shown in **Table 3.6-1** below and discussed in detail later in this chapter, the proposed project is projected to generate approximately 116 vehicle trips during the midday (12:30 p.m. to 1:30 p.m.) and PM peak hours (4:15 p.m. to 5:15 p.m.) on a typical weekend. Because this number of vehicle trips exceeds the 50 vehicle-trips/peak hour threshold for a detailed analysis in the *CEQR Technical Manual*, a detailed traffic analysis is provided for both time periods. The weekend midday and PM peak hours were chosen for analysis as these are assumed to represent the peak period of beach-related vehicle trips.

The traffic study area was selected to include the intersections most likely to be used by project-generated vehicles traveling to and from the beach. As shown in **Figure 3.6-1**, the study area extends along Ebbitts Street and includes the signalized intersection at Mill Road/Ebbitts Street, as well as the stop-controlled intersection of Cedar Grove Avenue/Ebbitts Street. The access to the Cedar Grove Beach project site is proximate to the intersection of Cedar Grove Avenue/Ebbitts Street. Beyond this stretch of Ebbitts Street, project-generated traffic volumes would be more dispersed and, therefore, the potential effect on traffic operations would be less significant.

The following section describes year 2011 existing traffic conditions in the study area. Year 2014 future conditions without the proposed project (i.e., “Future No-Action” Condition) are described next. The change in vehicular traffic resulting from the proposed project is then estimated and added to the Future No-Action Condition traffic volumes to develop the forecast year 2014 “Future with the Proposed Action” (Future With-Action Condition) traffic volumes.

Table 3.6-1
Estimated Trip Generation Characteristics for Cedar Grove Beach

TRAVEL DEMAND ASSUMPTIONS																															
	Active Recreation								**Passive Recreation**								**Concessions**								**Beach**							
Size	2.90 acres								19.25 acres								3.22 1,000 square feet								5.065083 acre							
Daily Person Trip Generation Rate	Weekend[1] 196 per acre								Weekend[1] 62 per acre								Weekend[2*] 162.18 per 1,000 sq ft								Weekend[3] 121.8 per acre							
Temporal Distribution	MD[1] 6.0%		PM[1] 6.0%						MD[1] 6.0%		PM[1] 6.0%						MD[2] 12.6%		PM[2] 12.6%						MD[4] 18.3%		PM[4] 18.3%					
Directional Distribution	in[2] 48.0%	out[2] 52.0%	in[2] 48.0%	out[2] 52.0%					in[2] 48.0%	out[2] 52.0%	in[2] 48.0%	out[2] 52.0%					in[2] 63.0%	out[2] 37.0%	in[2] 63.0%	out[2] 37.0%					in[4] 70.0%	out[4] 30.0%	in[4] 30.0%	out[4] 70.0%				
Modal Split	Auto[2] 90.0%	Transit[2] 5.0%	Bicycle[2] 2.0%	Walk[2] 3.0%					Auto[2] 90.0%	Transit[2] 5.0%	Bicycle[2] 2.0%	Walk[2] 3.0%					Auto[2] 90.0%	Transit[2] 5.0%	Bicycle[2] 2.0%	Walk[2] 3.0%					Auto[2] 90.0%	Transit[2] 5.0%	Bicycle[2] 2.0%	Walk[2] 3.0%				
Auto Occupancy	2.5 [2]								2.5 [2]								2.2 [2]								1.6 [4]							
TRIP GENERATION CALCULATIONS																																
	Auto		Transit		Bicycle		Walk		Auto		Transit		Bicycle		Walk		Auto		Transit		Bicycle		Walk		Auto		Transit		Bicycle		Walk	
Person Trips	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*	*in*	*out*
Weekend Midday	15	16	1	1	0	0	0	1	31	34	2	2	1	1	1	1	37	22	2	1	1	0	1	1	71	30	4	2	2	1	2	1
Weekend PM	15	16	1	1	0	0	0	1	31	34	2	2	1	1	1	1	37	22	2	1	1	0	1	1	30	71	2	4	1	2	1	2
Vehicle Trips	in	out							in	out							in	out							in	out						
Weekend Midday	6	6							12	13							17	10							44	19						
Weekend PM	6	6							12	13							17	10							19	44						

TOTAL								
	Auto		**Transit**		**Bicycle**		**Walk**	
	in	**out**	**in**	**out**	**in**	**out**	**in**	**out**
Person Trips	**154**	**102**	**9**	**6**	**3**	**2**	**5**	**3**
	113	**142**	**6**	**8**	**3**	**3**	**4**	**5**
	in	**out**						
Vehicle Trips	**80**	**49**						
	54	**74**						

Active Recreation: Includes the following: basketball courts, tennis courts, soccer field, bike path, playground and bocce courts
Passive Recreation: Includes the remaining bungalows

Notes:
1 = 2010 *CEQR Technical Manual*
2 = *Fresh Kills Park FGEIS*
3 = Institute of Transportation Engineers, *Trip Generation, 8th Edition*, Beach Park (Land Use 415). Daily vehicle trip generation rate converted to person trips using the highest weekend day.
4 = *Arverne Urban Renewal Area FEIS*
* Assumes 25 percent of concession trips are linked (shared) with the beach, active recreation, and passive recreation uses.

Existing Conditions

Street Network

The physical and operational characteristics of the major streets comprising the roadway network within the study area are described as follows:

- *Ebbitts Street* – Within the study area, Ebbitts Street is a two-way (east-west), collector-level roadway. It extends between Hylan Boulevard to the west and Cedar Grove Avenue to the east. In the study area, Ebbitts Street is approximately 43 feet wide, with one travel lane in each direction and curbside parking allowed on both sides of the roadway.

- *Mill Road* – Within the study area, Mill Road is a two-way (north-south), collector-level roadway. Mill Road extends between the Great Kills Park area to the south and New Dorp Lane to the north. In the study area, Mill Road is approximately 48 feet wide, with one travel lane in each direction and curbside parking allowed on both sides of the roadway.

- *Cedar Grove Avenue* – Within the study area, Cedar Grove Avenue is a two-way (north-south), local roadway. Cedar Grove Avenue extends between Cedar Grove Beach to the south and Miller Field to the north. In the study area, Cedar Grove Avenue is approximately 30 feet wide, with one travel lane in each direction and curbside parking allowed on both sides of the roadway.

Study Area Intersections

The study area, shown in **Figure 3.6-1**, was defined to include two (2) study intersections in the proximity of the proposed project that have the potential to experience changes in traffic operations as a result of the Proposed Action. These two study intersections are as follows:

- Mill Road/Ebbitts Street (signalized)
- Cedar Grove Avenue/Ebbitts Street (stop-controlled)

A comprehensive data collection effort was undertaken at these two intersections to obtain the necessary data required for the traffic operations analysis.

Traffic Data Collection

Data were collected in the field at the two study intersections in April and May 2011. The traffic data collection effort included Automatic Traffic Recorder (ATR) counts, manual turning movement and vehicle classification counts, and a comprehensive inventory of roadway geometrics and physical operating characteristics at each study intersection.

Intersection Inventory

The physical and operational characteristics of each study intersection were inventoried in the field. This inventory specifically included:

- Street directions
- Number and configuration of lanes
- Crosswalk locations and crosswalk widths
- Curbside parking regulations
- Turning restrictions and prohibitions
- Type of intersection traffic control
- Signal timing and phasing sequences as observed in the field
- Bus stop locations

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Study Area Figure 3.6-1

Official signal timings were provided by the New York City Department of Transportation (NYCDOT) for the signalized study area intersection at Mill Road/Ebbitts Street.

ATR Counts

For a period of eight (8) days, beginning Friday, April 29th, 2011, ATR counts were conducted continuously at 15-minute intervals along both Ebbitts Street and New Dorp Lane, between the intersections with Mill Road and Titus Avenue.

Manual Turning Movement and Vehicle-Classification Counts

Manual turning movement and three-way vehicle classification counts were collected at each of the study intersections on two Saturdays: April 30th and May 7th, 2011[7]. These counts were performed at 15-minute intervals during the weekend midday (11:30 a.m. to 2:00 p.m.) and afternoon (4:00 to 6:00 p.m.) peak periods. During the counts, vehicles were classified as autos, trucks, or buses. Based on the summary of the turning movement counts, the weekend midday and PM peak hours for the traffic analysis were determined to be the following:

- Weekend midday peak hour: 12:30 to 1:30 p.m.
- Weekend PM peak hour: 4:15 to 5:15 p.m.

Seasonal Adjustment

Because the traffic counts were conducted in the spring and the peak season for the beach will be the summer, a seasonal adjustment factor was applied to the existing traffic count volumes to conservatively reflect background traffic conditions during the summer months. Based on a review of seasonal traffic volumes in the area, NYCDOT recommended the use of a 10 percent seasonal adjustment factor. This factor was applied to increase the existing (spring 2011) traffic volumes to reflect existing peak season summer traffic conditions.

Figures 3.6-2 and **3.6-3** show the turning-movement volumes at each of the two study intersections during the weekend midday and PM peak hours, respectively, under year 2011 existing conditions.

Capacity Analysis

The capacity analyses for the study-area intersections are based on the methodologies described in the *2000 Highway Capacity Manual (HCM)* and were conducted using *Highway Capacity Software (HCS+) Release 5.4*. The official signal phasing sequences and timing plans obtained from NYCDOT were used in the analysis of the signalized intersection at Mill Road/Ebbitts Street.

For signalized intersections, the *HCM* methodology calculates a volume-to-capacity (v/c) ratio for each approach or lane group. The v/c ratio represents the ratio of traffic volumes on the approach to the approach's vehicle-carrying capacity. At v/c ratios between 0.95 and 1.00, traffic volumes approach capacity and delays to motorists could become substantial. Volume-to-capacity ratios exceeding 1.00 indicate saturated conditions, typically characterized by long delays and building queues.

The *HCM* methodology also expresses the quality of flow for an approach or lane group in terms of level-of-service (LOS), a measure based on the average control delay that motorists experience when traveling through the intersection. Control delay includes delays associated with acceleration, deceleration, and queue move-up time, in addition to stopped delay at the intersection. For signalized intersections, LOS

[7] Temporary street closures occurred on Cedar Grove Avenue, north of Ebbitts Street, on both count days. The first was due to a brush fire during the PM peak hour on April 30th, and the second was due to a church event during the midday peak hour on May 7th. Therefore, the counts conducted on these primary days were replaced with supplemental counts conducted on Saturday, May 14th, 2011,when there were no street closures, to ensure the existing conditions traffic analysis reflected typical conditions.

ranges on a letter-grade scale from “A” (average control delays of 10 seconds or less per vehicle) to “F” (average control delays exceeding 80 seconds per vehicle).

For unsignalized two-way stop-controlled intersections, the *HCM* methodology assumes that major-street through and right-turning traffic is unaffected by turning movements from the minor street. Left-turns from the major street are assumed to be affected by the opposing (oncoming) major-street traffic flow. Minor-street traffic movements are affected by all of the conflicting higher-priority movements described above.

As with signalized intersections, the *HCM* methodology for two-way stop-controlled intersections expresses the quality of flow in terms of both v/c ratio and a letter-grade LOS, with LOS based on the average control delay experienced by motorists making left-turns from the major street or turns from the minor-street approach. However, the relationships between delay and LOS for two-way stop-controlled intersections are different from those for signalized intersections, primarily because motorists expect different levels of performance from these two types of intersections. For unsignalized two-way stop-controlled intersections, LOS ranges from “A” (average control delays of 10 seconds or less per vehicle) to “F” (average control delays exceeding 50 seconds per vehicle).

Table 3.6-3 shows the relationships between average control delay and LOS for signalized and two-way stop-controlled unsignalized intersections using the *HCM* methodologies. Levels-of-service “A”, “B” and “C” generally represent extremely favorable to fair levels of traffic flow. At LOS “D”, delays increase and the influence of congestion becomes noticeable. LOS “E” is considered to be the limit of acceptable delay for most motorists. LOS “F” is considered to be unacceptable to most motorists, with traffic flow at, or exceeding, the capacity of the roadway.

Table 3.6-3 Level-of-Service Criteria

Level-of-Service	Average Control Delay (seconds per vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10	≤ 10
B	> 10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

Source: *2010 Highway Capacity Manual*.

Using the existing turning movement volumes shown in **Figures 3.6-2** and **3.6-3**, traffic operations analyses were conducted for each of the study intersections for the weekend midday and PM peak hours. **Table 3.6-3** shows the results of these analyses, including volume-to-capacity (v/c) ratios, average control delays, and corresponding levels-of-service.

As shown in **Table 3.6-3**, all approaches at both study intersections currently operate at LOS “C” or better during the midday and PM peak hours on a typical summer weekend.

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2011 Existing Traffic Volumes Weekend Midday Peak Hour Figure 3.6-2

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2011 Existing Traffic Volumes Weekend PM Peak Hour Figure 3.6-3

Table 3.6-3

Peak Hour Level-of-Service Analysis Results

Year 2011 Existing Traffic Conditions

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)			WEEKEND PM PEAK HOUR (4:15-5:15 PM)		
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS
SIGNALIZED INTERSECTION								
Mill Road / Ebbitts Street	EB	LTR	0.81	31.9	C	0.79	29.6	C
	WB	LTR	0.82	34.4	C	0.76	30.4	C
	NB	LTR	0.51	12.9	B	0.28	9.7	A
		R	0.10	8.2	A	0.27	9.8	A
	SB	LTR	0.55	12.9	B	0.38	10.6	B
	Overall		**0.66**	**22.2**	**C**	**0.54**	**20.4**	**C**
UNSIGNALIZED INTERSECTION								
Cedar Grove Avenue / Ebbitts Street	EB	L	0.07	7.4	A	0.05	7.4	A
	SB	R	0.11	8.7	A	0.12	8.8	A

v/c = volume-to-capacity ratio; LOS = Level-of-Service
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
L = Left-Turn; T = Through; R = Right-Turn;
LT = Left-Turn/Through; TR = Through/Right-Turn; LR = Left-Turn/Right-Turn; LTR = Left-Turn/Through/Right-Turn
Average Control Delay shown in units of seconds/vehicle

Future Without the Proposed Action (Future No-Action Condition)

The Future No-Action Conditions traffic analysis identifies how the study area's transportation system is projected to operate in the future *without* the proposed Cedar Grove Beach Rehabilitation Project. As such, the Future No-Action Conditions traffic analysis includes anticipated future increases in background traffic volumes, but does not include traffic generated by the proposed project. The beach is anticipated to be fully rehabilitated and open for public use by the summer of 2014. Therefore, the future horizon year for the traffic analyses is 2014.

Planned Development

As part of this analysis, NYCDOT Traffic Planning and the New York City Department of City Planning (NYCDCP) were contacted in order to identify any significant planned future developments ("soft sites") or transportation improvement projects anticipated to occur within the study area between 2011 and 2014. Based on conversations with staff at both agencies, the following soft sites were identified:

470 New Dorp Lane (Kohl's) – This site is located at 470 New Dorp Lane, on the east side of Hylan Boulevard and west of Mill Road, at the Staten Island Plaza. The proposed development includes a two-story 100,000 square foot retail store (anticipated to be a Kohl's department store), including a newly-designed parking lot. The six-acre site is vacant and formerly contained Frank's Nursery & Craft Store and an A&P grocery store. Based on standard trip generation rates published in *ITE Trip Generation, 8th Edition* for a Department Store (Land Use Code 875), this development is projected to generate a total of 287 vehicular trips (155 trips in and 132 trips out) during the peak hours on a typical weekend (12:30 p.m. to 1:30 p.m. and 4:15 p.m. to 5:00 p.m.). Based on an estimated trip distribution pattern, approximately 10 percent of the total vehicle trips generated by this soft site are projected to travel through the study intersection of Mill Road/Ebbitts Street during weekend peak hours (12:30 p.m. to 1:30 p.m. and 4:15 p.m. to 5:00 p.m.). (The remaining 90 percent of the traffic volume is projected to be generated along other streets in the surrounding area, including Hylan Boulevard, which serves as a major arterial-level corridor in this area of Staten Island.)

New Dorp Beach Enhancement Project – In March 2010 construction began on the rehabilitation of the nearby section of New Dorp Beach (at the intersection of New Dorp Lane and Cedar Grove Avenue). An existing seating area and children's play area and spray shower was expanded to include additional tot lot play equipment for children ages 2-5 and a formalized multipurpose field. Construction on these elements was completed in September 2011. Debris and foundation remains on the western most portion of New Dorp Beach (near Cedar Grove Court) posed both a health and safety risk to the public and hindered Parks' ability to get maintenance equipment onto New Dorp Beach to properly clean the area. Cleaning and beautification of New Dorp Beach, including the removal of foundation remains at the southern end of New Dorp Beach is expected to be completed in the fall of 2011. This project is not anticipated to generate substantial traffic and has been accounted for in the general background growth rate of 1% which was applied to the 2011 Existing Conditions.

Future Without the Proposed Action Traffic Volumes and Levels-of-Service

During the 2011 to 2014 period, it is expected that vehicular travel demands in the study area will increase over time. In order to forecast future traffic demands without the proposed project, an annual growth rate of one percent was applied over three years (three percent total growth) to the existing traffic volumes, in accordance with the growth rate recommendations for Staten Island described in the 2010 *CEQR Technical Manual*. In addition, the weekend peak hour traffic volumes for the Kohl's department store soft site described above were added to these adjusted traffic volumes to arrive at the projected Future No-Action traffic volumes. The resulting year 2014 Future No-Action traffic volumes are shown in **Figures 3.6-4** and **3.6-5** for the weekend midday and PM peak hours, respectively.

Capacity Analysis

Using Future No-Action traffic volumes shown in **Figures 3.6-4** and **3.6-5**, intersection capacity analyses were conducted using the *HCM* methodologies. As shown in **Table 3.6-4**, delays on the eastbound and westbound approaches at the signalized study intersection of Mill Road and Ebbitts Street are projected to increase to the LOS "D" range in the future without the proposed Cedar Grove Beach Rehabilitation project (as compared to LOS "C" range under existing conditions) during the weekend midday peak hour under typical summer conditions. However, the intersection as a whole will continue to operate at LOS "C" overall during both analysis peak hours. The intersection of Cedar Grove Avenue/Ebbitts Street will continue to operate at LOS "A" during both analysis peak hours.

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2014 Future No-Action Conditions Traffic Volumes, Weekend Midday Peak Hour Figure 3.6-4

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2014 Future No-Action Conditions Traffic Volumes, Weekend PM Peak Hour Figure 3.6-5

Table 3.6-4

Peak Hour Level-of-Service Analysis Results

Year 2014 No-Action Traffic Conditions

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)			WEEKEND PM PEAK HOUR (4:15-5:15 PM)		
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS
SIGNALIZED INTERSECTION								
Mill Road / Ebbitts Street	EB	LTR	0.85	35.4	D	0.81	31.5	C
	WB	LTR	0.87	38.9	D	0.78	32.1	C
	NB	LTR	0.55	13.8	B	0.31	10.0	A
		R	0.10	8.3	A	0.28	9.9	A
	SB	LTR	0.58	13.5	B	0.41	11.0	B
	Overall		**0.70**	**24.3**	**C**	**0.57**	**21.2**	**C**
UNSIGNALIZED INTERSECTION								
Cedar Grove Avenue / Ebbitts Street	EB	L	0.07	7.4	A	0.06	7.4	A
	SB	R	0.11	8.8	A	0.13	8.8	A

v/c = volume-to-capacity ratio; LOS = Level-of-Service
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
L = Left-Turn; T = Through; R = Right-Turn;
LT = Left-Turn/Through; TR = Through/Right-Turn; LR = Left-Turn/Right-Turn; LTR = Left-Turn/Through/Right-Turn
Average Control Delay shown in units of seconds/vehicle

Future With the Proposed Action (Future With-Action Condition)

The Future With-Action Condition traffic analysis identifies how the study area's transportation system will operate in the 2014 horizon year with the addition of vehicular traffic generated by the proposed Cedar Grove Beach project. In this analysis, the projected weekend midday and PM peak hour vehicle trips associated with the proposed beach and its associated facilities were added to the respective Future No-Action traffic volumes to arrive at projected Future With-Action traffic volumes. Intersection level-of-service analyses were then repeated for both analysis peak hours based on the projected Future With-Action traffic volumes, in order to evaluate the performance of the transportation system with the inclusion of vehicular traffic associated with the proposed beach. The results of the Future No-Action and Future With-Action Conditions analyses were then compared to identify any potential significant traffic impacts associated with the proposed project.

Proposed Development Plan and Trip Generation

The proposed beach is located at the easterly terminus of Ebbitts Street, at its intersection with Cedar Grove Avenue. As part of the proposed project, some of the existing bungalows on site are proposed to be rehabilitated to become such beach facilities as a lifeguard headquarters, a park concession, comfort stations, equipment storage facilities, maintenance and operations headquarters, a caretaker facility, among other beach-related ancillary uses. In addition, the existing pick up sport areas will be rehabilitated (these facilities are currently unavailable to the public until after the environmental review). The remaining beach area would be considered passive recreation.

The trip generation estimate for the proposed beach and its ancillary facilities was developed in collaboration with NYCDOT staff, using trip rates and travel demand assumptions from various sources including:

- 2010 *CEQR Technical Manual*
- Institute of Transportation Engineers (ITE), *Trip Generation, 8th Edition*
- Fresh Kills Park FGEIS (March, 2009)
- Arverne Urban Renewal Area FEIS (October, 2003)

As shown in **Table 3.6-1**, the proposed beach facilities were grouped into four usage categories including:

- Active recreation;
- Passive recreation;
- Concessions; and
- Beach.

Each of these usage categories is described below.

Active Recreation

As shown in **Table 3.6-1,** the proposed beach is planned to accommodate 2.90 acres of rehabilitated active recreation facilities (currently unavailable to the public). Based on the 2010 *CEQR Technical Manual*, the projected daily (Saturday) person trip generation rate for "active park space" is 196 trips per acre, and the projected temporal distribution is six percent for the Saturday peak hour. Based on the "City Destination Park" land use in the *Fresh Kills Park FGEIS*, the projected directional distribution is 48 percent in and 52 percent out for weekend peak hours, the projected mode split is ninety percent auto, five percent transit, two percent bicycle and three percent walk, and the projected auto occupancy is 2.5 people per vehicle. Based on these assumptions, the proposed active recreation uses at the beach are projected to generate approximately 12 vehicle trips (6 inbound, 6 outbound) during both the weekend midday and weekend PM peak hours.

Passive Recreation

As shown in **Table 3.6-1,** the proposed project site is planned to accommodate 19.25 acres of passive recreation facilities. Based on the 2010 *CEQR Technical Manual*, the projected daily (Saturday) person trip generation rate for "passive park space" is 62 trips per acre, and the projected temporal distribution is six percent for the Saturday peak hour. Based on the "City Destination Park" land use in the *Fresh Kills Park FGEIS*, the projected directional distribution is 48 percent in and 52 percent out for weekend peak hours, the projected mode split is 90 percent auto, five percent transit, two percent bicycle and three percent walk, and the projected auto occupancy is 2.5 people per vehicle. Based on these assumptions, the proposed passive recreation uses at the beach are projected to generate approximately 25 vehicle trips (12 inbound, 13 outbound) during both the weekend midday and weekend PM peak hours.

Concessions

As shown in **Table 3.6-1,** the project site is planned to accommodate 3,220 square-feet of concession facilities. All travel demand assumptions for this use were based on the *Fresh Kills Park FGEIS* assumptions for Café/Restaurants, which includes a projected daily person trip generation rate of 162.18 trips per 1,000 square-feet. This rate includes a 25 percent linked-trip reduction to account for concession trips shared with the beach and with the active and passive park uses. The projected temporal distribution was 12.6 percent for weekend peak hours, and the projected directional distribution is 63 percent in and 37 percent out for both weekend peak hours. The projected mode split is ninety percent auto, five percent transit, two percent bicycle, and three percent walk, and the projected auto occupancy is 2.2 people per vehicle. Based on these assumptions, the proposed concession facilities are projected to generate approximately 27 vehicle trips (17 inbound, 10 outbound) during both the weekend midday and weekend PM peak hours.

Beach

As shown in **Table 3.6-1,** the site is planned to accommodate a beach of approximately 5.07 acres. The travel demand assumptions for the beach were based on *Trip Generation, 8th Edition* for a beach park (Land Use 415), the *Arverne Urban Renewal Area FEIS,* and the *Fresh Kills Park FGEIS*. The projected daily person trip generation rate used is 121.8 trips per acre, and the projected temporal distribution is 18.3 percent for weekend peak hours. The projected directional distribution is 70 percent in and 30 percent out during the weekend midday peak hour and 30 percent in and 70 percent out during the weekend PM peak hour. The projected auto occupancy is 1.6 people per vehicle. The projected mode split is 90 percent auto, five percent transit, two percent bicycle, and three percent walk. Based on these assumptions, the proposed beach is projected to generate approximately 63 vehicle trips (44 inbound, 19 outbound) during both weekend peak hours.

Based on the parameters described above, **Table 3.6-1** shows estimated numbers of vehicle trips projected to be generated by the proposed project during the weekend midday and PM peak hours. As shown in **Table 3.6-1**, the proposed development is projected to generate approximately 129 vehicle trips (80 inbound, 49 outbound) during the weekend midday peak hour (12:30 to 1:30 p.m.) and approximately 128 vehicle trips (54 inbound, 74 outbound) during the weekend PM peak hour (4:15 to 5:15 p.m.).

Trip Distribution and Assignment

Ample recreational opportunities exist in this area of Staten Island, including Miller Field to the north of the proposed site and Great Kills Park to the south of the site. As such, the proposed project is envisioned as primarily serving local residents of the New Dorp Beach and Oakwood neighborhoods. The distribution of new vehicle trips generated by the proposed project onto the roadway network within the study area was estimated based on the local roadway network and the location of these neighborhoods relative to the proposed site. The resulting trip distribution estimate is shown in **Figure 3.6-6**.

Figures 3.6-7 and **3.6-8** illustrate the resulting assignments of project-generated traffic volumes during weekend midday and PM peak hours, based on the estimated trip distribution patterns shown in **Figure 3.6-6**. **Figures 3.6-9** and **3.6-10** show the resulting total traffic volumes under the year 2014 Future With-Action Condition for both analysis peak hours, which are the sum of the project-generated traffic volumes and the traffic volumes under the Future With-Action Conditions.

Capacity Analysis

Using the Future With-Action traffic volumes shown in **Figures 3.6-9** and **3.6-10**, intersection capacity analyses were conducted using the *HCM* methodologies. As shown in **Table 3.6-5**, approaches at the two study intersections are projected to continue to operate LOS "D" or better during the weekend midday and PM peak hours, with the exception of Mill Road and Ebbitts Street. In the future with the Proposed Action, the westbound approach of Mill Road and Ebbitts Street is projected to operate over-capacity at LOS "F" during the weekend midday peak hour, and over-capacity at LOS "F" during the weekend PM peak hour. Overall, the intersection as a whole is projected to continue to operate at LOS "D" during both analysis peak hours.

AECOM	Cedar Grove Beach Rehabilitation Environmental Impact Statement NYC Department of Parks and Recreation	Estimated Trip Distribution Pattern Figure 3.6-6

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Site-Generated Traffic Volumes Weekend Midday Peak Hour Figure 3.6-7

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Site-Generated Traffic Volumes Weekend PM Peak Hour Figure 3.6-8

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2014 Future Action Conditions Traffic Volumes, Weekend Midday Peak Hour Figure 3.6-9

Source: Google Maps™ mapping service

AECOM	Environmental Impact Statement Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Year 2014 Future Action Conditions Traffic Volumes, Weekday PM Peak Hour Figure 3.6-10

Table 3.6-5

Peak Hour Level-of-Service Analysis Results

Year 2014 Action Traffic Conditions

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)			WEEKEND PM PEAK HOUR (4:15-5:15 PM)		
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS
SIGNALIZED INTERSECTION								
Mill Road / Ebbitts Street	EB	LTR	0.88	39.6	D	0.85	34.8	C
	WB	LTR	1.06	81.2	F	1.08	90.4	F
	NB	LTR	0.55	13.8	B	0.31	10.0	A
		R	0.17	8.9	A	0.32	10.4	B
	SB	LTR	0.58	13.5	B	0.41	11.0	B
	Overall		**0.77**	**35.1**	**D**	**0.68**	**36.5**	**D**
UNSIGNALIZED INTERSECTION								
Cedar Grove Avenue / Ebbitts Street	EB	LTR	0.07	7.4	A	0.06	7.4	A
	NB	LT	0.12	12.7	B	0.17	12.4	B
	SB	TR	0.16	9.5	A	0.15	9.2	A

v/c = volume-to-capacity ratio; LOS = Level-of-Service
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
L = Left-Turn; T = Through; R = Right-Turn;
LT = Left-Turn/Through; TR = Through/Right-Turn; LR = Left-Turn/Right-Turn; LTR = Left-Turn/Through/Right-Turn
Average Control Delay shown in units of seconds/vehicle

Traffic Impacts

Traffic Impact Criteria

According to the thresholds established in the *2010 CEQR Technical Manual*, the following situations represent significant traffic impacts for signalized intersections:

1) If a lane group under the With-Action condition is within LOS "A", "B" or "C" or marginally acceptable LOS "D" (average control delay less than or equal to 45.0 seconds/vehicle) the impact is not considered significant. However, if a lane group under the No-Action condition is within LOS "A," "B" or "C," then a deterioration under the With-Action condition to worse than mid-LOS "D" (delay greater than 45.0 seconds/vehicle) should be considered a significant impact.

2) For a lane group with LOS "D" under the No-Action condition, an increase in projected average control delay of 5.0 or more seconds should be considered significant if the With-Action delay exceeds mid-LOS "D" (delay greater than 45.0 seconds/vehicle).

3) For a lane group with LOS "E" under the No-Action condition, an increase in projected delay of 4.0 or more seconds should be considered significant.

4) For a lane group with LOS "F" under the No-Action condition, an increase in projected delay of 3.0 or more seconds should be considered significant.

For unsignalized intersections, the criteria above also apply. However, for the minor street at an unsignalized intersection to trigger significant impacts, 90 PCEs (passenger car equivalents) must be identified in the future With-Action conditions in any peak hour.

The criteria described above ensure that the LOS for individual turning movements at each intersection does not degrade significantly under the future with the proposed action conditions. In contrast, movements that are projected to operate relatively well under the future without the proposed action conditions are allowed to accommodate additional volumes and marginally increased delays under the future with the proposed action conditions, provided the additional volume does not significantly degrade intersection operations.

Potential Traffic Impacts

Table 3.6-6 compares the future without the proposed action LOS and delays (from **Table 3.6-4**) with the future with the proposed action levels-of-service and delays (from **Table 3.6-5**), and identifies where and when the proposed project will generate significant traffic impacts, based on the CEQR criteria described above. **Table 13.3-6** also shows the incremental change in vehicle delay associated with the proposed action.

As shown in **Table 13.3-6**, the westbound approach to the signalized Mill Road / Ebbitts Street intersection is projected to experience potentially significant traffic impacts during both weekend peak hours under the future with the proposed action condition, according to the stated criteria. During the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase from 38.9 seconds per vehicle (LOS "D") under future without the proposed action conditions, to 81.2 seconds per vehicle (LOS "F") under future with the proposed action conditions. During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase from 32.1 seconds per vehicle (LOS "C") under future without the proposed action conditions, to 90.4 seconds per vehicle (LOS "F") under future with the proposed action conditions.

No significant traffic impacts are projected to occur at the stop-controlled intersection of Cedar Grove Avenue / Ebbitts Street during either analysis peak hour as a result of the proposed action.

Traffic Mitigation

This section describes the transportation system improvements that are recommended at the intersection of Mill Road and Ebbitts Street to mitigate potential traffic impacts associated with the proposed project. Based on the potential traffic impacts identified in **Table 3.6-6**, the following a signal-phasing improvement is recommended to mitigate traffic impacts.

Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period.

This improvement is designed to accommodate the future traffic volumes projected to occur on the roadway network during critical periods of peak traffic activity under the future with the proposed action condition; specifically, during the peak 15-minute period of the weekend midday and PM peak hours. As shown in **Table 3.6-7**, with this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated.

Table 3.6-6
Comparison of Peak Hour Level-of-Service Analysis Results
Year 2014 No-Action and Action Traffic Conditions

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)								WEEKEND PM PEAK HOUR (4:15-5:15 PM)							
			No-Action			Action			Change in Delay	Impact?	No-Action			Action			Change in Delay	Impact?
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS		
SIGNALIZED INTERSECTIONS																		
Mill Road / Ebbitts Street	EB	LTR	0.85	35.4	D	0.88	39.6	D	4.2		0.81	31.5	C	0.85	34.8	C	3.3	
	WB	LTR	0.87	38.9	D	1.06	81.2	F	42.3	yes	0.78	32.1	C	1.08	90.4	F	58.3	yes
	NB	LTR	0.55	13.8	B	0.55	13.8	B	0.0		0.31	10.0	A	0.31	10.0	A	0.0	
		R	0.10	8.3	A	0.17	8.9	A	0.6		0.28	9.9	A	0.32	10.4	B	0.5	
	SB	LTR	0.58	13.5	B	0.58	13.5	B	0.0		0.41	11.0	B	0.41	11.0	B	0.0	
	Overall		**0.70**	**24.3**	**C**	**0.77**	**35.1**	**D**			**0.57**	**21.2**	**C**	**0.68**	**36.5**	**D**		
UNSIGNALIZED INTERSECTIONS																		
Cedar Grove Road / Ebbitts Street	EB	L	0.07	7.4	A	-	-	-			0.06	7.4	A	-	-	-		
		LTR	-	-	-	0.07	7.4	A			-	-	-	0.06	7.4	A		
	NB	LT	-	-	-	0.12	12.7	B			-	-	-	0.17	12.4	B		
	SB	R	0.11	8.8	A	-	-	-			0.13	8.8	A	-	-	-		
		TR	-	-	-	0.16	9.5	A			-	-	-	0.15	9.2	A		

v/c = volume-to-capacity ratio; LOS = Level-of-Service
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
L = Left-Turn; T = Through; R = Right-Turn;
LT = Left-Turn/Through; TR = Through/Right-Turn; LR = Left-Turn/Right-Turn; LTR = Left-Turn/Through/Right-Turn
Average Control Delay shown in units of seconds/vehicle

Table 3.6-7
Comparison of Peak Hour Level-of-Service Analysis Results
Year 2014 No-Action and Mitigated Action Traffic Conditions

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)								WEEKEND PM PEAK HOUR (4:15-5:15 PM)							
			No-Action			Action			Change in Delay	Impact?	No-Action			Action			Change in Delay	Impact?
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS		
SIGNALIZED INTERSECTIONS																		
Mill Road / Ebbitts Street	EB	LTR	0.85	35.4	D	0.74	24.3	C	-11.1		0.81	31.5	C	0.72	23.1	C	-8.4	
	WB	LTR	0.87	38.9	D	0.87	36.9	D	-2.0		0.78	32.1	C	0.88	38.7	D	6.6	
	NB	LTR	0.55	13.8	B	0.63	18.0	B	4.2		0.31	10.0	A	0.35	12.2	B	2.2	
		R	0.10	8.3	A	0.19	10.8	B	2.5		0.28	9.9	A	0.36	12.8	B	2.9	
	SB	LTR	0.58	13.5	B	0.65	17.1	B	3.6		0.41	11.0	B	0.46	13.5	B	2.5	
	Overall		**0.70**	**24.3**	**C**	**0.75**	**23.2**	**C**			**0.57**	**21.2**	**C**	**0.65**	**21.9**	**C**		
UNSIGNALIZED INTERSECTIONS																		
Cedar Grove Road / Ebbitts Street	EB	L	0.07	7.4	A	-	-	-			0.06	7.4	A	-	-	-		
		LTR	-	-	-	0.07	7.4	A			-	-	-	0.06	7.4	A		
	NB	LT	-	-	-	0.12	12.7	B			-	-	-	0.17	12.4	B		
	SB	R	0.11	8.8	A	-	-	-			0.13	8.8	A	-	-	-		
		TR	-	-	-	0.16	9.5	A			-	-	-	0.15	9.2	A		

v/c = volume-to-capacity ratio; LOS = Level-of-Service
NB = Northbound; SB = Southbound; EB = Eastbound; WB = Westbound
L = Left-Turn; T = Through; R = Right-Turn;
LT = Left-Turn/Through; TR = Through/Right-Turn; LR = Left-Turn/Right-Turn; LTR = Left-Turn/Through/Right-Turn
Average Control Delay shown in units of seconds/vehicle

Table 3.6-8
Comparison of Peak Hour Level-of-Service Analysis Results
Intersection of Cedar Grove Avenue / Ebbitts Street
Two-Way Stop Controlled vs. All-Way Stop Controlled

INTERSECTION	APPROACH	LANE GROUP	WEEKEND MIDDAY PEAK HOUR (12:30-1:30 PM)						WEEKEND PM PEAK HOUR (4:15-5:15 PM)					
			Two-Way Stop Controlled			All-Way Stop Controlled			Two-Way Stop Controlled			All-Way Stop Controlled		
			v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS	v/c	Average Control Delay	LOS
Cedar Grove Road / Ebbitts Street	EB	LTR	0.07	7.4	A	0.21	8.5	A	0.06	7.4	A	0.17	8.3	A
	NB	LT	0.12	12.7	B	0.08	8.0	A	0.17	12.4	B	0.12	8.2	A
	SB	TR	0.16	9.5	A	0.16	7.6	A	0.15	9.2	A	0.17	7.6	A

3.6.2 Parking

Existing Conditions

A survey of existing parking conditions was conducted on all streets within ¼-mile of the proposed project site on a typical weekend day (i.e., a Saturday) during the midday and afternoon periods. It should be noted that because the parking counts were conducted in the spring (before the beach was open to the public), and the peak season for the proposed beach will be the summer, the 10 percent seasonal adjustment factor recommended by NYCDOT (also used in the traffic analysis) was applied to the existing parking demand to reflect projected parking conditions during the summer months. This survey documented the total number of legal, on-street parking spaces on each block-face (based on available curb space) and existing parking regulations, as well as the total number of legally and illegally parked vehicles on each block-face during the 12:00 to 2:00 p.m. and 4:00 to 6:00 p.m. periods. Illegally-parked vehicles included vehicles double-parked on the street, parked at fire hydrants, or blocking a driveway.

There are a limited number of on-street parking regulations posted in the study area, including "No Standing" or "No Parking" signs. There are also no alternate side of the street parking regulations posted in the study area. Based on the available curbside capacity, there are a total of approximately 676 parking spaces in the ¼ mile study area surrounding the proposed site.

Table 3.6-9 summarizes the results of the on-street parking survey and identifies the existing number of legal, on-street parking spaces, as well as the existing parking utilization during each hour of the weekend midday and PM study time periods.

Table 3.6-9 Summary of Existing On-Street Parking Utilization – Existing Conditions

Time Period	Number of Legal Spaces[1]	Total Number of Parked Cars[2]	Total Number of Available Spaces	Existing Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	420	256	62%
Weekend Midday (1:00 to 2:00 p.m.)	676	439	237	65%
Weekend PM (4:00 to 5:00 p.m.)	676	453	223	67%
Weekend PM (5:00 to 6:00 p.m.)	676	457	219	68%

1 = Curbside parking capacity.
2 = Includes illegally-parked vehicles.

As shown in **Table 3.6-9**, the parking utilization in the study area is currently under-capacity during the weekend midday hours. The on-street parking utilization averages approximately 64 percent from 12:00 to 2:00 p.m. and approximately 68 percent from 4:00 to 6:00 p.m. Therefore, existing on-street parking demand does not exceed the available curbside supply within a ¼-mile radius of the site during any of the study hours on a typical weekend.

Future Without the Proposed Action (Future No-Action Condition)

On-street parking demand is projected to continue to increase over time. For the purposes of the future No-Action conditions parking analysis, the on-street parking demand was estimated to increase at a background growth rate of one percent per year over three years (2011 to 2014), for a total increase of three percent by 2014, in accordance with the growth rate recommendations for Staten Island described in the *CEQR Technical Manual*. It is assumed that all of the incremental parking demand for the soft-site at 470 New Dorp Lane (Kohl's) will be accommodated by parking spaces at that site (i.e., the newly designed parking lot will contain 320 parking spaces). Similarly, the New Dorp Beach Enhancement is not expected to impact the number of spots available.

Table 3.6-10 compares the projected future on-street parking utilization under the No-Action condition with the existing on-street parking supply, assuming the existing supply in the study area remains unchanged in the future (i.e., no changes to existing parking regulations).

Table 3.6-10 Summary of On-Street Parking Supply and Utilization - Future No-Action Conditions

Time Period	Number of Legal Spaces[1]	Projected Total Number of Parked Cars	Projected Total Number of Available Spaces	Projected Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	432	244	64%
Weekend Midday (1:00 to 2:00 p.m.)	676	451	225	67%
Weekend PM (4:00 to 5:00 p.m.)	676	466	210	69%
Weekend PM (5:00 to 6:00 p.m.)	676	469	207	69%

1= Curbside parking capacity.

As shown in **Table 3.6-10**, the future on-street parking demand on a typical weekend day is projected to continue to remain under-capacity under No-Action conditions, with parking utilization rates not exceeding approximately 69 percent.

Future With the Proposed Action (Future Action Condition)

The proposed beach is projected to provide up to 80 parking spaces located within the project site (West of Ebbitts Street). In addition, approximately 80 parking spaces are also available in a second parking lot located adjacent to the site. Therefore, a total of approximately 160 off-street parking spaces are projected to be available for motorists intending to drive to the beach and park.

In order to estimate the projected parking demand throughout the day for the Future Action condition, the trip generation rates, temporal distributions, auto mode splits, and auto occupancies presented in **Table 3.6-1** were used in conjunction with the proposed land use densities to derive a projected parking demand accumulation profile for a typical weekend day. The parking demand accumulation profiles for all four of the site's proposed land uses (i.e., active recreation, passive recreation, concessions, and beach) were aggregated to arrive at a combined total parking demand accumulation profile for the entire site during the proposed hours of operation (i.e., 9:00 AM to 6:00 PM).

Figure 3.6-11 compares the projected parking demand profile with the number of available off-street parking spaces. As shown in **Figure 3.6-11**, a maximum, worst-case parking demand of approximately 183 parked vehicles is projected to occur between 12:00 and 1:00 PM on a typical weekend. As shown in **Figure 3.6-11**, the future parking demand is projected to exceed the available off-street parking supply (i.e., 160 spaces) by 23 spaces during the 12:00 to 1:00 PM period and by six spaces during the 1:00 to 2:00 PM period. Parking for these vehicles would need to be accommodated on-street. During all other times on a typical weekend day, the projected parking demand associated with the proposed project can be accommodated by the 160 off-street parking spaces. In addition, because the proposed project is expected to attract considerably fewer visitors on weekdays than on weekends, parking demand on weekdays is expected to be lower than that illustrated in **Figure 3.6-11**.

As described above, it is projected that the proposed project would result in on-street parking demands for 23 parked vehicles between 12:00 and 1:00 PM and six parked vehicles between 1:00 and 2:00 PM. To arrive at the Action condition parking demand, these additional parked vehicles were added to the projected number of parked cars under future No-Action conditions, during the corresponding time periods, as shown in **Table 3.15-11**. **Table 3.15-11** compares the projected future on-street parking utilization under the Action condition with the existing on-street parking supply, assuming the existing supply in the study area remains unchanged in the future (i.e., no changes to existing parking regulations).

Table 3.6-11 Summary of On-Street Parking Supply and Utilization – Future Action Conditions

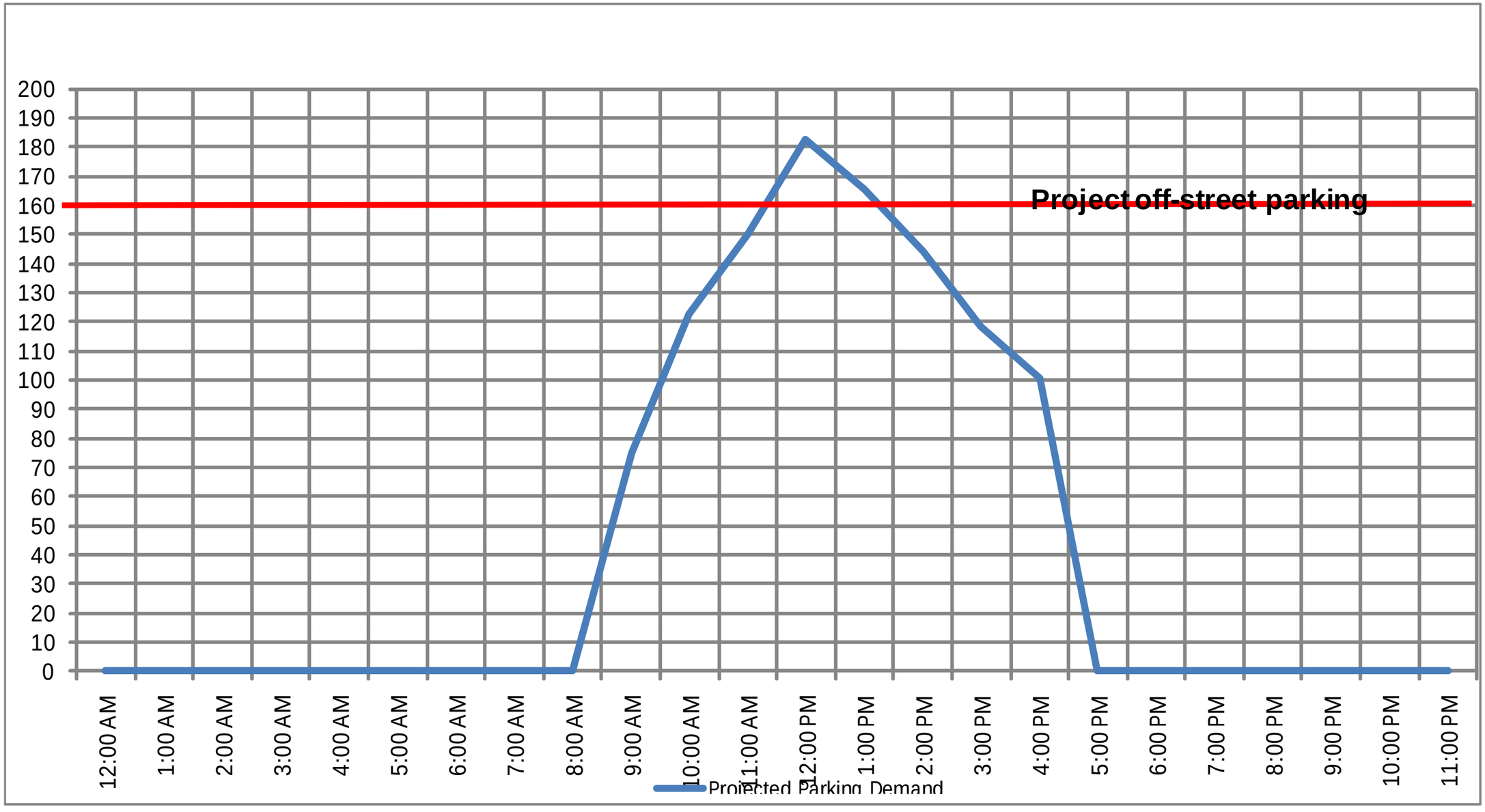
Time Period	Number of Legal Spaces[1]	Projected Total Number of Parked Cars	Projected Total Number of Available Spaces	Projected Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	455	221	67%
Weekend Midday (1:00 to 2:00 p.m.)	676	457	219	68%
Weekend PM (4:00 to 5:00 p.m.)	676	466	210	69%
Weekend PM (5:00 to 6:00 p.m.)	676	469	207	69%

1= Curbside parking capacity.

As shown in **Table 3.6-11**, the future on-street parking demand on a typical weekend day is projected to continue to remain under-capacity under Action conditions, with parking utilization rates not exceeding approximately 69 percent. Furthermore, on-street parking demand increases of the magnitudes described above are less than the CEQR threshold for significant adverse parking impacts (i.e., the projected parking demand must exceed half of the available parking capacity in the study area for a significant adverse parking impact). Therefore, no significant adverse parking impacts are projected to occur as a result of the proposed project.

In conclusion, the two off-street parking lots described above will provide sufficient parking for visitors during the operating hours of the beach, on both weekdays and weekends. Furthermore, it should be noted that—based on the projected future on-street parking demand shown in **Table 3.6-11** for the Action condition—additional parking spaces are also available within the ¼ mile study area to accommodate any overflow parking demand, were it to occur.

N



AECOM	Cedar Grove Beach Rehabilitation Environmental Impact Statement NYC Department of Parks and Recreation	Projected Off-Street Parking Supply and Demand Figure 3.6-11

3.6.3 Transit

The area surrounding the Cedar Grove Beach project site is served by public transit. Several New York City Transit bus lines are routed near the project site. The S76 and the S86 are routed on Ebbitts Street near the access point to the Cedar Grove Beach project site, while the S57, S78 and S79 are routed west of the site along Hylan Boulevard (approximately three-quarters of a mile away). Other transit options in the area include express bus service (X2, X3, X9 and X24), as well as the Staten Island Railroad that has a stop (New Dorp) that is approximately 1.5 miles west of the project site.

The *CEQR Technical Manual* indicates that a project would likely need to generate 200 or more transit trips during any peak hour in order to warrant a detailed analysis of transit impacts. As shown in **Table 3.6-1**, the number of transit trips generated by the proposed action would be minimal and would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Therefore, no significant adverse transit impacts are expected as a result of the proposed action.

3.6.4 Pedestrians

The *CEQR Technical Manual* recommends that a detailed pedestrian analysis be performed for projects that have the potential to generate over 200 pedestrian trips per hours. Under this threshold, CEQR states that an increase in project-generated pedestrian volumes would generally not be noticeable. As shown in **Table 3.6-1**, the number of pedestrian trips generated by the proposed action would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Thus, the increase in pedestrian volume generated by the proposed action does not warrant a detailed pedestrian assessment and is not expected to result in significant adverse pedestrian impacts.

In accordance with *CEQR Technical Manual*, a safety assessment was conducted using the most recent available three-year crash date in order to identify the accident history in the study area.

Pedestrian Safety

Pedestrian Accidents

Accident data compiled by the NYCDOT was reviewed to identify the accident history at the study intersections of Mill Road and Ebbitts Street and Cedar Grove Avenue and Ebbitts Street. As shown in **Table 3.6-12**, information available from the NYCDOT for the three-year period from 2007 to 2009 indicates that there were a total of 6 accidents at these two intersections. None of these accidents involved a pedestrian and no fatalities were reported.

Table 3.6-12 NYCDOT Accident Data

Intersection	Total Accidents	Pedestrian Accidents	Fatal Accidents
Mill Road / Ebbitts Street	5	0	0
Cedar Grove Avenue / Ebbitts Street	1	0	0
Total	**6**	**0**	**0**

Source: New York City Department of Transportation (2007-2009).

It should be noted that the *CEQR Technical Manual* considers a “high crash location” any location with 48 or more total reportable and non-reportable crashes, or five or more pedestrian/bicyclist injury crashes, in any consecutive 12 months of the most recent 3-year period for which data is available. As shown above, the number of accidents at both study intersections is well below these thresholds.

The Proposed Action is not expected to increase the likelihood of vehicular or pedestrian crashes at these intersections. In addition, field observations conducted during the data collection periods indicated low

vehicular traffic volumes at the Cedar Grove Avenue/Ebbitts Street intersection, which is adjacent to the project site. The existing conditions traffic analysis determined that this intersection currently operates at LOS A. In the future with the action, this intersection would operate in the LOS A/B range under the current stop-controlled configuration and LOS A under the all-way stop-controlled configuration. Thus, under either configuration, traffic conditions near the project site in the future with the action would be characterized by low traffic volumes, low delays, and uncongested conditions that would not inherently create unsafe traffic conditions for pedestrians.

3.7 NEIGHBORHOOD CHARACTER

Introduction

As defined in the *CEQR Technical Manual,* neighborhood character is considered to be an amalgam of the various elements that give a neighborhood its distinct personality. These elements include land use, socioeconomic conditions, historic and cultural resources, urban design and visual resources, transportation, noise, open space and shadows, as well as any other physical or social characteristics that help to define a community. Not all these elements affect neighborhood character in all cases; a neighborhood usually draws its distinctive character from a few defining features.

According to the *CEQR Technical Manual,* an assessment of neighborhood character is generally needed when the action would exceed preliminary thresholds in any one of the following areas of technical analysis: land use, urban design and visual resources, historic and cultural resources, socioeconomic conditions, transportation, noise, open space or shadows. An assessment is also appropriate when the action would have moderate effects on several of the aforementioned areas. Potential effects on neighborhood character may include:

- **Land Use**. Development resulting from a proposed action could alter neighborhood character if it introduces new land uses, conflicts with land use policy or other public plans for the area, changes land use character, or generates significant land use impacts.

- **Socioeconomic Conditions**. Changes in socioeconomic conditions have the potential to affect neighborhood character when they result in substantial direct or indirect displacement or addition of population, employment, or businesses; or substantial differences in population or employment density.

- **Historic and Cultural Resources**. When an action would result in substantial direct changes to a historic and cultural resource or substantial changes to public views of a resource, or when a historic and cultural resource analysis identifies a significant impact in this category, there is a potential to affect neighborhood character.

- **Urban Design and Visual Resources**. In developed areas, urban design changes have the potential to affect neighborhood character by introducing substantially different building bulk, form, size, scale, or arrangement. Urban design changes may also affect block forms, street patterns, or street hierarchies, as well as streetscape elements such as street walls, landscaping, curb cuts, and loading docks. Visual resource changes could affect neighborhood character if they directly alter key visual features such as unique and important public view corridors and vistas, or block public visual access to such features.

- **Transportation**. Changes in traffic and pedestrian conditions can affect neighborhood character in a number of ways. For traffic to have an effect on neighborhood character, it must be a contributing element to the character of the neighborhood (either by its absence or its presence), and it must change substantially as a result of the action. According to the CEQR Technical Manual, such substantial traffic changes can include: changes in level of service (LOS) to C or below; change in traffic patterns; change in roadway classifications; change in vehicle mixes, substantial increase in traffic volumes on residential streets; or significant traffic impacts, as identified in the technical traffic analysis. Regarding pedestrians, when a proposed action would result in substantially different pedestrian activity and circulation, it has the potential to affect neighborhood character.

- **Noise**. According to the CEQR Technical Manual, for an action to affect neighborhood character with respect to noise, it would need to result in a significant adverse noise impact and a change in acceptability categories.

- **Open Space**. When an action would potentially have a direct or indirect effect on open space that would adversely affect utilization of existing resources, there is a potential to affect neighborhood character.

- **Shadows**. When Shadows from a proposed project fall on a sunlight-sensitive resource and substantially reduce or completely eliminate direct sunlight exposure such that the public's use of the resource is significantly altered or the viability of vegetation or other resources is threatened, there is a potential to affect neighborhood character.

This chapter of the EIS examines the Proposed Action's potential to affect the neighborhood character of the Cedar Grove Beach project site and the 400-foot surrounding study area. The study area is coterminous with the study area used for the analysis in **Chapter 3.1**, "Land Use, Zoning and Public Policy." The impact analysis of neighborhood character focuses on changes to the technical areas discussed above, since an effect in these technical areas could lead to an effect on neighborhood character.

The Proposed Action involves the rehabilitation of Cedar Grove Beach. The project would expand and enhance the beach, the active and passive recreation areas on site, and the surrounding natural areas. The rehabilitation of the beach and surrounding area would also include altering structures within the beach area to make the project site more accessible to the public. As described elsewhere in this EIS, as well as in the Environmental Assessment Statement prepared for the project dated February 10, 2011, the Proposed Action would not result in significant adverse impacts to land use, socioeconomic conditions, urban design and visual resources, noise, open space and shadows. In addition, as the Proposed Action would lead to the rehabilitation of the project site, moderate effects in these technical areas are not expected to lead to a significant adverse neighborhood character impact.

A potentially significant adverse transportation impact is expected as a result of the Proposed Action, as discussed in detail in **Chapter 3.6**, "Transportation." During the weekend midday and PM peak periods, the westbound approach to the signalized intersection of Mill Road and Ebbitts Street is projected to experience a potentially significant traffic impact, in the future with the action. However, as described in **Chapter 3.10**, "Mitigation," with the implementation of proposed mitigation measures the identified traffic impacts would be fully mitigated. Mitigation measures include the reallocation of signal green time at the Mill Road and Ebbitts Street intersection. In addition, traffic is not considered a defining feature of the neighborhood. The Cedar Grove Beach project site is insulated from the neighborhood and local street traffic by trees and vegetation. The project site has one vehicular access point near the intersection of Cedar Grove Avenue and Ebbitts Street and there is no through-traffic that travels within the project site. Thus, traffic-related impacts are not expected to result in significant adverse impact to neighborhood character.

The project site is located within the State/National Register-eligible Cedar Grove Beach Club Historic District. As discussed in detail in **Chapter 3.3**, "Historic and Cultural Resources," the removal of structures in the eligible historic district would represent a potentially significant adverse impact to historic and cultural resources. This impact to historic and cultural resources has the potential to cause a significant adverse neighborhood character impact, as the historic district would be considered a defining feature that contributes to the character of Cedar Grove Beach. The neighborhood character assessment that follows assesses the potential for a significant adverse neighborhood character impact to result from the proposed rehabilitation of Cedar Grove Beach.

3.7.1 Existing Conditions

The Cedar Grove Beach project site is located in Great Kills Park, a 307-acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). The site is accessible from its entrance near the intersection of Ebbitts Street and Cedar Grove Avenue, as well as from the beach area that connects to publicly-accessible beach and open space resources to the north and south.

The project site contains a collection of approximately 42 seasonal beach bungalows that pre-date the park mapping. The majority of the beach bungalows are aligned along the beach, but some bungalows are situated further upland. Other structures on the project site include a Club House, a Barn, five ancillary garage structures and a guardhouse near the project site's entrance. The project site also includes a ball field, sport courts and a child's play area. The structures and other resources on the project site were used for seasonal summer occupancy by the Cedar Grove Beach Club for many years. Pursuant to a written agreement with the Cedar Grove Beach Club, the bungalows were vacated on or before September 30, 2010. The New York State Office of Parks Recreation and Historic Preservation (OPRHP) has determined that the project site is eligible for listing on the State and National Registers of Historic Places (S/NR eligible) as a historic district.

The neighborhood character study area includes an area 400 feet around the boundary of the project site. The eastern portion of the study area is located on the east coast of Staten Island and includes a beach area that abuts the Atlantic Ocean. To the north, the study area includes portions of the beach and parkland that continue along the shore, while single-family homes and parking lots are present in the section of the study area west of Cedar Grove Avenue and north of Ebbitts Street, outside of the project site. To the west and south, the study area is comprised of natural areas that are undeveloped. These natural areas include tidal and freshwater marshes and woodlands.

The project site and much of the study area is insulated from the greater New Dorp neighborhood of Staten Island that it is located within by wooded areas and vegetation along its perimeter. While outside the project site the local neighborhood has paved roads, a regular street pattern and residential development, inside, the project site is characterized by natural features including, grass, trees and other vegetation. In addition, the beach area and waterfront provide vistas that include views of Brooklyn and New Jersey. The insularity of the project site, the historic resources, the natural features and the beach area all contribute to the unique character of the Cedar Grove Beach project site.

3.7.2 Future No-Action Condition (Future Without the Action)

In the future without the Proposed Action, it is expected that all of the bungalows and other structures on site would remain subject to the natural elements and be cordoned off with fencing from public access. The beach area would remain in its current state with temporary trailers likely being brought in to allow for seasonal beach operations. The structures on site would remain, the upland areas would not be otherwise restored and native plant species would not be re-planted.

The neighborhood character of the Cedar Grove Beach project site is drawn mainly from the presence of natural resources, the beach area and waterfront views, and its local historic importance as one of the last surviving summer beachfront communities on Staten Island. It is anticipated that sealing off resources within the historic district from public access, in the future without the action, would leave historic resources exposed to the elements. The installation of temporary fencing and trailers would indirectly affect the natural features and waterfront views and would hinder the public's access to the project site.

Under the Future No-Action scenario, it is expected that the condition of most of the buildings that comprise the historic district would continue to decline, primarily as a result of exposure to the elements. Although the historic resources on the project site would not be removed, deterioration of the resources in the historic district would diminish the aspects that contribute to their historic significance including the early-to-mid-20th-century materials, the design of the bungalows (and other structures) and the cohesive layout of the residences along the shoreline. As the historic resources on the project site contribute to a defining feature of the neighborhood character, their deterioration over time would have a negative effect on the character of the neighborhood. In addition, fencing would hinder public access to portions the project site.

3.7.3 Future Action Condition (Future With the Action)

In the future with the action, a number of buildings on the site are proposed to be demolished in order to restore the beach in these areas, and improve public access to the coastal area. Bike path striping would be painted and greenway signage and bicycle improvements would be implemented, further improving access to and through the site. A number of structures that have been selected to remain on site would be adaptively reused for public and ancillary park use. In addition to the opening of the beach area for public swimming, the existing pick-up sport play area would be made available for public use. The existing children's play equipment would be replaced with new children's play equipment. New fencing would be installed along Ebbitts Street and parking on site would be consolidated and made more efficient by relocating parking spaces to one area. Instead of one to two parking spots along roadways directly in front of each structure, parking would be amalgamated to the overflow lawn parking area closest to the park entrance at Ebbitts Street.

Under the Proposed Action, which was developed with OPRHP's consultation, seven resources within the Cedar Grove Beach Club Historic District, including five bungalows (Buildings 1, 4, 7, 9A and 71), the clubhouse (Building 78) and the Barn, would be retained and rehabilitated for NYCDPR uses. Four of the seven resources possess high architectural integrity, according to OPRHP. Surrounding landscapes would be stabilized and developed for NYCDPR beach and recreation programs. As a result of the Proposed Action, 43 resources would be demolished. The resources to be demolished include 37 bungalows, five garages, and the guard house.

The Proposed Action would have a direct effect on the Cedar Grove Beach Historic District because it would result in direct physical removal of 43 of the 50 resources in the historic district. Although seven resources would be preserved and the landscape would be stabilized and upgraded for use as a public beach, the location, design, setting, materials, workmanship, feeling, and association of the historic district would be permanently altered. The significance of the historic district is tied, in part, to the interrelationship of the 42 beachfront bungalows and other buildings and structures with the shoreline and surrounding landscape. Modification of this layout would permanently compromise the appearance of the historic district. This type of modification would also result in an indirect effect on the historic district because its context or setting as an early-20th-century beach colony would be changed.

In addition, the seven resources that would be retained for adaptive reuse may be subject to direct construction impacts during the removal of the 43 structures from the historic district. Specifically, the seven resources may be subject to several effects, including, but not limited to, construction-related vibrations; foundation undermining; and falling objects when the adjacent buildings are removed. These actions may have the potential to impact the historic integrity of the seven remaining resources, including their material, layout, form, and massing. Based on these potential direct and indirect effects, the Proposed Action would lead to a significant adverse effect on historic and cultural resources. Possible mitigation methods including documentation of existing resources, mothballing, construction protection plan, and context-sensitive design (described in detail **Chapter 3.10**, "Mitigation") could be implemented to mitigate the significant adverse impact on the historic district, due to the Proposed Action.

The proposed rehabilitation of the Cedar Grove Beach project site would improve this stretch of beach, providing recreation areas for the public and enhancing the area's natural resources and waterfront views. In contrast to the Future No-Action scenario where incompatible would be used to separate the public from the structures on site, sealing off a substantial portion of the site, and temporary trailers would be present, in the Future Action scenario some existing historic resources would be adaptively reused and incorporated into the project site. Moreover, the removal of resources would allow the site to return to a more natural state and improve the beach and the vistas it offers.

The Proposed Action would lead to a significant adverse impact to historic and cultural resources, as it would lead to the removal of historic structures on site. However, while the removal of these resources would be a loss of features that contribute to the neighborhood character of the project site and study area, overall, the Proposed Action is not expected to result in a significant adverse impact to neighborhood character. Under the Future No-Action scenario, the historic resources would remain on

the site; however, it is expected that the structures would deteriorate, diminishing their prominence as a defining feature of the neighborhood's character. In addition, in the future without the action, portions of the project site would be inaccessible by the public and fencing and temporary trailers would likely be introduced to the site to provide for seasonal needs. Under the Future Action scenario, the Proposed Action would adaptively reuse select rehabilitated historic resources, thereby preserving elements of the Cedar Grove Beach Historic District. In addition, natural features of the project site would be restored and enhanced, including the beach area and waterfront views and would serve to strengthen the unique natural characteristics of the project site and study area.

Conclusion

The assessment of neighborhood character focuses on changes to the technical areas that combine to give a neighborhood a distinct personality. An adverse impact to any of these technical areas could have a negative effect on neighborhood character, particularly if the effect is on a defining feature of the neighborhood's character. The Proposed Action is not anticipated to result in any significant adverse land use, socioeconomic conditions, urban design and visual resources, noise, open space and shadows impacts. A significant adverse traffic impact has been identified for one studied intersection; however, a minor readjustment of signal phasing would mitigate the projected adverse traffic impact, and the traffic impact is not expected to affect neighborhood character. In addition, moderate changes in these technical areas as a result of the Proposed Action are not expected to collectively lead to a significant adverse neighborhood character impact.

The Proposed Action would lead to the removal of several of the historic resources on the Cedar Grove Beach project site. As a result, a potentially significant adverse historic and cultural resources impact is expected as a result of the Proposed Action. Although the removal of the historic resources on the project site would potentially affect the character of the neighborhood, overall, the Proposed Action is not expected to result in a significant adverse neighborhood character impact. In the future without the action, all historic resources would remain on the project site, but the historic resources would not be utilized and their condition would continue to deteriorate. Furthermore, in order for the historic resources to remain, the buildings would need to be fenced off rendering portions of the project site inaccessible by the public, and temporary trailers would be needed. In contrast, in the future with the action, the Cedar Grove Beach project site would be rehabilitated and public accessibility would be improved, including the preservation and adaptive reuse of select historic resources. The projects site's natural features would be enhanced by the Proposed Action, including views of the beach and waterfront. Therefore, although the Proposed Action would alter the character of the neighborhood, the change would not constitute a significant adverse impact to neighborhood character.

3.8 CONSTRUCTION IMPACTS

Construction impacts, although temporary in duration, can have disruptive and noticeable effects on the area that surrounds a project site. The potential for construction impacts to become significant could occur when construction activity results in a significant adverse effect on such technical areas as transportation, air quality, noise, historic and cultural resources, hazardous materials, natural resources, open space, socioeconomic conditions, community facilities, land use and public policy, neighborhood character or infrastructure. The determination of significance and need for related mitigation is generally based on the duration and magnitude of the potential construction impacts.

The Proposed Action would rehabilitate the Cedar Grove Beach, an approximately 30 acre site in the New Dorp community of Staten Island (Staten Island Community District 2). The project site is located in Great Kills Park, a 307 acre park in Staten Island which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay. The site contains a collection of approximately 42 one and one and one-half story/second story seasonal beach bungalows that pre-date the park mapping, a clubhouse, a barn, a guardhouse and five ancillary garage structures (50 total structures). In July, 2010, the New York State Office of Parks Recreation and Historic Preservation (OPRHP) determined that the project area is eligible for listing on the State and National Registers of Historic Places (S/NR eligible).

Demolition, restoration, and construction related activities are expected to occur over a 36-month period. The first section of this chapter describes the general schedule and type of construction activity and the second section provides an assessment of the proposed action's potential impacts associated with construction related activities. As detailed below, the proposed action is not expected to result in any significant adverse construction impacts.

3.8.1 Construction Schedule and Activities

The proposed action involves the rehabilitation of a portion of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. As previously stated, the project site currently contains a number of structures, which had been used for private seasonal summer occupancy by the Cedar Grove Beach Club. Pursuant to a written agreement between the Parks Department and the Cedar Grove Beach Club, the bungalows were vacated on or before September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition.

The project is divided into two phases: Phase one includes demolition of a majority of the structures on site and adaptive reuse of some structures for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase one will include installation of a new bike path/greenway signage, installation of fencing and consolidation of parking on site into an overflow parking area near Ebbitts Street (parking would be amalgamated to the historic overflow lawn parking area closest to the park entrance at Ebbitts Street). Phase two involves construction of a new playground, minor rehabilitation of the existing pick up sport play area, and adaptive reuse of other structures on site. Renovations on the project site are anticipated to be complete in the year 2014. Phase one is expected to begin in early 2012 upon issuance of a Notice of Completion and anticipated to last approximately 3 months from the commencement of construction activities.

Phase two is expected to last approximately 12 months from the completion of Phase one construction activities. The rehabilitation of the project site is expected to be completed in 2014.

3.8.2 Potential Impacts During Construction

Under CEQR, any construction period expected to last longer than 24 months is considered "long-term", though construction activities are themselves not permanent but rather impermanent. Thus, a preliminary assessment of the technical areas reviewed in the EIS that could be affected are presented below. Specially, these areas are: land use, open space, historic and cultural resources; natural resources; hazardous materials; transportation; and neighborhood character, which is an amalgam of such technical areas as land use, socioeconomic conditions, community facilities, open space, shadows, and infrastructure. In addition, other technical areas that are not reviewed in the EIS, but could result in construction-related air quality and noise impacts, are also reviewed.

3.8.2.1 Land Use

The Proposed Action is not expected to result in any significant adverse construction related impacts on land uses within the surrounding area. The project site is insulated from the neighborhood by trees and vegetation, and on-site demolition, construction, and restoration activities would not alter the land use on the site, but rather result in the enhancement of open space on the site compatible with the surrounding areas.

3.8.2.2 Open Space

The Proposed Action is not expected to result in any significant adverse construction related impacts on open space or on public use of the open space or beach area. Construction impacts on the existing surrounding open space would be of limited duration, and measures would be taken to minimize disturbance on the adjacent open spaces surrounding the site. Construction is not expected to impact the 2012 beach season.

3.8.2.3 Historic and Cultural Resources

Historic and cultural resources include both archaeological and historic architectural resources, and are defined in the *CEQR Technical Manual* as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance. This includes resources listed in the State/National Registers of Historic Places (S/NRHP) or determined eligible for listing in the S/NRHP by the Office of Parks, Recreation and Historic Preservation (OPRHP), landmarks designated or under consideration for designation by the New York City Landmarks Preservation Commission (LPC), National Historic Landmarks (NHL), and previously unidentified resources that meet the S/NRHP and/or LPC eligibility requirements.

Archaeological Resources

As detailed further in **Chapter 3.3** (Historic and Cultural Resources), it is anticipated that the Proposed Action would be implemented in a manner that minimizes the disturbance of areas of high and moderate archaeological sensitivity identified in the study area in the *Phase IA Documentary Study* prepared for the project site. Therefore, provided the Proposed Action does not disturb these sensitive areas, it would have no effect on potential archaeological resources in the study area. It should be noted that in the event final designs for the Proposed Action involve ground disturbance in areas noted as moderately or highly sensitive for archaeological resources, OPRHP and NYCLPC would be coordinated with and limited Phase IB field testing would likely be undertaken to assess the degree of disturbance to the ground surface in these locations. Based on the findings, impacts to any potential archaeological resources would be analyzed in the FEIS.

Historic Architectural Resources

As detailed further in **Chapter 3.3** (Historic and Cultural Resources), under the Proposed Action, 43 historic resources within the Cedar Grove Beach Historic District would be demolished, while seven identified resources, including five bungalows (Buildings 1, 4, 7, 9A and 71), Building 78 (the Club House)

and the Barn, would be retained and rehabilitated for NYCDPR related uses. Surrounding landscapes would be stabilized and developed for NYCDPR beach and recreation programs.

The seven resources that would be retained for adaptive reuse may be subject to direct construction impacts when the 43 resources are removed from the historic district. Specifically, the seven resources may be subject to several effects, including, but not limited to construction-related ground disturbance and vibrations; foundation undermining from below-ground construction such as excavation; and falling objects when adjacent buildings are removed. These actions may have the potential to impact the historic integrity of the seven resources, including their material, layout, form, and massing.

A construction protection plan would be developed to mitigate the potential for significant adverse effects on these resources caused by construction, to ensure the integrity of high and moderately sensitive areas during implementation. The construction protection plan would be developed and adhered to by NYCDPR and its contractors, in consultation with OPRHP and LPC, to safeguard the areas from ground disturbance. Those structures to be retained will be protected from demolition as per NYCDPR's normal practices and procedures. Elements of the plan may include the following:

- Existing foundation and structural condition information for the seven buildings to be reused.
- Protection from falling objects.
- Monitoring during construction using tell-tales, seismographic equipment, and horizontal and lateral movement scales (MOEC, May 2010).

3.8.2.4 Natural Resources

Natural Resources relates to habitats, wildlife, and other ecological resources. The project site is located along the east coast of Staten Island, west of the Atlantic Ocean, and east and south of undeveloped areas. The site is situated within the northeast portion of a larger undeveloped natural area that contains areas of tidal and freshwater marshes and woodlands. The perimeter of the larger natural area is surrounded by urban developments. Within the site, much of the habitats are actively maintained to be consistent with a park-like setting.

Topography, Geology, and Soils

As detailed further in **Chapter 3.4** (Natural Resources), the topography, geology, and soils of the site would not undergo substantial modification, thus the Proposed Action is not expected to result in any significant adverse construction impacts to the topography, geology or soils on the project site.

Habitats

Construction activities on the project site are expected to result in minimal disturbance to area habitats. As detailed further in **Chapter 3.4** (Natural Resources), none of the habitats that were mapped on site are either rare or unique and many of the habitats are common to Staten Island, and differ in ecological value. While some modification of the existing habitats would occur due to construction activities, most of the habitats would remain unchanged. Areas around the site will be repurposed for parking and for play areas, but that action is not expected to result in disturbance to sensitive habitats. While these actions would result in a net positive increase of ecological value for the site, construction activities would result in the temporary loss of grass lawns that are habitats of limited ecological value. However, the loss of these habitats would be offset by the creation of maritime dune vegetation, a much more limited resource.

Flora/Fauna

The Proposed Action is not expected to result in any significant adverse construction related impacts to flora or fauna. Most of the fauna that utilize the site now are species common to urban and suburban environments. During construction, some of these species may be displaced; however, the large tracts of undeveloped land adjacent to the site could accommodate any displacement. Once construction is

completed, the new habitats, especially the maritime dune communities, would provide attractive habitat to various fauna. . While Sand Dune Sandspur was observed by NYCDPR on the site in Fall 2010 and Spring 2011, construction activities largely would be limited to portions of the project site and would not likely disrupt this resource, and the creation of the areas of maritime dune vegetation in the areas of the former bungalows would provide potential additional habitats.

The Proposed Action would also not engage in any particular solid waste management practices that could attract vermin and result in an increase in pest populations. If appropriate, construction contracts would include provisions for a rodent (mouse and rat) control program. Before the start of construction, the contractor would survey and bait the appropriate areas and provide for proper site sanitation. During the construction phase, as necessary, the contractor would carry out an ongoing prevention, inspection, and response program. Coordination would be maintained with appropriate public agencies. Only registered rodenticides would be permitted, and contractors would be required to perform rodent control programs in a manner that avoids hazards to persons, domestic animals, and non-target wildlife.

Water Resources

Except for certain isolated wetlands, all freshwater wetlands within the study area fall under the jurisdiction of the USACE, pursuant to Section 404 of the Clean Water Act (CWA). Freshwater and tidal wetlands also come under the jurisdiction of New York State Department of Environmental Conservation (NYSDEC) pursuant to Articles 24 and 25 of the New York State Environmental Conservation Law (NYS ECL). The NYSDEC has identified and mapped littoral zone and intertidal marsh areas within the study area.

NYCDPR will continue to coordinate with USACE and NYSDEC as needed. As the Proposed Action would involve work within New York State's freshwater and tidal wetlands and/or regulated adjacent areas, NYCDPR would coordinate with the NYSDEC pursuant to the state's Freshwater Wetlands Regulatory Program and Tidal Wetlands Permit Program. In addition, the NYSDEC requires authorization of a Section 401 Water Quality Certification to ensure that proposed work within state regulated waters and/or wetlands does not contravene state water quality standards. Best management practices for the control of sedimentation and erosion would be required to control potential silt and sediment releases to surface waters and wetlands. The NYCDPR would not begin physical development and/or ground disturbing activities within regulated areas until all necessary permits and certifications are secured.

Construction activity is not expected to have a significant adverse effect on protected threatened and/or endangered resources. The Proposed Action would not have any impact on Bird Conservation Areas (BCAs) or Significant Coastal Fish and Wildlife Habitats (SCFWH). Construction activities are also not expected to result in any adverse impacts to the Coastal Erosion Hazard Area (CEHA), regulated by the NYSDEC under the Coastal Erosion Management Program

3.8.2.5 Hazardous Materials

The Proposed Action is not expected to result in any significant adverse construction related impacts to hazardous materials. A hazardous material is any substance that poses a threat to human health or the environment. Substances that may be of concern include heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), methane, polychlorinated biphenyls (PCBs), pesticides, dioxins, hazardous wastes, radiation sources, etc.

As detailed further in **Chapter 3.5** (Hazardous Materials) of this EIS, based on the findings of the Phase I ESA, no known Recognized Environmental Conditions (RECs) associated with the project site were identified, thus the potential for hazardous materials related impacts during construction is low. However, based on the age of the structures on the project site, there is potential that lead based paints and/or asbestos containing material (ACM) are present. As part of the overall rehabilitation of the project site, the NYCDPR is committed to ensure the proper removal of lead based paints and/or ACM on the project site, in accordance with all applicable federal, state and city standards.

3.8.2.6 Transportation

Construction activities induced by the proposed action will cause some short-term increases in local truck and other vehicular traffic, due to the arrivals and departures of construction workers during the morning and afternoon hours, respectively, combined with daily truck deliveries and removal of construction materials and equipment from the project site. Construction is planned to take place on weekdays only, with the peak construction traffic volumes occurring during off-peak travel times on the surrounding roadway network, thereby minimizing potential traffic impacts. It is anticipated that the construction equipment and deliveries would have on-site staging areas during construction for loading and unloading of materials to avoid off-site impacts. The peak construction period is expected to occur over three months in the spring of 2014. This assessment of transportation impacts related to construction activities is based on truck and personal vehicle activity during this peak period for construction.

Trucks and construction workers are expected to travel to and from the site via Ebbitts Street, and enter and exit the site via the access driveway at the Cedar Grove Avenue/Ebbitts Street intersection. As with most construction projects, truck trips to/from the site would be directed towards the nearest major roadways in the area; in this case, Hylan Boulevard and the Staten Island Expressway. Trucks leaving the site for regional destinations would travel west on Ebbitts Street to Hylan Boulevard, and then continue north to the Staten Island Expressway. Trucks traveling to the site from regional origins would utilize the same route.

It is expected that all construction parking and staging can be accommodated on site. As such, queuing of construction-related traffic on study area roadways is not anticipated, nor are any street closures or off-site parking.

Construction-related trips to and from the site are projected to occur on weekdays between 6:00 a.m. and 5:00 p.m., although the majority of the trips are expected to take place between 6:00 a.m. and 4:00 p.m. On a typical weekday, the peak periods for existing vehicular traffic generally occur between approximately 7:00 a.m. and 9:00 a.m., and between approximately 4:00 p.m. and 6:00 p.m. Therefore, the timing of the on-site construction activities reduces the impact that construction vehicles have on traffic on the surrounding street network during these peak periods, largely because workers are expected to initiate daily construction activity before the morning peak hour of traffic on the surrounding roadway network, and also conclude construction activities before the afternoon peak hour. The following is a detailed discussion of the projected level of vehicular trip activity associated with both construction workers and trucks.

Construction Worker Vehicle Trips

All construction workers are anticipated to arrive via private vehicles. **Figure 3.8-1 (A)** shows the monthly distribution of daily construction worker vehicle-trips over the course of the construction period, based on the expected construction schedule for the project. As shown, the number of daily construction worker vehicle trips is projected to increase from 20 daily vehicle trips at the onset of construction during the first pre-peak month to a peak of 42 daily vehicle trips for approximately nine peak construction weeks, before decreasing to 20 vehicle trips during the first two post-peak construction months for maintenance and inspection activities, and decreasing to eight vehicle trips per day during final inspection in the third post-peak construction month.

Figure 3.8-1 (B) shows the hourly vehicle-trip profile for construction workers throughout the course of a typical weekday, during the peak construction months. The trips shown represent one-way vehicle trips (both inbound and outbound) associated with worker arrivals at the site in the morning and departure trips in the evening. This profile, though higher in magnitude because it reflects the peak month, is typical of the profiles during the non-peak construction months. The majority of construction workers will arrive at the site between 6:00 a.m. and 7:00 a.m., prior to the onset of the morning peak period for traffic on the surrounding street system (7:00 a.m. to 9:00 a.m.). Similarly, the majority of the construction workers are expected to leave the site between 3:00 p.m. and 4:00 p.m., before the onset of the evening peak period (4:00 p.m. to 6:00 p.m.).

Truck Trips

Truck trips to and from the site are expected to be comprised primarily of dump trucks, flat-bed trucks with heavy equipment, and delivery trucks for the transportation of construction materials. **Figure 3.8-1 (C)** shows the distribution of daily truck trips anticipated to take place over the course of the construction period, based on the construction schedule prepared by the NYC DPR. As shown in **Figure 3.8-1 (C)**, the number of truck trips is projected to increase from approximately 24 truck trips per day (i.e., 12 inbound trips, and 12 outbound trips) during the first peak construction week to a maximum of approximately 30 truck trips per day (i.e., 15 inbound trips, 15 outbound trips) during the approximately eight peak construction weeks.

Figure 3.8-1 (D) shows the time-of-day profile of truck trips throughout the course of a typical weekday during the peak months. The trips shown in **Figure 3.8-1 (D)** represent single truck trips (both inbound and outbound) associated with truck arrivals and departures during the course of the day. Truck trips to and from the site during the peak months are projected to be relatively uniform throughout the course of the work day, with a maximum of four truck trips per hour between 9:00 a.m. and 2:00 p.m.

Total Construction Trips

Figure 3.8-1 (E) shows the combined numbers of total daily construction-related vehicle trips (i.e., worker trips plus truck trips) anticipated to take place over the course of the construction period, based on the construction schedule prepared by the NYCDPR. The number of daily construction-related vehicle trips is projected to increase from approximately 20 trips per day (i.e., 10 inbound trips, and 10 outbound trips) at the onset of construction during the pre-peak construction month, to a maximum of approximately 72 trips per day (i.e., 36 inbound trips, 36 outbound trips) during peak construction weeks two through nine. Daily vehicle trips decrease to 20 trips for the first two post-peak construction months during maintenance and inspection activities, and to 8 vehicle trips per day during the third post-peak construction month, during final inspection.

Figure 3.8-1 (F) shows the time-of-day profile for all construction-related vehicle trips (i.e., worker trips plus truck trips) throughout the course of a typical weekday during the peak construction weeks (mid-July through early September). Construction-related vehicle trips are projected to peak during the morning from 6:00 a.m. to 7:00 a.m., and again in the afternoon from 3:00 p.m. to 4:00 p.m. in connection with the arrival and departure of construction workers in private vehicles. During the remaining hours of a typical peak weekday, the number of construction vehicle trips projected to occur is considerably lower.

CEQR Criteria for Construction Traffic Impacts

The *CEQR Technical Manual* states that a project would have no significant construction traffic impacts if all of the following criteria are met:

- The construction peak would generate fewer vehicle trips, presented as Passenger Car Equivalents (PCEs), than the operational project peak and the construction peak lane geometry, signal timing, and parking regulations are all consistent with those of the project peak hours;
- The construction would occur during off-peak hours or during hours comparable to the project peak hours;
- The project has been determined not to produce the potential for significant adverse traffic impacts during the operational period; and
- The preliminary assessment indicates that changes to the capacity of the roadway network related to construction activities are not likely to cause a significant deterioration in local or regional traffic flow.

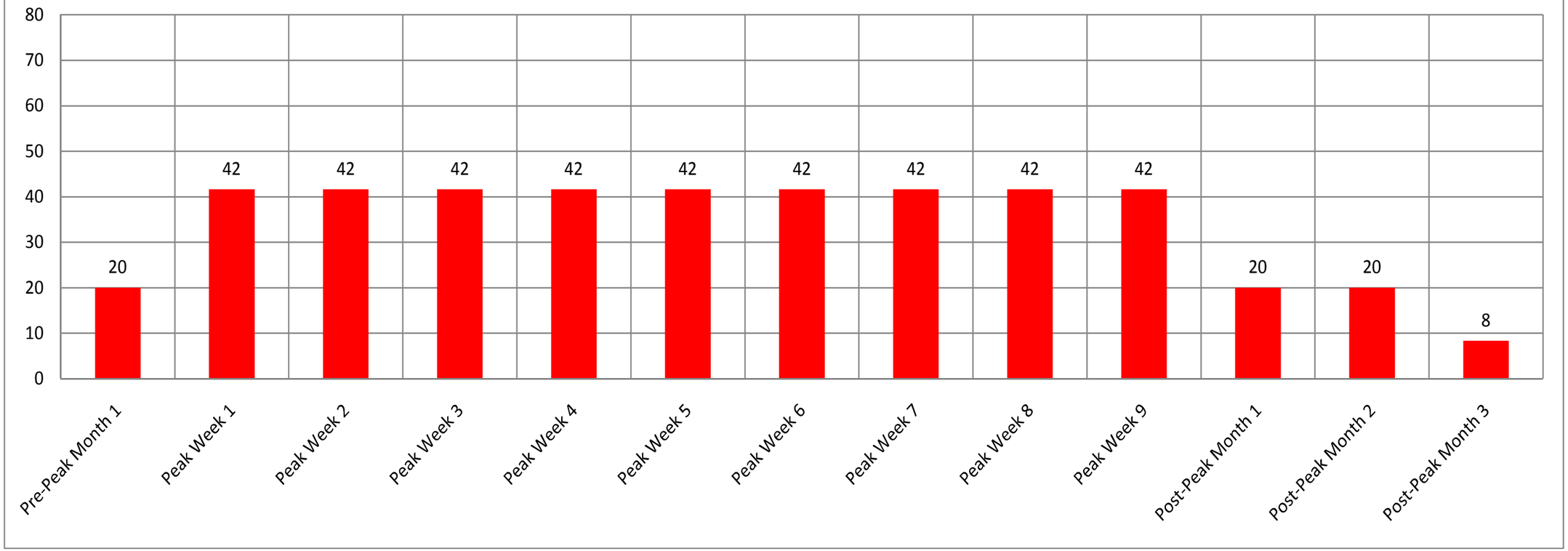
Projected Construction Traffic Impacts

Each of the CEQR criteria cited above for construction traffic impacts were evaluated above with respect to the proposed action. As part of this evaluation, all truck trips were converted to equivalent PCEs. **Figure 3.8-1 (G)** presents the projected hourly profile of total construction-related vehicle trips during the peak months of construction (i.e., early July through early September), with the PCE adjustment for truck trips (the *Highway Capacity Manual* recommends the use of a PCE of 1.5 for trucks on level terrain). A total of 19 peak hour construction-related trips are projected to occur between 6:00 a.m. and 7:00 a.m., and a total of 20 peak hour construction-related trips are projected to occur between 3:00 p.m. and 4:00 p.m. Although construction activities are anticipated to take place on weekdays only, and the peak day for the proposed beach under normal operation is expected to be a weekend, the projected number of weekday construction vehicle trips is considerably lower than the projected number of weekend vehicle trips associated with the beach during normal operation. It should also be noted that the peak hour construction trips for the morning and afternoon time periods are below the 50 peak hour trip threshold identified in the *CEQR Technical Manual* for detailed traffic analysis.

Furthermore, peak construction traffic volumes are anticipated to occur during off-peak travel times for the surrounding roadway network, thereby minimizing potential traffic impacts on roadways and intersections in the area. In addition, it is expected that all construction parking and staging can be accommodated on site, and that no changes to lane geometries, traffic signal timings, or parking regulations are anticipated in order to accommodate the proposed construction activities.

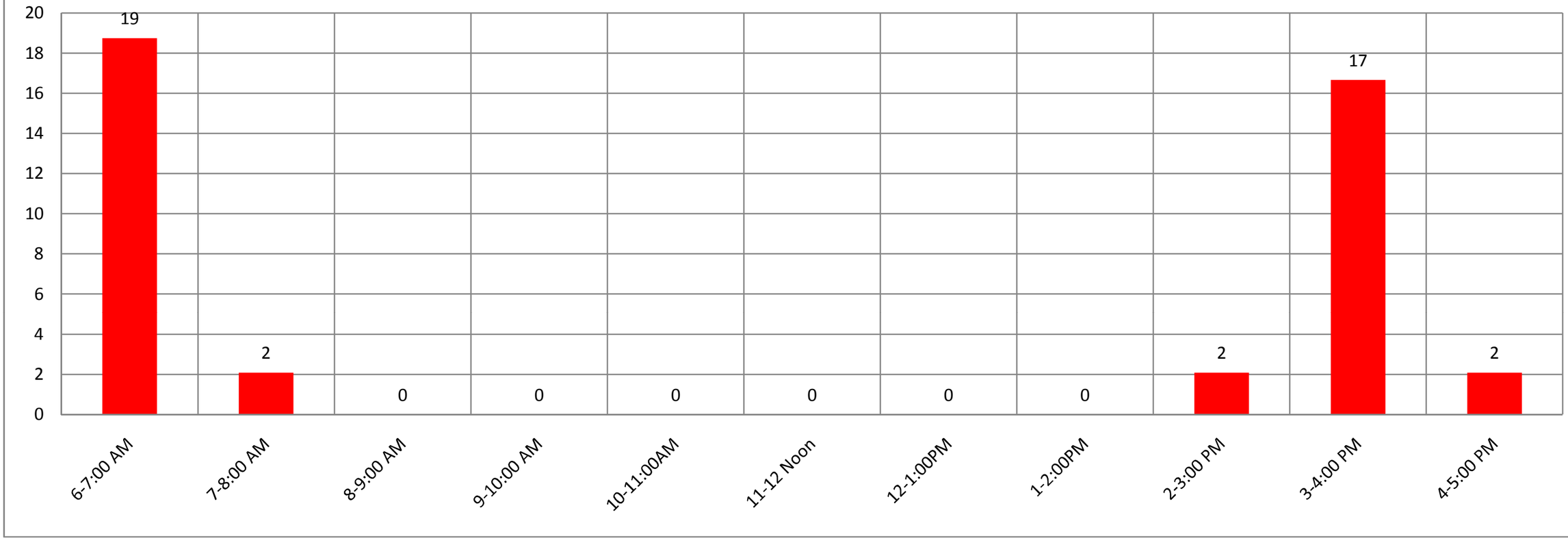
In conclusion, based on the magnitude of the projected construction traffic volumes, the times-of-day when construction activity is expected to take place, and the anticipated effect of construction-related vehicular traffic on roadway and intersection operations in the study area, the proposed action is not projected to have significant adverse construction-related traffic impacts.

Figure A: Number of Daily Construction Worker Trips, by Week/Month



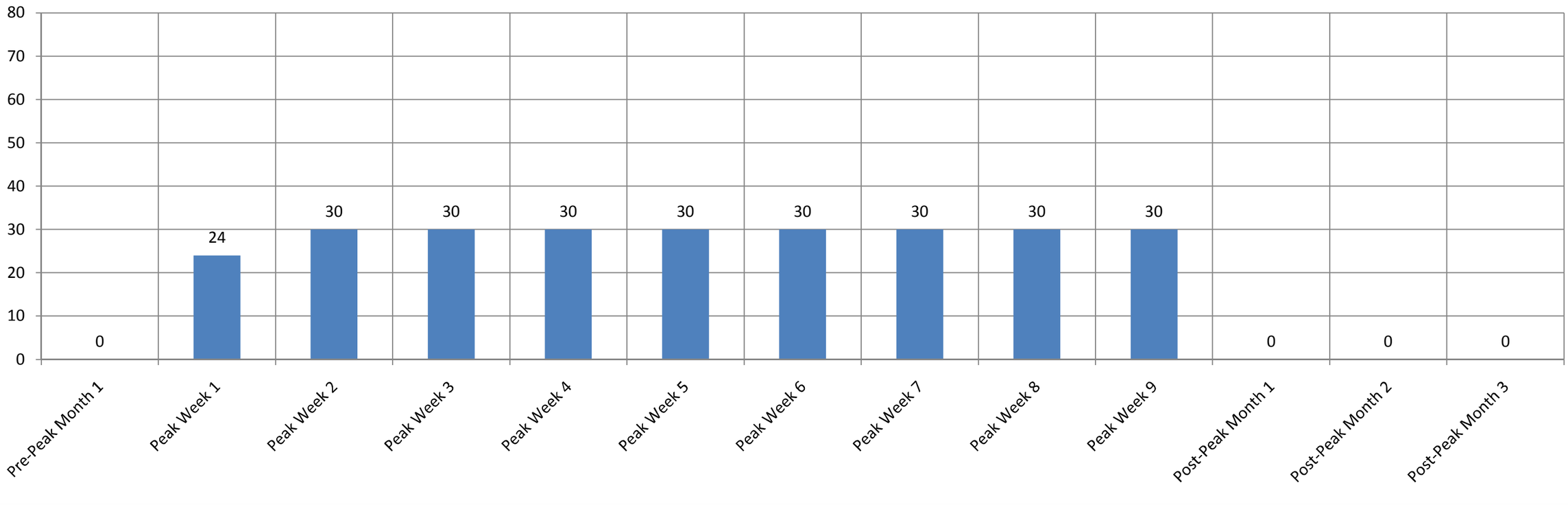
AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(A)

Figure B: Workers Trips by Time of Day, Peak Day



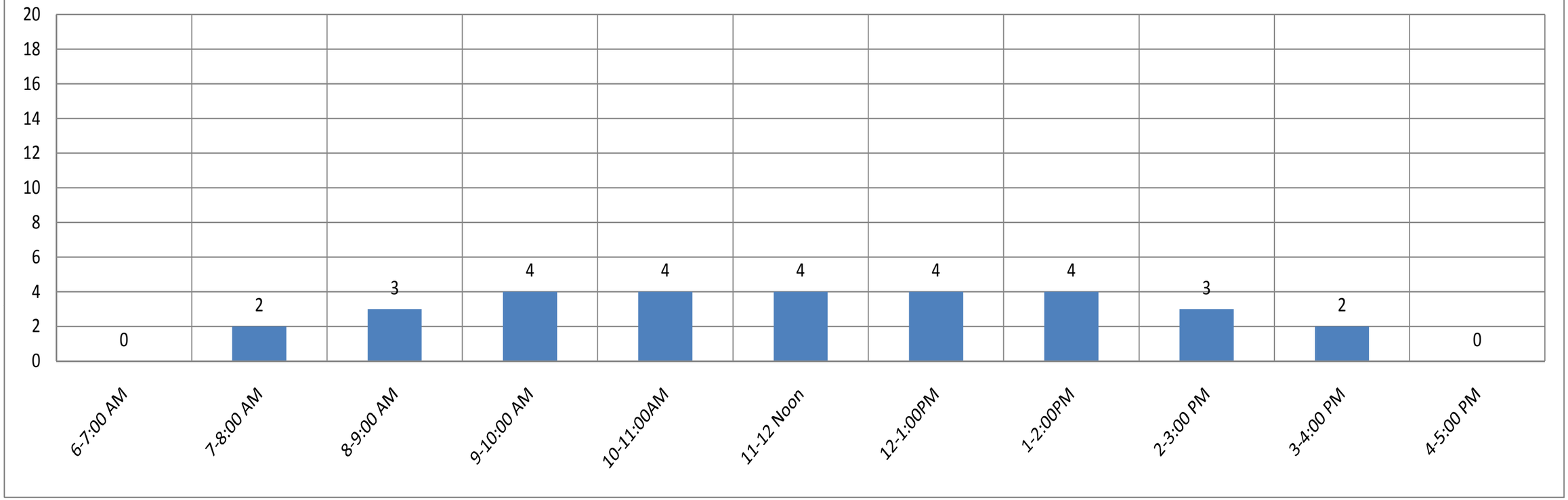
AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(B)

Figure C: Number of Daily Truck Trips, by Week/Month



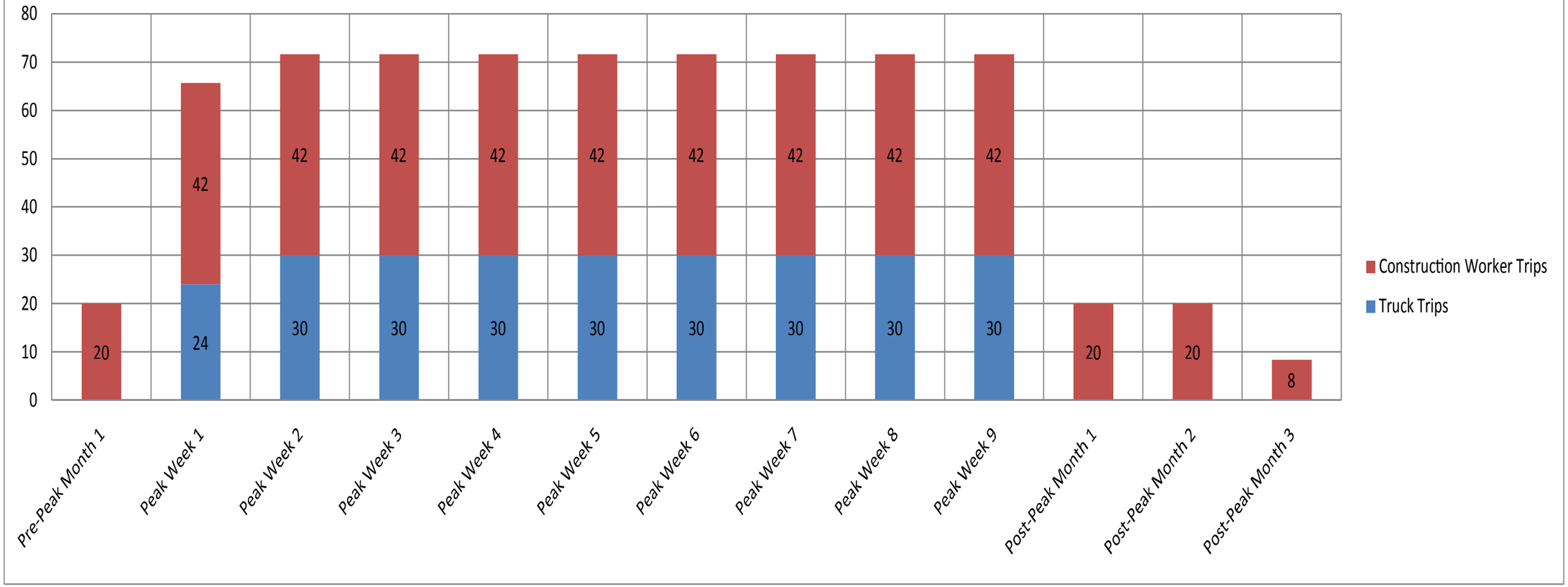
AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(C)

Figure D: Truck Trips by Time of Day, Peak Day



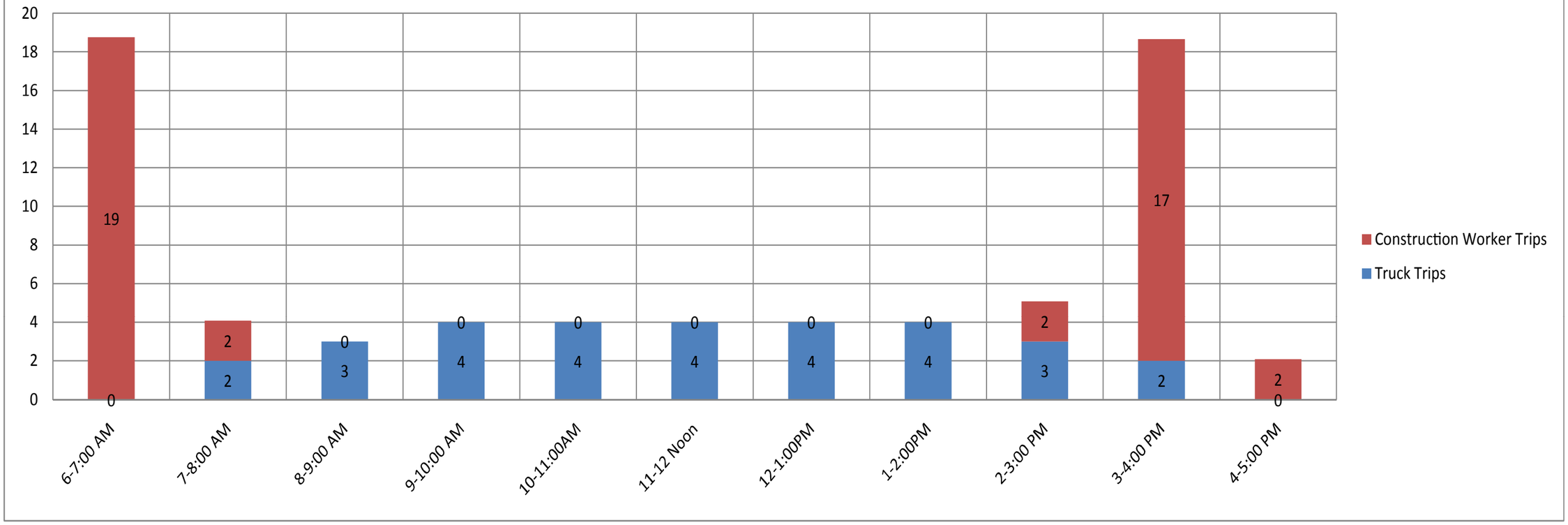
AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(D)

Figure E: Total Number of Daily Construction Trips, by Week/Month



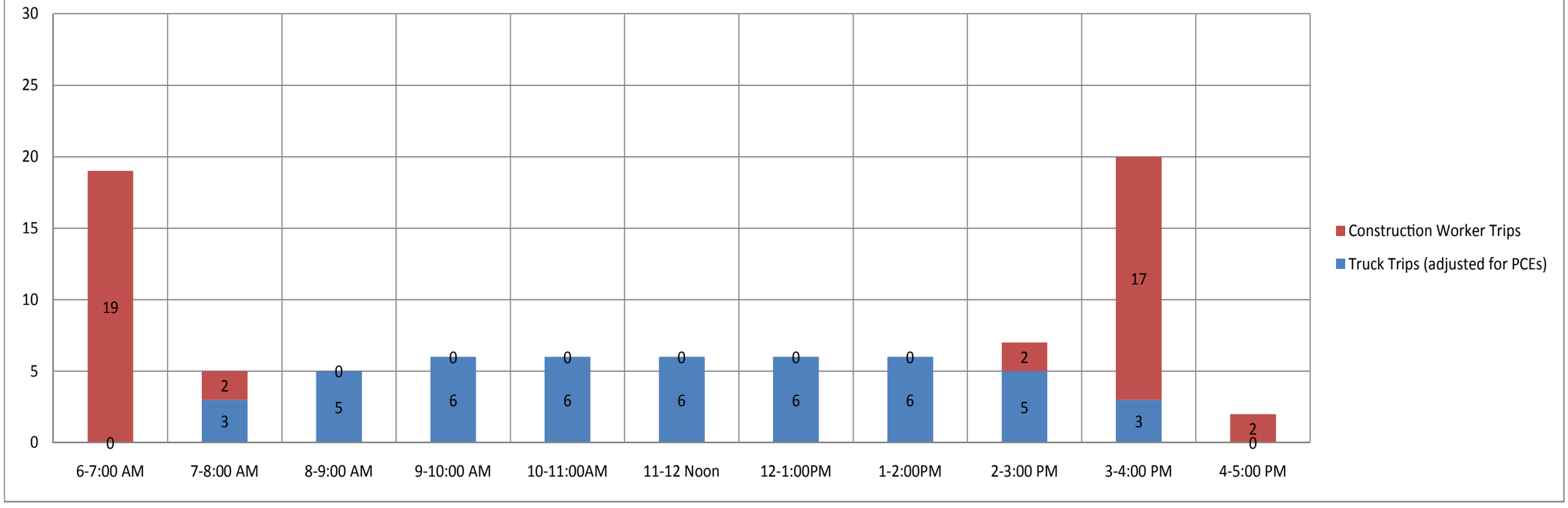
AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(E)

Figure F: Total Construction Trips by Time of Day, Peak Day



AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(F)

Figure G: Total Construction Trips by Time of Day, Peak Day (adjusted for PCEs)



AECOM	Environmental Impact Assessment Cedar Grove Beach, Staten Island, NY NYC Department of Parks and Recreation	Construction Impacts Figure 3.8-1(G)

3.8.2.7 Air Quality

Possible and momentary impacts on local air quality during construction of the project site include fugitive dust (particulate) emissions from land clearing operations, as well as mobile source emissions, including hydrocarbons, nitrogen oxide, and carbon monoxide.

Fugitive dust emissions could occur from land clearing, excavation, hauling, dumping, spreading, grading, compaction, wind erosion, and traffic over unpaved areas. Actual quantities of emissions depend on the extent and nature of the land clearing operations, the type of equipment employed, the physical characteristics of the underlying soil, the speed at which construction vehicles are operated, and the type of fugitive dust control methods employed. Much of the fugitive dust generated by construction activities consists of relatively large-size particles, which are expected to settle within a short distance from the construction site and to not significantly impact nearby buildings or people. All appropriate fugitive dust control measures, including watering of exposed areas and dust covers for trucks, would be expected to be employed during construction.

Mobile source emissions may result from the operation of construction equipment, trucks delivering materials and removing debris, workers' private vehicles, or occasional disruptions in traffic near the construction site. Localized increases in mobile source emissions would be minimized by following standard traffic maintenance requirements, such as: construction requiring temporary street closings would be performed during off-peak hours whenever possible; the existing number of traffic lanes would be maintained to the maximum extent possible; and idling of delivery trucks or other equipment would not be permitted during unloading or other inactive times.

3.8.2.8 Noise

Impermanent construction noise impacts would be caused by the operation of construction equipment on or near the site, and by the travel of construction-related car and truck traffic through the community. Construction noise levels are typically highest during any excavation and foundation phases, when several large pieces of construction equipment operate on construction sites. Construction noise from on-site equipment depends on the type and number of the machinery, which pieces of equipment are operating at any one time, how frequently the equipment operates throughout the work day, and how far removed they are from the site boundaries and from the nearest sensitive receptors (e.g., residences, schools, etc.). Peak noise levels from impact equipment (e.g., pile drivers, pavement breakers, etc.) can be close to or over 100 dB(A) or higher at 50 feet from the equipment. Locating noisy equipment away from site boundaries, and placing applicable noise barriers (e.g., temporary plywood walls) around the project site or the equipment itself would help reduce these potential temporary noise impacts.

As with most projects in the city, the proposed action would result in temporary and short-term impacts on adjacent properties. Construction noise is regulated by the New York City Noise Control Code and by the U.S. Environmental Protection Administration noise emission standards for construction equipment. These local and federal controls require that certain types of construction equipment and vehicles meet specific noise emission standards. Except under exceptional circumstances, City regulations limit construction activity to weekdays between the hours of 7:00 a.m. and 6:00 p.m., and construction materials must be handled and transported in a manner that avoids the generation of unnecessary noise.

3.8.2.9 Neighborhood Character

Construction-related impacts on the site that would occur due to demolition and renovation activities would be of limited duration and would not result in a significant adverse impact to neighborhood character. As defined in the *CEQR Technical Manual,* neighborhood character is considered to be an amalgam of the various elements that give a neighborhood its distinct personality. These elements include physical or social characteristics that help to define a community.

In addition to the technical areas discussed above that are assessed in this EIS, a preliminary assessment of other technical areas for neighborhood character that were not included as part of the EIS follows below. These areas are: socioeconomic conditions; community facilities; shadows; urban design and visual resources; and infrastructure.

- ***Socioeconomic Conditions:*** The Proposed Action is not expected to result in any significant adverse construction related impacts on socioeconomic conditions. The proposed rehabilitation of Cedar Grove Beach and the demolition vacated bungalows will create construction and related jobs, a positive benefit. Construction activities would result in direct benefits due to expenditures on labor, materials, and related services, as well as indirect benefits due to expenditures for material suppliers and by construction workers and other employees involved in construction activities.

- ***Community Facilities and Services:*** The Proposed Action is not expected to result in any significant adverse construction related impacts on community facilities within the area. Construction activities would not displace any existing community facilities, as none exist on the project site or within close proximity to the site within the surrounding area. Local police departments, fire departments, and hospitals have sufficient resources to provide emergency services, if necessary, during construction activities.

- ***Shadows:*** The Proposed Action is not expected to result in any significant adverse construction-related impacts due to shadows. No new structures would be built as part of the Proposed Action or as part of construction activities, and thus no new shadows would be created.

- ***Urban Design and Visual Resources:*** The Proposed Action is not expected to result in any significant adverse construction related impacts on urban design or visual resources on the site or within the surrounding area. Any visual impacts on the site that would occur due to construction activities, including various construction equipment and materials placed on the site, would be temporary and would be buffered from the neighboring areas by existing trees and vegetation.

- ***Infrastructure:*** The Proposed Action is not expected to result in any significant adverse construction-related impacts on infrastructure (e.g., water supply and wastewater/stormwater conveyance), as no new water supply or stormwater conveyance system would be created as a result of the proposed action. Best management and other practices would be adhered to, following all applicable local and state regulations, during construction activities to minimize and control stormwater runoff on the site.

3.8.3 Conclusion

As discussed above, although some temporary construction-related impacts would occur during demolition of existing structures and the restoration of the Cedar Grove Beach project site, it is not expected that construction activities would result in any significantly adverse construction-related impacts. Construction protection plans would be developed to mitigate the significant adverse effects caused by construction, specifically for the historic structures that are proposed to remain on the project site, and to ensure the integrity of high and moderately sensitive archeological areas during construction activities. Further, significant adverse construction-related impacts are not expected to natural resources, hazardous materials, transportation, open space, socioeconomic conditions, community facilities, land use and public policy, neighborhood character or infrastructure. Any construction impacts related to air quality or noise would be of limited duration and measures would be followed to minimize fugitive dust or construction noise levels. Thus, no significant adverse construction impacts are expected as a result of the proposed action.

3.9 ALTERNATIVES

INTRODUCTION

The purpose of this alternatives analysis is to examine reasonable alternatives to the Proposed Action that avoid or reduce identified action-related significant adverse impacts, while still allowing for the achievement of the stated goals and objectives of the Proposed Action.

The Proposed Action involves the rehabilitation of a portion of Cedar Grove Beach, where the main goal is to provide improved beach access for the general public. The project site currently contains a number of structures, which had been used for private seasonal summer occupancy by the Cedar Grove Beach Club until their agreement with NYCDPR expired on September 30, 2010. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has determined that the Cedar Grove Beach Club at Cedar Grove Beach constitutes a State/National Register of Historic Places (S/NRHP)-eligible historic district, known as the Cedar Grove Beach Club Historic District.

As part of the Proposed Action, which was developed in consultation with the OPRHP, seven resources within the eligible Cedar Grove Beach Club Historic District would be retained, rehabilitated, and adaptively reused for public and ancillary park use, including five bungalows (Buildings 1, 4, 7, 9A and 71), the Club House (Building 78) and the Barn, with surrounding landscapes stabilized and developed for NYCDPR beach and recreation programs. As a result of the Proposed Action, 43 structures on the project site would be demolished in order to restore the beach in these areas, and improve public access to the coastal area. The 43 structures to be demolished include 37 bungalows, 5 garages, and 1 guard house.

In accordance with the Final Scope of Work issued August 19, 2011, and as mandated by CEQR, this chapter includes the analysis of a No-Action Alternative which examines future conditions within the project site assuming the absence of the Proposed Action. As analyzed under the “Future Without the Proposed Action,” sections that are presented in Chapters 3.1 through 3.7 of this targeted Environmental Impact Statement (EIS), the No-Action Condition Alternative provides a baseline against which impacts of the Proposed Action were compared.

In addition to the No-Action Alternative, this alternatives analysis assesses two alternatives to the Proposed Action and considers their ability to achieve the goals and objectives of the Proposed Action. The first alternative assessed is the Complete Demolition and Rebuild Alternative, under which all resources within the eligible Cedar Grove Beach Club Historic District would be demolished, landscapes would be restored and stabilized, and a new facility to support beach and recreation operations would be constructed. The second alternative assessed is the Full Restoration Alternative under which all resources within the eligible Cedar Grove Beach Club Historic District would be retained and rehabilitated, including the stabilization and restoration of surrounding landscapes for beach and recreation uses.

For each of the technical areas presented in this targeted EIS, the anticipated effects of the Proposed Action are compared to those that are expected to result from each of the analyzed alternatives. The purpose of this alternatives analysis, as set forth by the *CEQR Technical Manual*, is to provide decision makers with the opportunity to consider reasonable alternatives to the Proposed Action that are consistent with the goals and objectives of the proposed Cedar Grove Beach Rehabilitation project.

3.9.1 No-Action Alternative

Under the No-Action Alternative, it is expected that all of the bungalows and other structures within the eligible Cedar Grove Beach Club Historic District would remain in place, subject to the natural elements, and cordoned off from public access. The beach area would remain in its current state and temporary trailers would be brought in to allow for seasonal beach operations. The structures on site would remain and the upland areas would not be otherwise restored or available for public and ancillary park use, thereby limiting public access to the project site.

3.9.1.1 Land Use, Zoning and Public Policy

Under the No-Action Alternative, the type of land use on the project site would not change. The project site is currently parkland and would remain parkland under the No-Action Alternative. Zoning regulations are not applicable to lands under the jurisdiction of NYCDPR and there are no anticipated public policy actions that would have an effect on conditions in the study area in the future without the Proposed Action. All city public policies, as described in Chapter 3.1, "Land Use, Zoning and Public Policy," are expected to remain unchanged under the No-Action Alternative.

3.9.1.2 Open Space

Under the No-Action Alternative, it is expected that all of the bungalows and other structures on site would remain in place, subject to the natural elements. The majority of the project site would remain cordoned off from public access with use restricted to NYCDPR personnel only. The beach area would remain in its current state with temporary trailers brought in to allow for seasonal beach operations. The structures on site would remain and the upland areas would not be otherwise restored. Thus, under the No-Action Alternative, public access to the open space provided by the project site would be limited.

3.9.1.3 Historic and Cultural Resources

Under the No-Action Alternative, it is expected that the S/NRHP-eligible Cedar Grove Beach Club Historic District would remain in place, subject to the natural elements, and would be sealed off from public access. The resources within the eligible historic district would remain, and the upland areas would not be otherwise restored. The beach area would also remain in its current state with temporary trailers brought in to allow for seasonal beach operations. Unused, unimproved, and subject to storm damage and natural elements, the structures would degrade and their contribution as contributing resources to the potentially-eligible historic district would diminish.

Archaeological Resources

As described in Chapter 3.3, "Historic and Cultural Resources," it is anticipated that in the future without the Proposed Action, areas of high and moderate archaeological sensitivity identified in the *Phase IA Documentary Study* performed for the project site would not be affected. Therefore, the No-Action Alternative would have no effect on potential archaeological resources in the study area.

Architectural Resources

The S/NRHP-eligible Cedar Grove Beach Club Historic District is significant for its local historic importance and architectural significance as one of the last surviving summer beachfront communities on Staten Island that retains integrity. It is anticipated that sealing off resources within the eligible historic district from public access and leaving structures exposed to the elements, would indirectly affect the eligible Cedar Grove Beach Historic District. These actions would result in the introduction of incompatible visual elements within the district, such as fencing and temporary trailers. Although the historic resources would remain in the eligible historic district they would not be restored and could, overtime, be further degraded by natural elements.

Overall, it is anticipated that the No-Action Alternative would have a negative effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District because the resources within it would likely deteriorate, diminishing their value as visual resources, and potentially become safety hazards. The deterioration of the resources may have the potential to diminish the qualities of the district which contribute to its significance, including the early-to-mid-20th-century materials, design of the bungalows and other buildings and structures, and cohesive layout of the residences along the shoreline.

3.9.1.4 Natural Resources

Topography, Geology, and Soils

Under the No-Action Alternative, there would be slight changes to the topography; although the soils of the site would not be substantially changed. The notable change would be the formation of dunes from wind-borne sand accumulation and topographic changes due to storm events between the bungalows.

Habitats, Flora, and Fauna

Under the No-Action Alternative, there would be no impacts to habitats and fauna under this option as the site would continue to provide the same habitats that it currently provides. Overtime, the abandoned buildings would likely fall into disrepair and potentially serve as habitat for avifauna and small mammals adapted for urban environments. The beach would continue to be utilized in the same manner and no impacts would occur to the oceanic habitats and associated flora and fauna under this option.

Under the No-Action Alternative, beach sandbur would continue to exist within the areas identified during a June 2011 field visit (see Chapter 3.4, "Natural Resources"). The organisms may also volunteer into the dune areas forming between the bungalows and the proposed maritime dune vegetation planting areas. However, under the No-Action Alternative, all structures would remain on the site, and the project area would not be restored, nor would native species be planted.

Surface Waters and Wetlands

Under the No-Action Alternative, no further disturbance is envisioned for wetlands and/or regulated adjacent areas that exist on site.

Protected Resources - New York State Bird Conservation Areas (BCA), Critical Environmental Areas (CEA), NYS-Designated Coastal Fish & Wildlife Habitats (SCFWH), Coastal Erosion Hazard Areas (CEHA), and Threatened and Endangered Species

Under the No-Action Alternative, there would be no impacts on BCAs CEAs, or SCFWHs as these resources do not occur on and/or immediately adjacent to the site. However, under the No-Action Alternative, additional structures would remain within the New York State Designated Coastal Erosion Hazard Area (CEHA), as compared to the Proposed Action. The US Army Corps of Engineers (USACE) has documented more than 90 storms that significantly impacted the New York City area during the 30 years prior to the 1960's. This section of shoreline was subjected to serious storm damage and flooding during the November 1950 Hurricane and the December 1992 nor'easter.[8] Most recently, Hurricane Irene in August 2011, caused substantial degradation of the beach front (see Appendix D). Based upon a study of the Staten Island shoreline by the USACE, expected to be completed in December of 2012, without major changes the level of natural protection will decline as sea level rises and the area becomes increasingly susceptible to larger storm events. Additionally, as per recent discussions between NYCDPR and the New York State Department of Environmental Conservation (DEC), 11 of the resources are in a highly compromised area of the CEHA south of the southern jetty. The location of buildings 27 through 36 leaves them particularly vulnerable to being damaged or destroyed by future storm events and sea level rise.

3.9.1.5 Hazardous Materials

Under the No-Action Alternative, it is expected that all of the bungalows and other structures on site would remain subject to the natural elements and be sealed off with fencing from public access. Due to the age of the structures on the Cedar Grove Beach project site, the presence of lead and/or asbestos containing materials (ACM) is considered likely in most of the buildings on site. However, as a majority of the project site would remain inaccessible to the public and as the structures would remain sealed off with

[8] U.S. Army Corps of Engineers, *South Shore of Staten Island Feasibility Study*, 2002

fencing and would not be disturbed under the No-Action Alternative, public exposure to ACM or lead-containing materials (e.g. paint) is not likely to occur. Consultation will be made with OPRHP in the instance of deterioration (due to storm events or structural stability issues) that require removal of all or a portion of the structures on the project site. Rules and regulations for applicable hazardous materials abatement would be followed.

3.9.1.6 Transportation

Traffic

The traffic analysis under the No-Action Alternative assesses how the study area's transportation system is projected to operate in the future without the Proposed Action. During the 2011 to 2014 period, it is expected that vehicular travel demands in the study area will increase. In order to forecast future traffic demands without the proposed project, an annual growth rate of one percent was applied over three years (three percent total growth) to the existing traffic volumes, in accordance with the growth rate recommendations for Staten Island described in the *CEQR Technical Manual*. In addition, the weekend peak hour traffic volumes for the Kohl's department store site (see Chapter 3.6, "Transportation") were added to the adjusted traffic volumes to arrive at the projected Future No-Action traffic volumes.

As discussed in Chapter 3.6, "Transportation," delays on the eastbound and westbound approaches at the signalized study intersection of Mill Road and Ebbitts Street are projected to increase to the Level of Service (LOS) "D" range under No-Action conditions (as compared to LOS "C" range under existing conditions) during the weekend midday peak hour under typical summer conditions. However, the intersection as a whole will continue to operate at LOS "C" overall during both analysis peak hours. The intersection of Cedar Grove Avenue and Ebbitts Street will continue to operate at LOS "A" during both analysis peak hours. No significant traffic impacts would occur under the No-Action Alternative.

Parking

Under the No-Action Alternative, the on-street parking demand is estimated to increase at a background growth rate of one percent per year over three years (2011 to 2014), for a total increase of three percent by 2014, in accordance with the growth rate recommendations for Staten Island described in the *CEQR Technical Manual*. **Table 3.9-1** below compares the projected future on-street parking utilization under the No-Action condition with the existing on-street parking supply, assuming the existing supply in the study area remains unchanged in the future (i.e., no changes to existing parking regulations).

Table 3.9-1 Summary of On-Street Parking Supply and Utilization – No-Action Alternative

Time Period	Existing Number of Legal Spaces[1]	Projected Total Number of Parked Cars	Projected Total Number of Available Spaces	Projected Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	432	244	64%
Weekend Midday (1:00 to 2:00 p.m.)	676	451	225	67%
Weekend PM (4:00 to 5:00 p.m.)	676	466	210	69%
Weekend PM (5:00 to 6:00 p.m.)	676	469	207	69%

1= Curbside parking capacity.

As shown in **Table 3.9-1**, the future on-street parking demand on a typical weekend day is projected to be under-capacity in the No-Action Alternative, with parking utilization rates not exceeding approximately 69 percent. No significant parking impacts are expected to occur under the No-Action Alternative.

Transit

As discussed in Chapter 3.6, "Transportation," the number of transit trips generated by the Proposed Action would be minimal and would not exceed the 200-trip preliminary screening threshold for transit trips in the midday or PM weekend peak hours. Under the No-Action Alternative there would be fewer projected transit trips than the Proposed Action, due to the lack of site amenities such as concession stands, open space and play areas. As no significant adverse transit impacts are expected as a result of the Proposed Action, with fewer transit trips expected under the No-Action Alternative, it is unlikely that significant adverse transit impacts would occur under the No-Action Alternative.

Pedestrian

As discussed in Chapter 3.6, "Transportation," the number of pedestrian trips generated by the Proposed Action would be minimal and would not exceed the 200-trip preliminary screening threshold for pedestrian trips in the midday or PM weekend peak hours. Under the No-Action Alternative there would be fewer projected pedestrian trips than the Proposed Action, due to the lack of site amenities such as concession stands, open space and play areas. As no significant adverse transit impacts are expected as a result of the Proposed Action, with fewer transit trips expected under the No-Action Alternative it is unlikely that significant adverse transit impacts would occur under the No-Action Alternative. In addition, as discussed in Chapter 3.6, "Transportation," vehicular and pedestrian accidents are unlikely to increase under the No-Action Alternative.

3.9.1.7 Neighborhood Character

Under the No-Action Alternative, it is expected that all of the bungalows and other structures on site would remain, subject to the natural elements, and the majority of the site would remain sealed off with fencing from public access. The beach area would remain in its current state with temporary trailers being brought in to allow for seasonal beach operations. The structures on site would remain and the upland areas would not be otherwise restored.

The neighborhood character of the Cedar Grove Beach project site is drawn mainly from the presence of natural resources, the beach area, waterfront views, and its local historic importance as one of the last surviving summer beachfront communities on Staten Island. It is anticipated that sealing off resources within the historic district from public access in the future without the action would leave historic resources exposed to the elements. Unimproved, the resources would impact visual resources in the study area, including views of natural areas and the shoreline of the Lower New York Bay. Under the No-Action Alternative, it is expected that the condition of most of the buildings that comprise the eligible historic district would likely decline, primarily as a result of exposure to the elements. Although the historic resources on the project site would not be removed, the deterioration of the resources in the eligible historic district would diminish the elements that contribute to their historic significance including the early-to-mid-20th-century materials, the design of the bungalows (and other structures) and the cohesive layout of the residences along the shoreline. As the historic resources on the project site contribute to a defining feature of the neighborhood character, their deterioration over time would likely have a negative effect on the character of the neighborhood as the resources would potentially become a safety hazard. In addition, the natural resources on the site, including the beach area and waterfront views, could be negatively affected by the incompatible fencing and temporary trailers, reducing the unique natural characteristics of the project site and study area and limiting the public's access to the project site.

3.9.1.8 Construction Impacts

Under the No-Action Alternative, it is expected that all of the bungalows and other structures on site would remain subject to the natural elements and be sealed off with fencing from public access. No planned construction would occur under the No-Action Alternative, thus no significant substantive construction impacts are expected to occur.

3.9.1.9 Unavoidable and Adverse Impacts

Under the No-Action Alternative, it is expected that the condition of most of the buildings that comprise the eligible historic district would likely decline, primarily as a result of exposure to the elements. No mitigation efforts would be pursued under the No-Action Alternative. Thus, an unavoidable adverse impact to the eligible Cedar Grove Beach Club Historic District would likely occur.

3.9.1.10 Conclusion

While under the No-Action Alternative all resources that comprise the eligible S/NRHP-eligible Cedar Grove Beach Historic District would be retained, it is anticipated that the No-Action Alternative would likely have a negative effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District because the resources within it would be exposed to the elements. Exposure to the elements may ultimately result in possible deterioration of resources within the eligible historic district, which in turn would have a negative effect on neighborhood character. In addition, the No-Action Alternative does not meet the purpose and need of the project, which is to rehabilitate Cedar Grove Beach through expansion of public access, improvement of recreational resources, and preservation of select resources within the S/NRHP-eligible Cedar Grove Beach Historic District. The restoration of select bungalows would not occur under the No-Action Alternative. Thus, the resources needed by NYCDPR for maintenance and operations purposes and the public in the form of amenities typically provided at public beaches, such as a food concession and comfort station, would not be provided. Trailers would be brought in seasonally to serve as both lifeguard and comfort stations.

3.9.2 Complete Demolition and Rebuild Alternative

Under the Complete Demolition and Rebuild Alternative, all resources within the eligible Cedar Grove Beach Club Historic District would be demolished, landscapes would be restored and stabilized, and a new facility to support beach and recreation operations would be constructed. Under this alternative, amenities would be specifically designed for the site and uses. Included is a new code-compliant facility that would accommodate uses for a lifeguard/first aid station, a comfort station and maintenance and operations.

Under the Complete Demolition and Rebuild Alternative the historical context of the project site would have limited influence on the overall design. Historic landscape elements such as plantings, trees, paths and recreation features would be retained, but their presence alone would not contribute to the beach colony environment identified in the S/NRHP eligibility determination.

The effects of the Complete Demolition and Rebuild Alternative are described below and compared to those of the Proposed Action.

3.9.2.1 Land Use, Zoning and Public Policy

As is the case with the Proposed Action, under the Complete Demolition and Rebuild Alternative, the type of land use would not change on the project site. The project site currently is parkland and would remain parkland under the Complete Demolition and Rebuild Alternative. Zoning regulations are not applicable to lands under the jurisdiction of NYCDPR and all city public policies, as described in Chapter 3.1, “Land Use, Zoning and Public Policy,” are expected to remain unchanged under the Complete Demolition and Rebuild Alternative.

3.9.2.2 Open Space

Similar to the Proposed Action, no significant adverse open space impacts are expected under the Complete Demolition and Rebuild Alternative. The rehabilitation of Cedar Grove beach would revitalize the existing open space and formalize existing recreation areas within the park. Further, a beachfront recreational area would be created for the general public’s use and enjoyment.

3.9.2.3 Historic Resources

The Complete Demolition & Rebuild Alternative proposes demolition of all resources within the S/NRHP-eligible Cedar Grove Beach Historic District, restoration and stabilization of landscapes, and construction of a new facility to support beach and recreation operations. Following the demolition of the resources within the historic district, a new code-compliant facility would be constructed to accommodate uses for a lifeguard/first aid station, public toilets, and maintenance and operations. Existing landscaped areas would be stabilized and planted, and the roadways, paths, landscape recreation amenities, and trees would be protected, retained and rehabilitated.

Archeological Resources

Similar to the Proposed Action, it is expected that the Complete Demolition and Rebuild Alternative would be implemented in a manner that does not disturb areas of high archaeological sensitivity identified in the study area in the *Phase IA Documentary Study*. However, in the event final designs for the Proposed Action involve ground disturbance in areas noted as moderately or highly sensitive for archaeological resources, and in coordination with OPRHP and LPC to determine if and how, limited Phase IB field testing would be undertaken to assess the degree of disturbance to the ground surface in these locations. (see **Chapter 3.8**, "Construction Impacts," for detailed discussion of construction protection plan).

Architectural Resources

The Complete Demolition and Rebuild Alternative would have a direct effect on the S/NRHP-eligible Cedar Grove Beach Historic District. It would result in the direct physical destruction of the historic built environment which largely defines the character of the historic district. Although the landscape would be stabilized and rehabilitated, its presence, coupled with new construction, would no longer evoke the location, design, setting, materials, workmanship, feeling, and association of the historic district. Therefore, the Complete Demolition and Rebuild Alternative would have a significant adverse effect on the Cedar Grove Beach Club Historic District.

Mitigation

In comparison to the Proposed Action where several mitigation measures are available to mitigate the significant adverse effect on historic resources, under the Complete Demolition and Rebuild Alternative, the only measure available for mitigation is documentation of the existing conditions prior to demolition. The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the Complete Demolition and Rebuild Alternative. The scope and content of the HABS documentation would be defined in coordination with OPRHP. HABS documentation typically includes a physical description of the overall historic district, including setting; brief physical descriptions of the interior and exterior of buildings and structures, including significant alterations; historic context illustrated by historic photographs and/or maps; and large-format black-and-white photographs of the historic district. OPRHP would also assist NYCDPR in identifying adequate repositories for copies of the documentation.

3.9.2.4 Natural Resources

Similar to the Proposed Action, no significant adverse natural resources impacts are expected under the Complete Demolition and Rebuild Alternative. The topography, geology and soils of the site would not undergo substantial modification, nor would habitats be modified or flora and fauna on the project site be affected. The beach would continue to be utilized in the same manner as currently occurs.

Under the Complete Demolition and Rebuild Alternative, there would be no projected impact on BCAs CEAs, or SCFWHs as these resources do not occur on and/or immediately adjacent to the site. It is anticipated the project would have a net positive impact on the CEHA. The project would remove existing man-made structures within the CEHA and replace those areas with planted dune vegetation. Under this alternative, beach sandbur would continue to exist and the creation of the areas of maritime dune

vegetation in the areas of the former bungalows would provide potential habitat for the beach sandbur. While a new code-compliant facility would likely be built outside of the CEHA and house all NYCDPR identified park needs including the comfort station and the lifeguard station, the upland location of the new facility would not be ideal or convenient for park users and operations staff alike.

Under the Complete Demolition and Rebuild Alternative, work would occur within New York State's freshwater and tidal wetlands and/or regulated adjacent areas, the Project Sponsors would coordinate with the NYSDEC pursuant to the state's Freshwater Wetlands Regulatory Program and Tidal Wetlands Permit Program. In addition, the NYSDEC likely would require authorization of a Section 401 Water Quality Certification to ensure that proposed work under the Proposed Action within state regulated waters and/or wetlands do not contravene state water quality standards. Best management practices for the control of sedimentation and erosion would be required to control potential silt and sediment releases to surface waters and wetlands. The United States Army Corps of Engineers (USACE) previously indicated that a USACE permit would not be required, as the rehabilitation of Cedar Grove Beach is not anticipated to involve dredging, placement of any dredged or fill material, or construction activities over any navigable waters or waterbodies of the United States. Based on the final construction plans prepared under the Complete Demolition and Rebuild Alternative, the Project Sponsors would continue to coordinate with NYSDEC and USACE and all applicable permits will be sought as needed. Thus, the Complete Demolition and Rebuild Alternative would not have a significant negative effect upon the ecological value of wetlands or natural resources.

Mitigation

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005).

Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit and mitigation could be required. . A component of the Complete Demolition and Rebuild Alternative is the potential removal of bungalows and impervious structures from the regulated adjacent areas. These structures would be replaced with native dune vegetation; thus, a net positive ecological benefit to the regulated adjacent area would occur through implementation of the Complete Demolition and Rebuild Alternative.

3.9.2.5 Hazardous Materials

Similar to the Proposed Action, under the Complete Demolition and Rebuild Alternative no significant adverse hazardous materials impacts are anticipated to occur. As discussed in detail in Chapter 3.5, "Hazardous Materials," based on the findings of the Phase I ESA, no known RECs associated with the project site were identified. Further, based on field observations made during the site reconnaissance and a review of available documents, no evidence of underground storage tanks were identified on the project site. There is potential, based on the age of the buildings on the project site, that lead based paints and/or asbestos containing material (ACM) are present. Under the Complete Demolition and Rebuild Alternative, all resources within the eligible Cedar Grove Beach Club Historic District would be demolished, landscapes would be restored and stabilized and a new facility to support beach and recreation operations would be constructed. The project sponsor, The New York City Department of Parks and Recreation, is committed to the proper removal of lead based paints and/or ACM on the project site, in accordance with all applicable federal, state and city standards. Therefore, no significant adverse hazardous materials impacts would be expected under the Complete Demolition and Rebuild Alternative.

3.9.2.6 Transportation

Under the Complete Demolition and Rebuild Alternative, all resources within the eligible Cedar Grove Beach Club Historic District would be demolished, landscapes would be restored and stabilized and a

new facility to support beach and recreation operations would be constructed. While all resources would be removed under the Complete Demolition and Rebuild Alternative, the overall project site would remain the same and the trip generation assumptions for the Proposed Action would apply under the Complete Demolition and Rebuild Alternative.

Traffic

It is expected that under the Complete Demolition and Rebuild Alternative, the traffic impacts would be the same as identified under the Proposed Action. Thus, the westbound approach to the signalized Mill Road / Ebbitts Street intersection is projected to experience significant adverse traffic impacts during both weekend peak hours. Compared to the No-Action Alternative, under the Complete Demolition and Rebuild Alternative, during the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase to 81.2 seconds per vehicle (LOS "F"). During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase to 90.4 seconds per vehicle (LOS "F") under the Complete Demolition and Rebuild Alternative.

Traffic Mitigation

Similar to the Proposed Action, mitigation measures would be recommended under the Complete Demolition and Rebuild Alternative to mitigate traffic impacts. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated under the Complete Demolition and Rebuild Alternative.

Parking

The parking demand under the Complete Demolition and Rebuild Alternative would be the same as it assessed under the Proposed Action (see Chapter 3.6, "Transportation"). Thus, as shown in **Table 3.9-2** below, the on-street parking demand on a typical weekend day is projected to continue to remain under-capacity under the Complete Demolition and Rebuild Alternative, with parking utilization rates not exceeding approximately 69 percent. Furthermore, on-street parking demand increases of the magnitudes described above are less than the CEQR threshold for significant adverse parking impacts (i.e., the projected parking demand must exceed half of the available parking capacity in the study area for a significant adverse parking impact). Therefore, no significant adverse parking impacts are projected to occur under the Complete Demolition and Rebuild Alternative.

Table 3.9-2 Summary of On-Street Parking Supply and Utilization – Complete Demolition and Rebuild Alternative

Time Period	Number of Legal Spaces[1]	Projected Total Number of Parked Cars	Projected Total Number of Available Spaces	Projected Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	455	221	67%
Weekend Midday (1:00 to 2:00 p.m.)	676	457	219	68%
Weekend PM (4:00 to 5:00 p.m.)	676	466	210	69%
Weekend PM (5:00 to 6:00 p.m.)	676	469	207	69%

1= Curbside parking capacity.

Transit

The *CEQR Technical Manual* indicates that a project would likely need to generate 200 or more transit trips during any peak hour in order to warrant a detailed analysis of transit impacts. Similar to the Proposed Action (see Chapter 3.6, "Transportation"), the number of transit trips generated under the Complete Demolition and Rebuild Alternative would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Therefore, no significant adverse transit impacts are expected as a result of the Complete Demolition and Rebuild Alternative.

Pedestrian

The *CEQR Technical Manual* recommends that a detailed pedestrian analysis be performed for projects that have the potential to generate over 200 pedestrian trips per hour. Under this threshold, CEQR states that an increase in project-generated pedestrian volumes would generally not be noticeable. Similar to the Proposed Action (see Chapter 3.6, "Transportation"), the number of pedestrian trips generated under the Complete Demolition and Rebuild Alternative would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Thus, the increase in pedestrian volume generated by the Complete Demolition and Rebuild Alternative does not warrant a detailed pedestrian assessment and is not expected to result in significant adverse pedestrian impacts.

Pedestrian Safety

As discussed in Chapter 3.6, "Transportation," accident data compiled by the NYCDOT was reviewed to identify the accident history at the study intersections of Mill Road and Ebbitts Street and Cedar Grove Avenue and Ebbitts Street. Information available from the NYCDOT for the three-year period from 2007 to 2009 indicates that there were a total of 6 accidents at these two intersections (see Table 3.6-12 in Chapter 3.6, "Transportation"). None of these accidents involved a pedestrian and no fatalities were reported. Thus, similar to the Proposed Action, the Complete Demolition and Rebuild Alternative is not expected to increase the likelihood of vehicular or pedestrian crashes at these intersections.

3.9.2.7 Neighborhood Character

Under the Complete Demolition and Rebuild Alternative, all historic resources would be removed from the Cedar Grove Beach project site. As a result, a significant adverse historic and cultural resources impact is expected under the Complete Demolition and Rebuild Alternative. In addition, the removal of the beach colony element of the project site would have a negative effect on the character of the neighborhood. However, the Complete Demolition and Rebuild Alternative is not expected to result in a significant adverse neighborhood character impact. Similar to the Proposed Action, under the Complete Demolition and Rebuild Alternative, the Cedar Grove Beach project site would be rehabilitated and public accessibility would be improved. The project site's natural features would be enhanced, including views of the beach and waterfront. Therefore, although the character of the neighborhood would be negatively affected under the Complete Demolition and Rebuild Alternative, these changes would not constitute a significant adverse impact to neighborhood character.

3.9.2.8 Construction Impacts

Similar to the Proposed Action, significant construction impacts are not expected as a result of the Complete Demolition and Rebuild Alternative. As discussed in detail in Chapter 3.9, "Construction Impacts," although some temporary construction-related impacts would occur during demolition of existing structures and the restoration of the Cedar Grove Beach project site, it is not expected that construction activities would result in any significantly adverse construction-related impacts. Construction protection plans would be developed to mitigate the significant adverse effects caused by construction, to ensure the integrity of high and moderately sensitive archeological areas during construction activities. Further, significant adverse construction-related impacts are not expected to natural resources, hazardous materials, transportation, open space, socioeconomic conditions, a community facility, land use and public policy, neighborhood character or infrastructure. Any construction impacts related to air quality or

noise would be of limited duration and measures would be followed to minimize fugitive dust or construction noise levels. Thus, no significant adverse construction impacts are expected as a result of the Complete Demolition and Rebuild Alternative.

3.9.2.9 Mitigation

As discussed in Sections 3.9.2.3, 3.9.2.4 and 3.9.2.6 above, the potential for significant impacts have been identified under the Complete Demolition and Rebuild Alternative to occur for Historic and Cultural Resources, Natural Resources, and Transportation. In accordance with the *CEQR Technical Manual*, mitigation measures are examined to minimize or eliminate these impacts. These mitigation measures are discussed below.

Historic and Cultural Resources

In comparison to the Proposed Action where several mitigation measures are available to mitigate the significant adverse effect on historic resources, under the Complete Demolition and Rebuild Alternative, the only measure available for mitigation is documentation of the existing conditions prior to demolition. The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the Proposed Action. The scope and content of the HABS documentation would be defined in coordination with OPRHP. HABS documentation typically includes a physical description of the overall historic district, including setting; brief physical descriptions of the interior and exterior of buildings and structures, including significant alterations; historic context illustrated by historic photographs and/or maps; and large-format black-and-white photographs of the historic district. OPRHP would also assist NYCDPR in identifying adequate repositories for copies of the documentation.

Natural Resources

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005).

Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit. In order to offset losses of tidal wetlands, mitigation would be required. A component of this proposed project is the potential removal of bungalows and impervious structures from the regulated adjacent areas. These structures would be replaced with native dune vegetation; thus, a net positive ecological benefit to the regulated adjacent area would occur through implementation of the Complete Demolition and Rebuild Alternative.

Traffic

As discussed above in Section 3.9.2.6, similar to the Proposed Action, mitigation measures would be recommended under the Complete Demolition and Rebuild Alternative to mitigate traffic impacts. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated under the Complete Demolition and Rebuild Alternative.

3.9.2.10 Unavoidable and Adverse Impacts

As described above in Section 3.9.2.3, “Historic and Cultural Resources,” under the Complete Demolition and Rebuild Alternative, the only measure available for mitigation of potential impacts is documentation of

the existing conditions prior to demolition. The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the Complete Demolition and Rebuild Alternative. The scope and content of the HABS documentation would be defined in coordination with OPRHP. However, as the historic resources on the site would be demolished under this alternative, an unavoidable adverse impact to the S/NHRP-eligible Cedar Grove Beach Club Historic District would occur.

3.9.2.11 Conclusion

Under the Complete Demolition and Rebuild Alternative, all resources within the eligible Cedar Grove Beach Historic District would be demolished and the restoration and stabilization of landscapes and the construction of a new facility to support beach and recreation operations would occur. Following demolition of the resources within the historic district, a new code compliant facility would be constructed. Existing landscaped areas would be stabilized and roadways paths, landscape recreation amenities and trees would be protected, retained and rehabilitated.

This alternative would provide amenities specifically designed for the site and required uses. However, while the Complete Demolition and Rebuild Alternative would serve the programmatic goals of the projects it would result in an adverse effect on the eligible Cedar Grove Beach Historic District, as all buildings that comprise the district would be demolished. Historic landscape elements such as plantings, trees, paths and recreation features would largely be retained, but their presence alone would not contribute to the beach colony environment identified in the S/NRHP eligibility determination. Thus, the Complete Demolition and Rebuild Alternative does not meet the preservation goals as set forth in the project purpose and need for the Proposed Action.

3.9.3 Full Restoration Alternative

Under the Full Restoration Alternative, all resources within the eligible Cedar Grove Beach Club would be retained and rehabilitated, including the stabilization and restoration of surrounding landscapes for beach and recreation uses. The renovation under the Full Restoration alternative would include 50 resources with most in poor condition and the majority located in a Coastal Erosion Hazard Area (CEHA).

The renovation or restoration of the resources would require significant replacement of existing deteriorated materials on the project site. All resources would be renovated and required to be brought up to code compliance for public use. Most resources would be required to be mothballed until funds would become available for their restoration.

The effects of the Full Restoration Alternative are described below and compared to those of the Proposed Action.

3.9.3.1 Land Use, Zoning and Public Policy

Similar to the Proposed Action, under the Full Restoration Alternative, the type of land use would not change on the project site. The project site is currently parkland and would remain parkland under the Full Restoration Alternative. Zoning regulations are not applicable to lands under the jurisdiction of NYCDPR and all city public policies, as described in Chapter 3.1, “Land Use, Zoning and Public Policy,” are expected to remain unchanged under the Full Restoration Alternative.

3.9.3.2 Open Space

Similar to the Proposed Action, no significant adverse open space impacts are expected under the Full Restoration Alternative. The rehabilitation of Cedar Grove beach would revitalize the existing open space and formalize existing recreation areas within the park. Further, a beachfront recreational area would be created for the general public’s use and enjoyment. However, the publicly accessible areas would likely not be as expansive due to the continuing presence of all bungalows.

3.9.3.3 Historic Resources

Implementation of the Full Restoration Alternative would entail retaining and rehabilitating all resources within the S/NRHP-eligible Cedar Grove Beach Club Historic District, and stabilizing and restoring surrounding landscapes for beach and recreation uses. The renovation of resources would be a significant undertaking considering there are 50 resources within the historic district, most in poor condition, and the majority are located in a CEHA and/or within wetland areas. Renovation or restoration of the resources would require significant replacement of materials since many of the bungalows are in poor condition. Appropriate park-related adaptive reuses would need to be developed for the resources to remain. Most of the resources would be vacant until park related uses are identified and rehabilitation funding obtained. Additionally, as per recent discussions between NYCDPR and the New York State Department of Environmental Conservation (DEC), 11 of the resources are in a highly compromised area of the CEHA, south of the southern jetty, which leaves them vulnerable to damage or damage caused by future storm events and sea-level rise.

Archeological Resources

Similar to the Proposed Action, it is expected that the Full Restoration Alternative would be implemented in a manner that does not disturb areas of high archaeological sensitivity identified in the study area in the *Phase IA Documentary Study*. However, in the event final designs for the Proposed Action involve ground disturbance in areas noted as moderately or highly sensitive for archaeological resources, and in coordination with OPRHP and LPC to determine if and how, limited Phase IB field testing would be undertaken to assess the degree of disturbance to the ground surface in these locations. (see **Chapter 3.8**, "Construction Impacts," for detailed discussion of construction protection plan).

Architectural Resources

The Full Restoration Alternative would have a direct effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District as it would result in direct alteration of the historic built and natural environment within the eligible historic district. In addition, resources within the historic district may be subject to direct construction impacts such as vibrations as buildings undergo restoration. However, if a construction protection plan is developed, park related end uses developed, and the resources mothballed until they are adaptively reused for park related purposes, and the landscape stabilized in consultation with OPRHP, no significant adverse effects on architectural resources are expected as a result of the Full Restoration Alternative.

3.9.3.4 Natural Resources

Similar to the Proposed Action, no significant adverse natural resources impacts are expected under the Full Restoration Alternative. The topography, geology and soils of the site would not undergo substantial modification, nor would habitats be modified or flora and fauna on the project site be affected. The beach would continue to be utilized in the same manner as currently occurs.

Under the Full Restoration Alternative, there would be no projected impact on BCAs CEAs, or SCFWHs as these resources do not occur on and/or immediately adjacent to the site. Also, building rehabilitation work is planned within the CEHA. Under the Full Restoration Alternative, additional structures would remain within the New York State Designated Coastal Erosion Hazard Area (CEHA), when compared to the Proposed Action.

Coordination with the United States Army Corps of Engineers (USACE) was previously undertaken. As per a January 2, 2011 letter, the USACE indicated that their review determined that as the rehabilitation of Cedar Grove Beach will not involve dredging or construction activities over any navigable waters of the United States, the placement of any dredged or fill material in any waters of the United States, or the accomplishment of any work affecting the course, location, condition or capacity of such areas. It is not anticipated that fill or construction materials would affect wetlands and water bodies of the United States, thus a USACE permit would not be required.

Work under the Full Restoration Alternative would be within New York State's freshwater and tidal wetlands and/or regulated adjacent areas, the Project Sponsors would coordinate with the DEC pursuant to the state's Freshwater Wetlands Regulatory Program and Tidal Wetlands Permit Program. In addition, the DEC likely would require authorization of a Section 401 Water Quality Certification to ensure that proposed work under the Full Restoration Alternative within state regulated waters and/or wetlands do not contravene state water quality standards. Best management practices for the control of sedimentation and erosion would be required to control potential silt and sediment releases to surface waters and wetlands.

Based on the final construction plans prepared under the Full Restoration Alternative, DEC may request that wetlands delineation be performed to determine the exact location of the wetland boundary and regulated adjacent areas if construction work would occur within a portion of the tidal wetlands regulated adjacent area. It is anticipated that the Full Restoration Alternative would not physically impact freshwater wetland areas and/or regulated adjacent areas with the exception of some areas that are already disturbed and have maintained lawns. Thus, the Full Restoration Alternative would not have a significant negative effect upon the ecological value of the freshwater wetlands.

Mitigation

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005). Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit. In order to offset losses of tidal wetlands, mitigation would be required.

3.9.3.5 Hazardous Materials

Similar to the Proposed Action, under the Full Restoration Alternative no significant adverse hazardous materials are expected. As discussed in detail in **Chapter 3.5**, "Hazardous Materials," based on the findings of the Phase I ESA, no known Recognized Environmental Conditions (RECs) associated with the project site were identified. Further, based on field observations made during the site reconnaissance and a review of available documents, no evidence of underground storage tanks were identified on the project site. There is potential, based on the age of the buildings on the project site, that lead based paints and/or asbestos containing material (ACM) are present. Under the Full Restoration Alternative, upon programmatic need and funding availability, all 50 resources would be rehabilitated on the project site for use as a public beach and open space resource. The project sponsor, New York City Department of Parks and Recreation, is committed to the proper removal of lead based paints and/or ACM on the project site, in accordance with all applicable federal, state and city standards. Therefore, no significant adverse hazardous materials impacts would be expected under the Full Restoration Alternative.

3.9.3.6 Transportation

Under the Full Restoration Alternative, all resources within the eligible Cedar Grove Beach Club would be retained and rehabilitated, including the stabilization and restoration of surrounding landscapes for beach and recreation uses. While all resources would be retained under the Full Restoration Alternative, park related programming for fifty resources has not yet been developed, however, it is anticipated that the overall project site would remain the same and the trip generation assumptions for the Proposed Action would apply to the Full Restoration Alternative.

Traffic

It is expected that under the Full Restoration Alternative, the traffic impacts would be the same as identified under the Proposed Action. Thus, the westbound approach to the signalized Mill Road / Ebbitts Street intersection is projected to experience potentially significant traffic impacts during both weekend

peak hours. Compared to the No-Action Alternative, under the Full Restoration Alternative, during the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase to 81.2 seconds per vehicle (LOS "F"). During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase to 90.4 seconds per vehicle (LOS "F") under the Full Restoration Alternative.

Similar to the Proposed Action, mitigation measures would be recommended under the Full Restoration Alternative to mitigate traffic impacts. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated under the Full Restoration Alternative.

Parking

The parking demand under the Full Restoration Alternative would be the same as it assessed under the Proposed Action (see **Chapter 3.6**, "Transportation"). Thus, as shown in **Table 3.9-3** below, the on-street parking demand on a typical weekend day is projected to continue to remain under-capacity under the Full Restoration Alternative, with parking utilization rates not exceeding approximately 69 percent. Furthermore, on-street parking demand increases of the magnitudes described above are less than the CEQR threshold for significant adverse parking impacts (i.e., the projected parking demand must exceed half of the available parking capacity in the study area for a significant adverse parking impact). Therefore, no significant adverse parking impacts are projected to occur under the Full Restoration Alternative.

Table 3.9-3 Summary of On-Street Parking Supply and Utilization – Full Restoration Alternative

Time Period	Number of Legal Spaces[1]	Projected Total Number of Parked Cars	Projected Total Number of Available Spaces	Projected Utilization
Weekend Midday (12:00 to 1:00 p.m.)	676	455	221	67%
Weekend Midday (1:00 to 2:00 p.m.)	676	457	219	68%
Weekend PM (4:00 to 5:00 p.m.)	676	466	210	69%
Weekend PM (5:00 to 6:00 p.m.)	676	469	207	69%

1= Curbside parking capacity.

Transit

The *CEQR Technical Manual* indicates that a project would likely need to generate 200 or more transit trips during any peak hour in order to warrant a detailed analysis of transit impacts. Similar to the Proposed Action (see **Chapter 3.6**, "Transportation"), the number of transit trips generated by the Full Restoration Alternative would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Therefore, no significant adverse transit impacts are expected as a result of the Full Restoration Alternative.

Pedestrian

The *CEQR Technical Manual* recommends that a detailed pedestrian analysis be performed for projects that have the potential to generate over 200 pedestrian trips per hour. Under this threshold, CEQR states that an increase in project-generated pedestrian volumes would generally not be noticeable. Similar to the

Proposed Action (see **Chapter 3.6**, "Transportation"), the number of pedestrian trips generated by the Full Restoration Alternative would not exceed the 200-trip preliminary screening threshold in the midday or PM weekend peak hours. Thus, the increase in pedestrian volume generated by the Full Restoration Alternative does not warrant a detailed pedestrian assessment and is not expected to result in significant adverse pedestrian impacts.

Pedestrian Safety

As discussed in **Chapter 3.6**, "Transportation," accident data compiled by the NYCDOT was reviewed to identify the accident history at the study intersections of Mill Road and Ebbitts Street and Cedar Grove Avenue and Ebbitts Street. Information available from the NYCDOT for the three-year period from 2007 to 2009 indicates that there were a total of 6 accidents at these two intersections (see Table 3.6-12 in Chapter 3.6, "Transportation"). None of these accidents involved a pedestrian and no fatalities were reported. Thus, similar to the Proposed Action, the Full Restoration Alternative is not expected to increase the likelihood of vehicular or pedestrian crashes at these intersections.

3.9.3.7 Neighborhood Character

Under the Full Restoration Alternative, the historic resources on the Cedar Grove Beach project site would be rehabilitated and restored once park related end uses are developed. As a result, the significant adverse historic and cultural resources impact expected as a result of the Proposed Action is not expected to occur under the Full Restoration Alternative. In addition, under the Full Restoration Alternative, the Cedar Grove Beach project site would be rehabilitated and public accessibility would be improved, including the preservation and adaptive reuse of historic resources. The project site's natural features, including views of the beach and waterfront, would be enhanced under the Full Restoration Alternative, although not to the degree anticipated under the Proposed Action. Therefore, under the Full Restoration Alternative, no significant adverse impacts to neighborhood character are expected.

3.9.3.8 Construction Impacts

Similar to the Proposed Action, construction impacts are not expected as a result of the Full Restoration Alternative. Although some temporary construction-related impacts would occur during rehabilitation of existing structures and the restoration of the Cedar Grove Beach project site, it is not expected that construction activities would result in any significantly adverse construction-related impacts. Construction protection plans would be developed to mitigate the significant adverse effects caused by construction and to ensure the integrity of high and moderately sensitive archeological areas during construction activities. Further, significant adverse construction-related impacts are not expected to natural resources, hazardous materials, transportation, open space, socioeconomic conditions, community facility, land use and public policy, neighborhood character or infrastructure. Any construction impacts related to air quality or noise would be of limited duration and measures would be followed to minimize fugitive dust or construction noise levels. Thus, no significant adverse construction impacts are expected as a result of the Full Restoration Alternative.

3.9.3.9 Mitigation

As discussed in **Sections 3.9.3.4** and **3.9.3.6** above, the potential for significant impacts have been identified under the Full Restoration Alternative to occur for Natural Resources and Transportation. In accordance with the CEQR Technical Manual, mitigation measures are examined to minimize or eliminate these impacts. These mitigation measures are discussed below.

Natural Resources

Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use

mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005). Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit. In order to offset losses of tidal wetlands, mitigation would be required.

Traffic

As discussed in **Section 3.9.3.6** above, although park related uses for the fifty resources is not yet developed, it is expected that under the Full Restoration Alternative, the traffic impacts would be the same as identified under the Proposed Action. Thus, the westbound approach to the signalized Mill Road / Ebbitts Street intersection is projected to experience potentially significant traffic impacts during both weekend peak hours. Compared to the No-Action Alternative, under the Full Restoration Alternative, during the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase to 81.2 seconds per vehicle (LOS "F"). During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase to 90.4 seconds per vehicle (LOS "F") under the Full Restoration Alternative.

Similar to the Proposed Action, mitigation measures would be recommended under the Full Restoration Alternative to mitigate traffic impacts. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated under the Full Restoration Alternative.

3.9.3.10 Conclusion

Under the Full Restoration Alternative, all resources within the eligible historic district would be retained and would be adaptively reused should park related end uses be developed. The Full Restoration Alternative would be beneficial to the eligible historic district as it would retain the resources that contribute to the historic character of the eligible historic district. However, it is not a feasible alternative to the Proposed Action, due to the size, complexity and significant cost required to implement this alternative. NYCDPR does not have the financial capacity or appropriate program uses needed to sustain the resources within the historic district under this alternative, or to justify the expense of public funding. Furthermore, 11 of the resources are in a highly compromised area of the CEHA, south of the southern jetty (buildings 27, 28, 29, 30, 31, 32, 33, 33A, 34, 35, and 36) leaving them especially vulnerable to damage or destruction by future storm events and sea-level rise. It would not be fiscally responsible or in the public's best interest to rehabilitate those structures. The site is exceedingly vulnerable to future storm damage, as witnessed by the degradation of the beach and the structures as a result of historic storms and, most recently, Tropical Storm/Hurricane Irene in August, 2011 (see **Appendix D**). Given the findings of the aforementioned USACE Draft Report, which highlights the vulnerability of the site to future storm damage and the high costs associated with this alternative, it is concluded that the Full Restoration Alternative would not meet the goals of the project.

3.10 MITIGATION

Introduction

The preceding chapters of this EIS discussed the potential for significant adverse impacts to occur in each of the technical areas. Where significant impacts have been identified, in accordance with the *CEQR Technical Manual*, mitigation measures are examined to minimize or eliminate these impacts. These mitigation measures are discussed below.

3.10.1 Historic and Cultural Resources

The Proposed Action would have a significant adverse effect on the S/NRHP-eligible Cedar Grove Beach Club Historic District. Seven resources within the eligible historic district, including five bungalows (Buildings 1, 4, 7, 9A and 71), Club House (Building 78), and the Barn would be adaptively reused, and the surrounding landscape would also be restored and upgraded for public beach and recreation uses. The remaining 43 resources within the historic district would be removed, and this would permanently alter the location, design, setting, materials, workmanship, feeling, and association of the historic district.

To mitigate the significant adverse effect of the Proposed Action on the eligible Cedar Grove Beach Club Historic District, it is anticipated that NYCDPR and OPRHP would coordinate to select the appropriate mitigation measures. This agreement, documented in a Letter of Resolution (LOR) between NYCDPR, OPRHP, and New York State Department of Environmental Conservation (DEC) will describe the actions to be undertaken by NYCDPR. First, NYCDPR will record the eligible historic district and, second, protect the resources to remain while rehabilitating them according to OPRHP and NYC Department of Buildings standards.

Documentation

The eligible Cedar Grove Beach Club Historic District may be documented to Historic American Buildings Survey (HABS) standards prior to implementation of the proposed action. The scope and content of the HABS documentation will be defined in coordination with OPRHP. HABS documentation typically includes a physical description of the overall historic district, including setting; brief physical descriptions of the interior and exterior of buildings and structures, including significant alterations; historic context illustrated by historic photographs and/or maps; and large-format black-and-white photographs of the historic district. OPRHP would also assist NYCDPR in identifying adequate repositories for copies of the documentation.

Construction Protection Plan

The first phase of implementation of the Proposed Action requires removal of 43 buildings and structures from the eligible Cedar Grove Beach Club Historic District. Because seven buildings would be adaptively reused, a construction protection plan should be developed to protect them during the building demolition phase. As indicated in the *CEQR Technical Manual*, the plan should be developed in coordination with OPRHP and professional engineers appointed by NYCDPR. Elements of the plan may include the following:

- Existing foundation and structural condition information for the seven buildings to be reused.
- Protection from falling objects.
- Monitoring during construction using tell-tales, and horizontal and lateral movement scales (MOEC, May 2010).

Several reference documents also provide useful information on the development of construction protection plans, including “Technical Policy and Procedures Notice No. 10/88, Procedures for the Avoidance of Damage to Historic Structures Resulting from Adjacent Construction” prepared by NYCDOB, and “Protecting a Historic Structure During Adjacent Construction” prepared by NPS. NYCDPR

could also prepare a means and methods plan for how the demolition and construction will proceed on site to ensure that elements to remain (e.g. buildings, structures, trees, landscaping paths) are protected during construction.

Mothballing

It is anticipated that the seven buildings would be adaptively reused. In order to ensure that the seven buildings are adequately preserved prior to renovation, they should be mothballed in general accordance with *Preservation Brief 31*: "Mothballing Historic Buildings," available through NPS. Key elements of mothballing are noted below:

- Document the architectural and historical significance of the building, including character-defining features.
- Prepare a condition assessment of the building.
- Structurally stabilize the building, based on the condition assessment.
- Exterminate or control pests.
- Protect the exterior from moisture penetration.
- Secure the building and its component features to reduce vandalism or break-ins.
- Provide adequate ventilation to the interior.
- Secure or modify utilities and mechanical systems.
- Develop and implement a maintenance and monitoring plan for protection (Park, 1993).

Context-Sensitive Design

As needed, the seven buildings will be rehabilitated in coordination with OPRHP. It is anticipated that the adaptive reuse will be done in a manner that preserves their historic character-defining features.

3.10.2 Natural Resources

Coordination with all applicable Federal, State and Local agencies again would occur. Disturbance of regulated wetlands or adjacent areas would require a NYSDEC permit and potentially mitigation. In order to obtain a Freshwater Wetlands Act permit, a project must meet the permit standards in 6NYCRR Part 663 and be consistent with the public health, safety, and welfare. The project must also avoid impacts to wetlands, and if unavoidable, must minimize impacts. Project sponsors may use mitigation to offset residual impacts in wetlands in order to meet regulatory weighing standards (NYSDEC, 2005).

Disturbance of tidal wetlands and/or their regulated adjacent area would require a NYSDEC permit and potential mitigation. A component of this proposed project is the potential removal of bungalows and impervious structures from the regulated adjacent areas. These structures would be replaced with native dune vegetation; thus, a net positive ecological benefit to the regulated adjacent area would occur through implementation of the Proposed Action.

3.10.3 Traffic and Parking

According to the thresholds established in the *CEQR Technical Manual*, the following situations represent significant traffic impacts for signalized intersections:

- If a lane group under the With-Action condition is within LOS "A", "B" or "C" or marginally acceptable LOS "D" (average control delay less than or equal to 45.0 seconds/vehicle) the impact is not considered significant. However, if a lane group under the No-Action condition is within LOS "A," "B" or "C," then a deterioration under the With-Action condition to worse than mid-LOS "D" (delay greater than 45.0 seconds/vehicle) should be considered a significant impact.

- For a lane group with LOS “D” under the No-Action condition, an increase in projected average control delay of 5.0 or more seconds should be considered significant if the With-Action delay exceeds mid-LOS “D” (delay greater than 45.0 seconds/vehicle).

- For a lane group with LOS “E” under the No-Action condition, an increase in projected delay of 4.0 or more seconds should be considered significant.

- For a lane group with LOS “F” under the No-Action condition, an increase in projected delay of 3.0 or more seconds should be considered significant.

For unsignalized intersections, the criteria above also apply. However, for the minor street at an unsignalized intersection to trigger significant impacts, 90 PCEs (passenger car equivalents) must be identified in the future With-Action conditions in any peak hour.

The criteria described above ensure that the LOS for individual turning movements at each intersection does not degrade significantly under the future with the proposed action conditions. In contrast, movements that are projected to operate relatively well under the future without the proposed action conditions are allowed to accommodate additional volumes and marginally increased delays under the future with the proposed action conditions, provided the additional volume does not significantly degrade intersection operations.

As discussed in **Chapter 3.6**, “Transportation,” the westbound approach to the signalized Mill Road and Ebbitts Street intersection is projected to experience potentially significant traffic impacts during both weekend peak hours under the future with the proposed action condition, according to the stated criteria. During the weekend midday peak hour, delays for motorists on the westbound approach (on Ebbitts Street) are projected to increase from 38.9 seconds per vehicle (LOS “D”) under future without the proposed action conditions, to 81.2 seconds per vehicle (LOS “F”) under future with the proposed action conditions. During the weekend PM peak hour, delays for motorists on the westbound approach are projected to increase from 32.1 seconds per vehicle (LOS “C”) under future without the proposed action conditions, to 90.4 seconds per vehicle (LOS “F”) under future with the proposed action conditions.

No significant traffic impacts are projected to occur at the stop-controlled intersection of Cedar Grove Avenue and Ebbitts Street during either analysis peak hour as a result of the proposed action.

Based on the potential traffic impacts identified in **Chapter 3.6**, “Transportation,” the following a signal-phasing improvement is recommended to mitigate traffic impacts. Specifically, at Mill Road and Ebbitts Street, it is recommended that three (3) seconds of green time from the north-south phase be re-allocated to the east-west phase during the weekend afternoon (midday and PM) peak period.

This improvement is designed to accommodate the future traffic volumes projected to occur on the roadway network during critical periods of peak traffic activity under the future with the proposed action condition; specifically, during the peak 15-minute period of the weekend midday and PM peak hours. With this recommended improvement in place, the potential traffic impacts during the weekend midday and PM peak hours can be mitigated.

3.11 UNAVOIDABLE ADVERSE IMPACTS

Introduction

According to the *CEQR Technical Manual*, unavoidable adverse impacts are disclosed when a Proposed Action is expected to result in significant adverse impacts for which there are no reasonable or practical mitigation measures. As described in **Chapter 3.9**, "Mitigation," most of the potential significant adverse impacts of the Proposed Action could be avoided or mitigated by implementing a number of measures. However, there would also be unavoidable adverse impacts for which there is no mitigation, as described below.

3.11.1 Historic and Cultural Resources

The Proposed Action involves the rehabilitation of a portion of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. The project site currently contains a number of structures, which had been used for private seasonal summer occupancy by the Cedar Grove Beach Club. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) has determined that the Cedar Grove Beach Club at Cedar Grove Beach constitutes a State/National Register of Historic Places (S/NRHP)-eligible historic district, known as the Cedar Grove Beach Club Historic District, eligible for listing as the last beach colony surviving on Staten Island with a collection of early-20th century bungalows/cottages have substantially retained their original design and construction detail.

As described in detail in **Chapter 3.3**, "Historic and Cultural Resources," under the Proposed Action, which was developed in consultation with the OPRHP, seven resources within the eligible Cedar Grove Beach Club Historic District would be retained, rehabilitated, and adaptively reused for public and ancillary park use for NYCDPR uses, including five bungalows (Buildings 1, 4, 7, 9A and 71), the Club House (Building 78) and the Barn, with surrounding landscapes stabilized and developed for NYCDPR beach and recreation programs. As a result of the Proposed Action, 43 structures on the project site would be demolished in order to restore the beach these areas, and improve public access to the coastal area. The structures to be demolished include 37 bungalows, five garages, and the guard house.

As discussed in **Chapter 3.3**, "Historic and Cultural Resources," the demolition of the 43 resources on the project site constitutes a significant adverse impact. Recommended mitigation measures include HABS documentation, construction protection plan, mothballing, and context-sensitive design. Although such actions would document the eligible historic district for posterity and guide the rehabilitation of the remaining seven buildings in a historically appropriate manner, the eligible historic district would cease to exist in its present form. Thus, despite the mitigation measures described above, the significant adverse impact to historic and cultural resources as a result of the Proposed Action would not be completely eliminated. Therefore, the Proposed Action would result in an unavoidable adverse impact to the eligible Cedar Grove Beach Club Historic District.

3.12 GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

As set forth in the *CEQR Technical Manual*, growth-inducing aspects of a Proposed Action generally refer to "secondary" impacts of a Proposed Action that trigger further development. Proposed Actions that add a substantial amount of new development, new residents, or new employment could induce additional development of a similar kind or of support uses (e.g., stores to serve new residential uses). Actions that introduce or greatly expand infrastructure capacity (e.g., sewers, central water supply) might also induce growth; however in most areas of New York City the infrastructure is already in place and its improvement or expansion is usually proposed only to serve existing or expected users.

The Proposed Action involves the rehabilitation of Cedar Grove Beach. The project would expand and enhance the beach, the active and passive recreation areas on site, and the surrounding natural areas. The rehabilitation of the beach and surrounding area would also include altering and removing structures within the State/National Register-eligible Cedar Grove Beach Club Historic District to make the project site more accessible to the public. A description of the proposed changes to the Cedar Grove Beach project site is provided is **Section 2.0**, “Project Description.” Although a mapped City park since 1962, the land and beach generally have not been accessible by the public. The redevelopment of Cedar Grove Beach is intended to expand public access and improve recreational and natural resources on the project site.

Secondary impacts that might trigger further development are not expected in the case of the Proposed Action, as there would be minimal growth-inducing aspects related to the proposed project. The project site would rehabilitate an existing beach area and would not add a new land use to the site. No new residents would be generated as a result of the Proposed Action and new employment would be seasonal (e.g. lifeguards). Although the visitors and staff generated by the Proposed Action may lead to an increase in the demand for local neighborhood services, this would serve to enhance the existing local commercial corridors in the area. The Proposed Action could also lead to nominal growth due to the employment and fiscal effects generated during the construction phase of the proposed project. Finally, the Proposed Action would not introduce or expand infrastructure capacity as most of the buildings on site would be removed, and the buildings that remain would be adaptively reused, including the reuse of the existing sewage and water supply systems.

3.13 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

Resources, both natural and man-made, would be expended in the construction, renovation, reuse and operation of the development projected to occur as a result of the Proposed Action. These resources include the building materials used during construction and renovation; energy in the form of gas and electricity consumed during construction and operation of buildings by various mechanical and processing systems; and the human effort and funding required to develop, construct, renovate, and operate the various resources on the project site. These are considered irretrievably committed because their reuse for some other purpose would be highly unlikely.

The Proposed Action involves the rehabilitation of Cedar Grove Beach. The project would expand and enhance the beach, the active and passive recreation areas on site, and the surrounding natural areas. The rehabilitation of the beach and surrounding area would also include altering and removing structures within the State/National Register-eligible Cedar Grove Beach Club Historic District to make the project site more accessible to the public. A description of the proposed changes to the Cedar Grove Beach project site is provided is **Chapter 2.0**, "Project Description." Although a mapped City park since 1962, the land and beach generally have not been accessible by the public. The redevelopment of Cedar Grove Beach is intended to expand public access and improve recreational and natural resources on the project site.

The Proposed Action would require the irreversible and irretrievable commitment of energy, construction materials, human effort, and funding. The buildings and structures removed in the State/National Register-eligible Cedar Grove Beach Club Historic District may be considered a resource loss and potential impacts are discussed in detail in **Chapter 3.3**, "Historic and Cultural Resources." The rehabilitation of the Cedar Grove Beach under the Proposed Action constitutes a long-term commitment to the operation of the project site as a beach and open space resource, rendering land use for other purposes improbable. Further, funding committed to the design, construction, and operation of the Cedar Grove Beach project site as part of the Proposed Action would not be available for other projects.

Appendices

Appendix A: WRP Form

For Internal Use Only:
Date Received: _____

WRP no._____
DOS no._____

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)*. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A. APPLICANT

1. Name: City of New York Department of Parks & Recreation (NYCDPR)
2. Address: The Arsenal - Central Park, 830 5th Avenue, NY NY 10065
3. Telephone: 212-360-3402 Fax: 212-360-3453 E-mail: joshua.laird@parks.nyc.gov
4. Project site owner: NYCDPR

B. PROPOSED ACTIVITY

1. Brief description of activity:

   Under the proposed project, the majority of the existing structures on the site vacant as of September 30, 2010, would be demolished so that the Cedar Grove Beach can be properly restored and used more appropriately as public parkland, while other structures would be set aside and rehabilitated for public and ancillary park use.

2. Purpose of activity:

   The proposed action involves the rehabilitation of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. The project is divided into two phases: Phase one includes demolition of a majority of the structures on site and adaptive reuse of other structures to be later reused for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above-ground oil tanks (as necessary), as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase one will also include minor rehabilitation of the existing pick up sport play area and parking improvement measures. Phase two will involve construction of a new playground and bike path.

3. Location of activity: (street address/borough or site description):

   The project is located in Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay. Cedar Grove Beach is comprised of approximately 30 acres located south of Ebbitts Street (Block 4105, p/o Lot 50 and Block 4108, p/o Lot 45) in Staten Island.

Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

   - NYSDEC Freshwater and/or Tidal Wetlands Permit
   - NYSDEC Coastal Erosion Hazard Areas Approval
   - NYSDEC State Pollution Discharge Elimination System (SPDES) permit for stormwater discharges associated with construction activities
   - ORPHP approval due to potential S/NR eligibility

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

   NO

6. Will the proposed project require the preparation of an environmental impact statement?
   Yes ✔ No ____ If yes, identify Lead Agency:

   NYC Department of Parks & Recreation

7. Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.

   See the prepared EAS

C. COASTAL ASSESSMENT

Location Questions:	**Yes**	**No**
1. Is the project site on the waterfront or at the water's edge?	✔	
2. Does the proposed project require a waterfront site?	✔	
3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?	✔	

Policy Questions	**Yes**	**No**

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)	✔	
5. Is the project site appropriate for residential or commercial redevelopment? (1.1)		✔
6. Will the action result in a change in scale or character of a neighborhood? (1.2)		✔

Policy Questions cont'd	Yes	No
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)		✔
8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)		✔
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)	✔	
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		✔
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		✔
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		✔
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		✔
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)	✔	
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		✔
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		✔
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		✔
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		✔
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		✔
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)		✔
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)	✔	
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)	✔	
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		✔
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		✔
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		✔
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		✔
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		✔
28. Would the action cause violations of the National or State air quality standards? (5.2)		✔

Policy Questions cont'd	Yes	No
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		✔
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		✔
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		✔
32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)	✔	
33. Would the action result in any construction activities that would lead to erosion? (6)		✔
34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)		✔
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)	✔	
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)	✔	
37. Would the proposed project affect a non-renewable source of sand ? (6.3)		✔
38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)	✔	
39. Would the action affect any sites that have been used as landfills? (7.1)		✔
40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)	✔	
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)	✔	
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		✔
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)	✔	
44. Would the action result in the provision of open space without provision for its maintenance? (8.1)		✔
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		✔
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		✔
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)	✔	
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)	✔	
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)	✔	
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)	✔	

Policy Questions cont'd	Yes	No
51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)	✓	
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		✓

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: Joshua Laird, Assistant Commissioner, NYCDPR

Address: The Arsenal, Central Park, 830 5th Avenue, Room 401

NY, NY 10065 Telephone 212-360-3402

Applicant/Agent Signature: Date: 11/2/2011

Appendix B: Correspondence from OPRHP and NYC LPC

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643
www.nysparks.com

David A. Paterson
Governor

Carol Ash
Commissioner

July 7, 2010

Mr. Adrian Benepe, Commissioner
NYC Department of Parks and Recreation
Central Park - The Arsenal
830 Fifth Avenue
New York, NY 10065

RE: Cedar Grove Beach Club
Determination of State/National Registers Eligibility

Dear Commissioner Benepe:

In May 2010 the State Historic Preservation Office (SHPO) received an evaluation request from the Cedar Grove Beach Club (CGBC) on Staten Island to determine if the complex is eligible listing to the State and National Registers of Historic Places. As part of this evaluation request the CGBC's historic preservation consultant submitted a narrative description and historic overview along with historic and current-day maps and photographs of Staten Island's last surviving historic beachfront colony.

We have reviewed the documentation and recently made a site visit to the property. Based upon our review, it is the opinion of the SHPO that the Cedar Grove Beach Club meets the criteria for listing to the State and National Registers. I've attached a copy of our determination and a map of the eligible historic district for your review. In order for a building or district to be listed in the National Register the property owner(s) must not be in opposition to the proposed listing.

It is our understanding that the license agreements that City Parks has with the CGBC due to expire in the fall and that the cottages may be demolished. As you know, if any state or federal funds are used in the proposed redevelopment, the agency providing those funds must consult with the State Historic Preservation Office (SHPO) under either Section 106 of the National Historic Preservation Act or Section 14.09 of the New York State Historic Preservation Act. The SHPO's role in the review process is to ensure that effects or impacts on National Register eligible or listed properties are considered and avoided or mitigated

during the project planning process. The impact on this National Register-eligible district might also require CEQR review.

If you have any questions about this determination, I can be reached at (518) 237-8643, extension 3266, or kathy.howe@oprhp.state.ny.us.

Sincerely,

Kathleen A. Howe

Kathleen A. Howe
Historic Preservation Program Analyst

cc: Simeon Bankoff, Historic Districts Council
Catherine Barrier, Historic Preservation Consultant for the CGBC
Gina Santucci, New York City Landmarks Preservation Commission

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services Bureau • Peebles Island, PO Box 189, Waterford, New York 12188-0189
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David A. Paterson
Governor

Carol Ash
Commissioner

RESOURCE EVALUATION

DATE: July 7, 2010 STAFF: Kathy Howe

PROPERTY: Cedar Grove Beach Club Historic District MCD: Staten Island

ADDRESS: Cedar Grove Ave. & Cedar Grove Beach Place COUNTY: Richmond

USN: 08501.002938

I. ☐ Property is individually listed on SR/NR:
name of listing:

☐ Property is a contributing component of a SR/NR district:
name of district:

II. ☒ Property meets eligibility criteria.

☐ Property contributes to a district which appears to meet eligibility criteria.

Pre SRB: ☐ Post SRB: ☐ SRB date

Criteria for Inclusion in the National Register:

A. ☒ Associated with events that have made a significant contribution to the broad patterns of our history;
B. ☐ Associated with the lives of persons significant in our past;
C. ☒ Embodies the distinctive characteristics of a type, period or method of construction; or represents the work of a master; or possess high artistic values; or represents a significant and distinguishable entity whose components may lack individual distinction;
D. ☐ Have yielded, or may be likely to yield information important in prehistory or history.

STATEMENT OF SIGNIFICANCE:[1]

Description

Cedar Grove Beach Club (CGBC) Historic District is a summer beach-front cottage community located on nearly 300 acres on Staten Island's South Shore overlooking Lower New York Bay. The community consists of 38 primarily one-story frame cottages, or bungalows, accessory structures (garages and a gatehouse), a clubhouse, and tennis courts arranged in a plan that stresses the beach edge of the property as a location for cottages and interior roads and paths connecting the cottages and other amenities. Most of the cottages appear to have been built between 1907 and 1924, although a few may date to the 1930s or

[1] The information for the Statement of Significance is excerpted from the State/National Registers application form on the Cedar Grove Beach Club prepared by historic preservation consultant, Catherine Barrier, May 2010.

1940s due to replacement of buildings lost to storms, fires, or public works. Originally, CGBC was composed of more than 80 cottages that stretched further down the shore to the southwest.

These seasonal residences are well-preserved examples of vernacular seashore bungalow design, typically of light, wood-framed construction, with hipped or gable-fronted roofs, exposed roof rafters, porches, and stone fireplaces. Most are rectangular in plan of modest size and placed with minimal setbacks from their neighbors. All but a handful of the buildings are oriented primarily to the waterfront. Various shrubs, bushes, and flowers have been planted by the bungalow dwellers. The clubhouse is located within the grassy loop west of the beachfront-facing cottages. This area also features scattered trees and a few garages.

Historic Context

Summer beach bungalows have a long history on Staten Island and other waterfront communities in New York City including Coney Island, Brighton Beach, and the Far Rockaways. Beginning in the 1890s, the east and south shores of Staten Island became popular summer recreation spots for urban dwellers, especially residents of Manhattan and Brooklyn, and for residents of Staten Island. Three primary beach recreation areas sprang up in this period to serve the market – South Beach, Midland Beach, and New Dorp Beach.

While hotels and boarding houses for tourists sprang up quite early, between 1900 and 1910 a number of campgrounds of varying sizes and organization were established. These areas typically started by serving tourists who camped in actual tents, for fairly brief periods, but as the years went by and more short term tourists took up residence for longer periods each summer, tent sites became fixed enough for raised semi-permanent tent platforms and even some temporary shacks to be built. Between 1910 and 1920 several campsites in the area evolved into modest beach cottage colonies.

These cottage colonies, of which Cedar Grove Beach Club is the sole survivor, had distinct characteristics. They were located immediately on the beach, instead of being separated from it by roads or amusement facilities, and generally did not conform to a gridded street plan. The cottages tended to be constructed in a more vernacular and highly informal style with somewhat improvised construction methods. Finally, it appears that the land in each colony was the property of a single person or family, and that those who built or occupied the cottages owned the structures and paid a lot rent. "Summering" at the beach became popular with people from elsewhere on Staten Island or other boroughs, who relocated here each summer.

Cedar Grove Beach Club came into existence in the early 1900s as early photographs show that it was a tent colony by 1911. Most of the CGBC beachfront was developed with frame cottages by ca. 1920. Records appear to indicate that the land was owned as a single parcel and the individual cottages owned individually. A CGBC board was formed in 1911-1913 to promote the development of the common life of the property including recreational and social activities.

The beach tourist industry on Staten Island was badly affected by the Great Depression, and by the mid-20th century much of the boardwalk, amusement facilities, and many of the beach colonies in the area had succumbed to fire, storms, or demolition. The condemnation of much of the shoreline for a Robert Moses-planned seaside parkway in 1958 resulted in the clearing of almost all of the remains of South Beach, Midland Beach, and New Dorp Beach, and the beach colonies and campgrounds around them. In the case of Cedar Grove, the cottages were spared and individual cottage owners were compensated for their property. The CGBC board negotiated a lease with the City that allows the Club to rent back the cottages. Individual cottages were then rented to Club members who were individually responsible for maintaining the cottages they occupied.

National Register Criteria

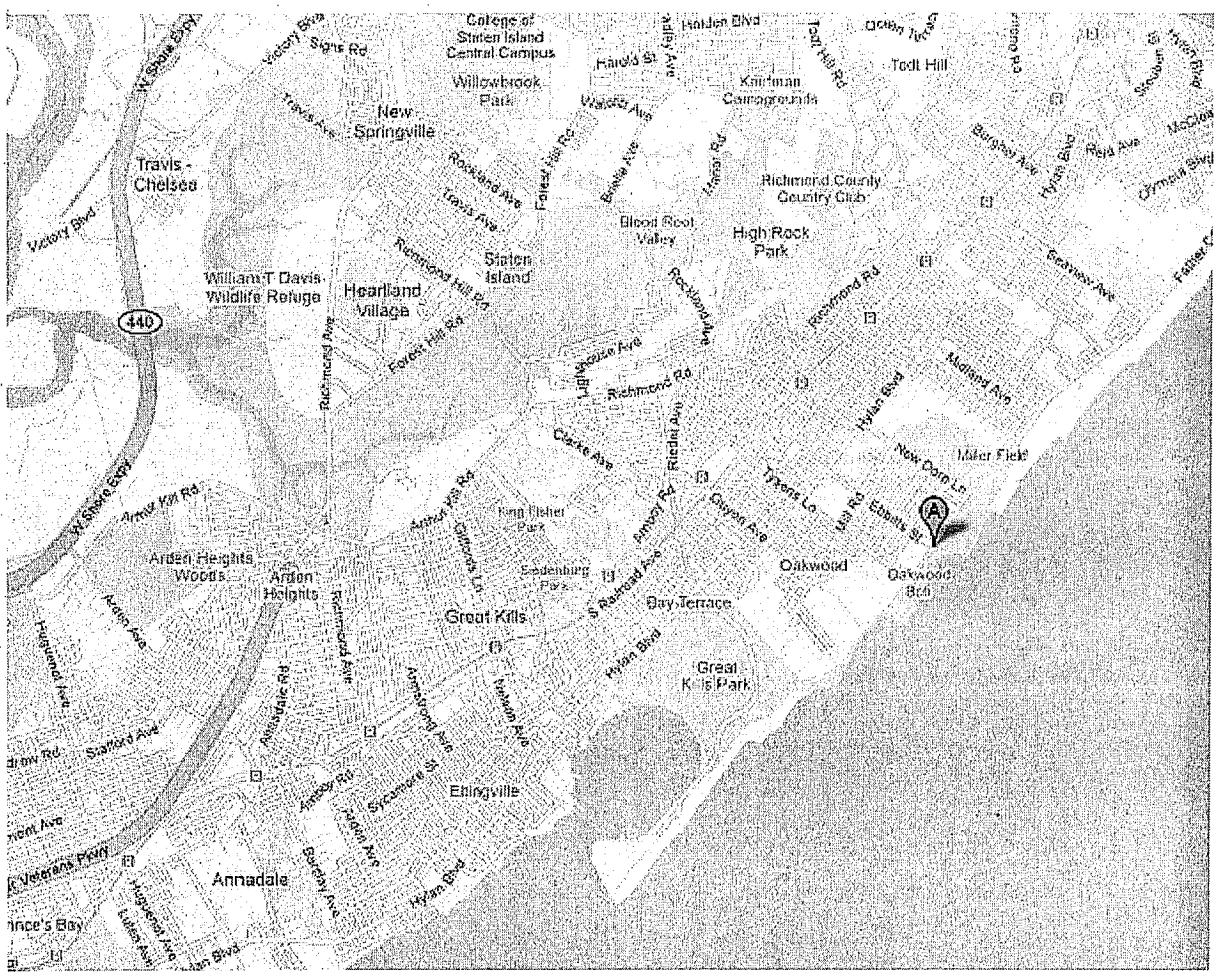
The Cedar Grove Beach Club is a rare surviving property type in New York City. The beach colony is believed to be the largest, intact beach-front seasonal bungalow community in New York City. Although

several cottages in the southern end of the complex were lost due to storms, fires, and shoreline work, the beach colony retains sufficient integrity of location, design, setting, materials, workmanship, feeling, and association. The CGBC is significant under Criterion A in the areas of social history, recreation, and community planning/development as the last beach colony surviving on Staten Island from the heyday of beach tourism and summer entertainments from South Beach to Great Kills. The colony is also significant under Criterion C for its collection early twentieth century bungalows. As a group, the cottages have substantially retained their original design and construction details. The significance of the CGBC is further reinforced by the fact that it continues to be used as a seasonal beach retreat with no intrusive incompatible development or usage.

If you have any questions concerning this Determination of Eligibility, please call Kathy Howe at (518) 237-8643, ext. 3266.

Location:

Cedar Grove Beach Club
Entrance at Ebbitts St. & Cedar Grove Ave.
New Dorp Beach
Staten Island, New York



Locator Map

Aerial Photo General Boundary Locator

Andrew M. Cuomo
Governor

Rose Harvey
Commissioner

New York State Office of Parks, Recreation and Historic Preservation

Historic Preservation Field Services • Peebles Island, PO Box 189, Waterford, New York 12188-0189
518-237-8643

www.nysparks.com

July 20, 2011

Joshua Laird
Assistant Commissioner of Planning
New York City Department of Parks & Recreation
830 Fifth Avenue, Room 401
New York, NY 10065

Re: Corps/DEC
Cedar Grove Beach
Richmond County
10PR05229

Dear Mr. Laird:

Thank you for continuing to consult with the New York State Field Services Bureau of the Office of Parks, Recreation and Historic Preservation. At this time, we understand that the US Army Core of Engineering is not an involved in this Undertaking. As such, we have reviewed the submitted alternatives analysis in accordance with New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). If there is an involved federal agency, then that agency should initiate consultation under Section 106 of the National Historic Preservation Act of 1966. These comments are those of the Field Services Bureau and relate only to Historic/Cultural resources. They do not include other environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

We have reviewed the Cedar Grove Beach Alternatives Analysis dated June 2011. Based upon this review, we concur that there are no prudent and feasible alternatives to demolition of all but 7 of the 37 buildings that make up the Cedar Grove Beach Club Historic District. While we are disappointed that an alternative that retains and restores the full district could not be found to be prudent and feasible, we believe that the retention of 5 of the cottage buildings, the clubhouse and the barn is appropriate mitigation for the historic district. We are pleased to see that buildings 1, 4 and 71 which we thought retained much of their historic integrity will be retained.

At this time, it is appropriate to work with the Department of Environmental Conservation (DEC) and our office to draft a Letter of Resolution (LOR), which will document the alternatives to retain the district, the process to minimize harm and mitigation measures to be included in the project.

If you have any questions, I can be reached at (518) 237-8643, ext. 3282. Please refer to the Project Review (PR) number in any future correspondences regarding this project.

Sincerely,

Beth A. Cumming
Historic Site Restoration Coordinator
e-mail: Beth.cumming@oprhp.state.ny.us

cc: J. Cryan – NYS DEC
J. Krawchuk – NYC DPR
S. Jensen – US ACOE
M. Salig – NYC DPR

via e-mail only

OFFICE OF PARKS · RECREATION · HISTORIC PRESERVATION
NEW YORK STATE

New York State Office of Parks, Recreation and Historic Preservation

Andrew M. Cuomo
Governor

Rose Harvey
Acting Commissioner

Historic Preservation Field Services Bureau
P.O. Box 189, Waterford, New York 12188-0189
518-237-8643 Fax: 518-233-9049

March 4, 2011

Nick Molinari
Director, Planning Division
City of New York Parks & Recreation
The Arsenal
Central Park
New York, NY 10065

Re: NYC Parks
Cedar Grove Rehabilitation
Staten Island, Richmond County, NY
10PR05229

Thank your for requesting the comments of the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) with regard to the potential for this project to affect significant historical/cultural resources. OPRHP has reviewed the recently submitted Phase 1A report, prepared by Historical Perspectives, Inc. in December 2010. Based on this review, OPRHP concurs with the recommendations of the report that Phase 1B field testing is appropriate for the identifying portions of the project if any ground disturbing activities are proposed. I understand that you are currently concerned about the location of the former Seaside Hospital. ORHP has no concerns regarding that location.

Please contact me at extension 3291, or by e-mail at douglas.mackey@oprhp.state.ny.us, if you have any questions regarding these comments.

Sincerely

Douglas P. Mackey
Historic Preservation Program Analyst
Archaeology

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

NYC DEPT. OF PARKS AND RECREAT/11DPR004R 2/28/2011

Project number **Date received**

Project: CEDAR GROVE Beach Rehabilitation

Comments: The LPC is in receipt of the, "Phase 1A Archaeological Documentary Study Cedar Grove Beach Rehabilitation B 4105, Part of L 50 and B 4108, part of L 45, Staten Island, New York," prepared by HPI, Inc. We concur that portions of the project area have the potential to contain significant archaeological resources. Should the DPR propose any excavation work in these areas, they should consult with the LPC about what archaeological testing may be appropriate. In addition, we concur that the area of the Seaside Hospital foundation is not archaeologically sensitive.

cc: NYSHPO

3/4/2011

SIGNATURE DATE

27092_FSO_ALS_03042011.doc

THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION
1 Centre Street, 9N, New York, NY 10007 (212) 669-7700 www.nyc.gov/landmarks

ENVIRONMENTAL REVIEW

NYC DEPT. OF PARKS AND RECREAT/11DPR004R — 11/5/2010

Project number — **Date received**

Project: GREAT KILLS PARK CEDAR GROVE REHABILITATION

Properties with archaeological significance:
126 CEDAR GROVE AVENUE, BBL 5041050050
70 CEDAR GROVE AVENUE, BBL 5041080045

Comments: LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from Native American occupation on the project site on the lots indicated above. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010).

LPC concurs with the SHPO determination of S/NR eligibility. The site does not appear LPC eligible.

cc: SHPO

Gina Santucci

SIGNATURE — 11/17/2010 DATE

27092_FSO_DNP_11152010.doc

Appendix C: Natural Resources Background Materials

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
55 Great Republic Drive
Gloucester, MA 01930-2276

AUG 31 2010

Nick Molinari
City of New York
Parks & Recreation
The Arsenal
Central Park
830 5th Avenue, Room 3
New York, New York 10065
Attn: Planning & Parklands Division

Re: Threatened or Endangered Species and Marine Mammal Species Information Request, Great Kills Park/Cedar Frove Beach Rehabilitation, Staten Island, New York

Dear Mr. Molinari,

This is in response to your letter dated August 26, 2010 regarding the New York City Department of Parks and Recreation (NYCDPR) proposed rehabilitation of Cedar Grove Beach within Great Kills Park, Staten Island, New York. NYCDPR has requested information on the presence of any species listed as threatened and/or endangered by NOAA's National Marine Fisheries Service (NMFS).

Four species of federally threatened or endangered sea turtles under the jurisdiction of NMFS may be found seasonally in the coastal waters of New York. Sea turtles are known to be present in the lower Bay of New York Harbor. Sea turtles are expected to be in these waters in warmer months, typically from late May to early November, with the highest numbers of sea turtles present from June - October. The sea turtles in these waters are typically small juveniles with the most abundant being the federally threatened loggerhead (*Caretta caretta*) followed by the federally endangered Kemp's ridley (*Lepidochelys kempi*). The waters off New York have also been found to be warm enough to support federally endangered green sea turtles (*Chelonia mydas*) from June through October. The three species of chelonid turtles found in the Northeast remain very briefly in open ocean waters, spending most of their time during the summer months in harbors and estuarine waters. Federally endangered leatherback sea turtles (*Dermochelys coriacea*) may be found in the waters off New York during the warmer months as well; however, this species is not often documented in harbors or estuarine waters and occurs more typically in deeper, offshore waters.

The best available information indicates that listed species will seasonally occur in the project area. It is unclear from your letter whether in water work will occur in association with the rehabilitation of Cedar Grove Beach. If no in-water work is proposed, no further coordination

with NMFS' Protected Resources Division (PRD) is necessary. However, if in-water work is proposed and the work has the potential to affect listed species and it is being approved, permitted or funded by a Federal agency, the lead Federal agency, or their designated non-Federal representative, is responsible for determining whether the proposed action is likely to affect listed species. The Federal agency would submit their determination along with justification for their determination and a request for concurrence, to the attention of the Endangered Species Coordinator, NMFS Northeast Regional Office, Protected Resources Division, 55 Great Republic Drive, Gloucester, MA 01930. After reviewing this information, NMFS would then be able to conduct a consultation under section 7 of the ESA. Should you have any questions about these comments or about the section 7 consultation process in general, please contact Danielle Palmer at (978)282-8468 or by e-mail (Danielle.Palmer@noaa.gov).

Sincerely,

Mary A. Colligan
Assistant Regional Administrator
for Protected Resources

EC: Rusanowsky
Palmer

File Code: Sec 7 Tech. Assistance 2010-Cedar Grove Beach, NY

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE

Habitat Conservation Division
James J. Howard Marine
Sciences Laboratory
74 Magruder Road
Highlands, New Jersey 07732

September 30, 2010

Nick Molinari
Director of Planning
NYCDPR
The Arsenal/ Central Park
830 5th Avenue, Room 3
New York, NY 10065

Re: EFH and Fish and Wildlife Conservation Act Species Information Request
Great Kills Park/Cedar Grove Beach Rehabilitation, Staten Island, NY

Dear Mr. Molinari:

We have reviewed your letter dated August 26, 2010, requesting information on essential fish habitat (EFH) species within one half mile of the proposed Great Kills Park/Cedar Grove Beach rehabilitation project. National Marine Fisheries Service (NMFS) offers the following preliminary information pursuant to the Fish and Wildlife Coordination Act (FWCA) and the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). The project area provides habitat for a wide variety of living aquatic organisms including fish, crustaceans and mollusks. When details of the project are made available and permit applications have been made, conservation recommendations may be given pursuant to the MSFMCA. The area of the proposed action has been identified as EFH for several species of fish, which may include, but is not limited to: Atlantic salmon (juvenile, adult), pollock (juvenile, adult), red hake (juvenile, adult), winter flounder (all life stages), windowpane flounder (all life stages), Atlantic sea herring (juvenile, adult), bluefish (juvenile, adult), Atlantic mackerel (eggs, larvae, juvenile, adult), summer flounder (juvenile), scup (eggs, larvae, juvenile, adult), black sea bass (juveniles), king mackerel (eggs, larvae, juvenile, adult), Spanish mackerel (eggs, larvae, juvenile, adult), and cobia (eggs, larvae, juvenile, adult). A complete list of species and life stages for which EFH has been designated can be found on the National Marine Fisheries Service (NMFS) Habitat Conservation Division website at: www.nero.noaa/ro/doc/webintro.html. The website also contains information on descriptions of EFH for each species, guidance on the EFH consultation process including EFH assessments, and information relevant to other NMFS mandates.

The required contents of an EFH assessment include: 1) a description of the action; 2) an analysis of the potential adverse effects of the action on EFH and the above managed species; 3) the federal agency's conclusion regarding the effects of the action on EFH; and 4) proposed mitigation, if applicable. Other information that should be contained in the EFH assessment, if appropriate, includes: 1) the results of on-site inspections to evaluate the habitat and site-specific effects; 2) the views of recognized experts on the habitat or the species that may be affected; 3) a review of pertinent literature and related information; and 4) an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH. Upon submittal of an EFH assessment by the federal action agency, the NMFS will provide conservation recommendations for the proposed project, as necessary.

Species which are not federally managed may come under the authority of the FWCA, and projects which may affect such species and their habitats could trigger separate recommendations from our agency to the lead regulatory agency which will minimize or avoid adverse effects.

Questions regarding Endangered Species Act Section 7 consultations should be directed to Julie Crocker, Julie.Crocker@noaa.gov, 978/ 281-9300 x 6530.

Should you require additional information regarding EFH or FWCA consultations, please contact Diane Rusanowsky, Diane.Rusanowsky@noaa.com, 203/882-6568.

Sincerely,

Stanley W. Gorski
Field Offices Supervisor

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334
Fax: (607) 753-9699

Long Island Field Office
3 Old Barto Rd., Brookhaven, NY 11719
Phone: (631) 776-1401
Fax: (631) 776-1405

Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or "critical habitat" may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current.*

Reminder: Section 9 of the ESA prohibits unauthorized taking** of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take**" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take**," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended;16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.*

Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

** Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to ***take*** (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. “Harm” includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

STATE OF NEW YORK
DEPARTMENT OF STATE
ONE COMMERCE PLAZA
99 WASHINGTON AVENUE
ALBANY, NY 12231-0001

DAVID A. PATERSON
GOVERNOR

RUTH NOEMÍ COLÓN
ACTING SECRETARY OF STATE

September 16, 2010

Nicholas Molinari
Director Planning
City of New York Parks & Recreation
The Arsenal
Central Park
New York, NY 10065

RE: NYSDOS Database Request: Great Kills Park/Cedar Grove Beach Rehabilitation, Staten Island, NY

Dear Mr. Molinari,

Thank you for requesting information regarding the State designated Significant Coastal Fish and Wildlife Habitats. While the Great Kills Park/Cedar Grove Beach Rehabilitation project lies inside the New York State Coastal Boundary, after review of the project area and the NYS Department of State Coastal Atlas, there are no Significant Habitats in the vicinity of the proposed center.

The proposed site is located in an area covered by the New York City Waterfront Revitalization Program. If the proposed activity will require authorization or other forms of approval from federal agencies, it will be necessary for you to provide us with a completed and signed Federal Consistency Assessment Form (the New York City Coastal Assessment Form may be used) together with your federal application and all supporting documents.

For information regarding rare, threatened, or endangered plants or animal species please contact the New York State Natural Heritage Program at 518.402.8935. You may also visit their website at http://www.dec.ny.gov/animals/31181.html for procedural information for requesting information.

Please feel free to visit www.nyswaterfronts.com for additional information and maps of Significant Coastal Fish and Wildlife Habitats. If you should have further questions, please feel free to contact me at 518.486.7641 or Stephanie.Wojtowicz@dos.state.ny.us.

Sincerely,

Stephanie Wojtowicz
Coastal Resource Specialist I

United States Department of the Interior

FISH AND WILDLIFE SERVICE

New York Field Office
3817 Luker Road, Cortland, NY 13045
Phone: (607) 753-9334
Fax: (607) 753-9699

Long Island Field Office
3 Old Barto Rd., Brookhaven, NY 11719
Phone: (631) 776-1401
Fax: (631) 776-1405

Endangered Species Act List Request Response Cover Sheet

This cover sheet is provided in response to a search of our website* for information regarding the potential presence of species under jurisdiction of the U.S. Fish and Wildlife Service (Service) within a proposed project area.

Attached is a copy of the New York State County List of Threatened, Endangered, and Candidate Species for the appropriate county(ies). The database that we use to respond to list requests was developed primarily to assist Federal agencies that are consulting with us under Section 7(a)(2) of the Endangered Species Act (ESA) (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*). Our lists include all Federally-listed, proposed, and candidate species known to occur, as well as those likely to occur, in specific counties.

The attached information is designed to assist project sponsors or applicants through the process of determining whether a Federally-listed, proposed, or candidate species and/or "critical habitat" may occur within their proposed project area and when it is appropriate to contact our offices for additional coordination or consultation. You may be aware that our offices have provided much of this information in the past in project-specific letters. However, due to increasing project review workloads and decreasing staff, we are now providing as much information as possible through our website. We encourage anyone requesting species list information to print out all materials used in any analyses of effects on listed, proposed, or candidate species.

The Service routinely updates this database as species are proposed, listed, and delisted, or as we obtain new biological information or specific presence/absence information for listed species. If project proponents coordinate with the Service to address proposed and candidate species in early stages of planning, this should not be a problem if these species are eventually listed. However, we recommend that both project proponents and reviewing agencies retrieve from our online database an *updated* list every 90 days to append to this document to ensure that listed species presence/absence information for the proposed project is *current.*

Reminder: Section 9 of the ESA prohibits unauthorized taking** of listed species and applies to Federal and non-Federal activities. For projects not authorized, funded, or carried out by a Federal agency, consultation with the Service pursuant to Section 7(a)(2) of the ESA is not required. However, no person is authorized to "take**" any listed species without appropriate authorizations from the Service. Therefore, we provide technical assistance to individuals and agencies to assist with project planning to avoid the potential for "take**," or when appropriate, to provide assistance with their application for an incidental take permit pursuant to Section 10(a)(1)(B) of the ESA.

Additionally, endangered species and their habitats are protected by Section 7(a)(2) of the ESA, which requires Federal agencies, in consultation with the Service, to ensure that any action it authorizes, funds, or carries out is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat. An assessment of the potential direct, indirect, and cumulative impacts is required for all Federal actions that may affect listed species.

For instance, work in certain waters of the United States, including wetlands and streams, may require a permit from the U.S. Army Corps of Engineers (Corps). If a permit is required, in reviewing the application pursuant to the Fish and Wildlife Coordination Act (48 Stat. 401, as amended;16 U.S.C. 661 *et seq.*), the Service may concur, with or without recommending additional permit conditions, or recommend denial of the permit depending upon potential adverse impacts on fish and wildlife resources associated with project construction or implementation. The need for a Corps permit may be determined by contacting the appropriate Corps office(s).*

For additional information on fish and wildlife resources or State-listed species, we suggest contacting the appropriate New York State Department of Environmental Conservation regional office(s) and the New York Natural Heritage Program Information Services.*

Since wetlands, ponds, streams, or open or sheltered coastal waters may be present in the project area, it may be helpful to utilize the National Wetlands Inventory (NWI) maps as an initial screening tool. However, they may or may not be available for the project area. Please note that while the NWI maps are reasonably accurate, they should not be used in lieu of field surveys for determining the presence of wetlands or delineating wetland boundaries for Federal regulatory purposes. Online information on the NWI program and digital data can be downloaded from Wetlands Mapper, http://wetlands.fws.gov/mapper_tool.htm.

Project construction or implementation should not commence until all requirements of the ESA have been fulfilled. After reviewing our website and following the steps outlined, we encourage both project proponents and reviewing agencies to contact our office to determine whether an accurate determination of species impacts has been made. If there are any questions about our county lists or agency or project proponent responsibilities under the ESA, please contact the New York or Long Island Field Office Endangered Species Program at the numbers listed above.

Attachment (county list of species)

*Additional information referred to above may be found on our website at: http://www.fws.gov/northeast/nyfo/es/section7.htm

** Under the Act and regulations, it is illegal for any person subject to the jurisdiction of the United States to *take* (includes harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect; or to attempt any of these), import or export, ship in interstate or foreign commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered fish or wildlife species and most threatened fish and wildlife species. It is also illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally. "Harm" includes any act which actually kills or injures fish or wildlife, and case law has clarified that such acts may include significant habitat modification or degradation that significantly impairs essential behavioral patterns of fish or wildlife.

Richmond County

Federally Listed Endangered and Threatened Species and Candidate Species

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

Common Name	Scientific Name	Status
Shortnose sturgeon[1]	*Acipenser brevirostrum*	E

Status Codes: E=Endangered, T=Threatened, P=Proposed, C=Candidate, D=Delisted.

[1] Primarily occurs in Hudson River. Principal responsibility for this species is vested with the National Oceanic and Atmospheric Administration/Fisheries.

Please visit the following website for more information http://www.nmfs.noaa.gov/pr/species/esa.htm.

Information current as of: 2/7/2011

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Fish, Wildlife & Marine Resources
New York Natural Heritage Program
625 Broadway, 5th Floor, Albany, New York 12233-4757
Phone: (518) 402-8935 • **Fax:** (518) 402-8925
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

September 10, 2010

Nick Molinari
City of New York – Parks & Recreation
The Arsenal – Central Park
830 Fifth Avenue, Room 3
New York City, NY 10065

Dear Mr. Molinari:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Rehabilitation of Cedar Grove Beach, within Great Kills Park, area as indicated on the map you provided, located on Staten Island, Richmond County.

Enclosed is a report of rare or state-listed animals and plants, significant natural communities, and other significant habitats, which our databases indicate occur, or may occur, on your site or in the immediate vicinity of your site. For most sites, comprehensive field surveys have not been conducted; the enclosed report only includes records from our databases. We cannot provide a definitive statement as to the presence or absence of all rare or state-listed species or natural communities. This information should not be substituted for on-site surveys that may be required for environmental impact assessment.

The enclosed report may be included in documents that will be available to the public. However, any enclosed maps displaying locations of rare species are considered sensitive information, and are intended only for the internal use of the recipient; they should not be included in any document that will be made available to the public, without permission from the New York Natural Heritage Program.

The presence of the plants and animals identified in the enclosed report may result in this project requiring additional review or permit conditions. For further guidance, and for information regarding other permits that may be required under state law for regulated areas or activities (e.g. regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again so that we may update this response with the most current information.

Sincerely,

Tara Salerno

Tara Salerno, Information Services
New York Natural Heritage Program

Enc.
cc: Region 2

954

Natural Heritage Report on Rare Species and Ecological Communities

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

The information in this report includes only records entered into the NY Natural Heritage databases as of the date of the report. This report is not a definitive atement on the presence or absence of all rare species or significant natural communities at or in the vicinity of this site.
Refer to the User's Guide for explanations of codes, ranks and fields.
Location maps for certain species and communities may not be provided 1) if the species is vulnerable to disturbance, 2) if the location and/or extent is not precisely known, 3) if the location and/or extent is too large to display, and/or 4) if the animal is listed as Endangered or Threatened by New York State.

Natural Heritage Report on Rare Species and Ecological Communities

IRDS

Tyto alba

Office Use 11357

Barn Owl
Breeding

NY Legal Status: Protected Bird
Federal Listing:
Last Report: 2002-06-15
County: Richmond
Town: New York City (Richmond County)
Location: Staten Island
General Quality and Habitat: The nests were found in an urban area. One was found under a bridge that crosses a creek, and another was found in a tower at a large manicured field. The field is bordered by abandoned buildings, a stand of pines and extensive residential area, a beach, and a small patch of deciduous trees and houses.

NYS Rank: S1S2 - Critically imperiled
Global Rank: G5 - Secure
EO Rank: Extant

1 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at http://www.natureserve.org/explorer, from NYSDEC at http://www.dec.ny.gov/animals/7494.html (for animals), and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

More detailed information about many of the natural community types in New York, including identification, dominant and characteristic vegetation, distribution, conservation, and management, is available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org. For descriptions of all community types, go to http://www.dec.ny.gov/animals/29384.html and click on Draft Ecological Communities of New York State.

NY Natural Heritage Program, NYS DEC, 625 Broadway, 5th Floor,
Albany, NY 12233-4757
(518) 402-8935

HISTORICAL RECORDS

The following plants and animals were documented in the vicinity of the project site at one time, but have not been documented there since 1979 or earlier.
There is no recent information on these plants and animals in the vicinity of the project site and their current status there is unknown. In most cases the precise location of the plant or animal in this vicinity at the time it was last documented is also unknown and therefore location maps are generally not provided.
If appropriate habitat for these plants or animals is present in the vicinity of the project site, it is possible that they may still occur there.

Natural Heritage Report on Rare Species and Ecological Communities

DRAGONFLIES and DAMSELFLIES

Ischnura ramburii

Office Use 12588

Rambur's Forktail

NY Legal Status: Unlisted
Federal Listing:
Last Report: 1913-pre

NYS Rank: S2 - Imperiled
Global Rank: G5 - Secure
EO Rank: Historical, no recent information

County: Richmond
Town: New York City (Richmond County)
Location: Staten Island
Directions: Follow Highway 278 southwest from Kings across the Verrazano-Narrows Bridge. The damselfly was found on Staten Island.
General Quality and Habitat: The dragonfly was found on a very large island.

Somatochlora linearis

Office Use 12598

Mocha Emerald

NY Legal Status: Unlisted
Federal Listing:
Last Report: 1926-pre

NYS Rank: S2S3 - Imperiled
Global Rank: G5 - Secure
EO Rank: Historical, no recent information

County: Richmond
Town: New York City (Richmond County)
Location: Staten Island
Directions: Follow Highway 278 southwest from Kings across the Verrazano-Narrows Bridge. The dragonfly was found on Staten Island.
General Quality and Habitat: The dragonfly was captured on a very large island.

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2 Records Processed

More detailed information about many of the rare and listed animals and plants in New York, including biology, identification, habitat, conservation, and management, are available online in Natural Heritage's Conservation Guides at www.acris.nynhp.org, from NatureServe Explorer at http://www.natureserve.org/explorer, from NYSDEC at http://www.dec.ny.gov/animals/7494.html (for animals), and from USDA's Plants Database at http://plants.usda.gov/index.html (for plants).

USERS GUIDE TO NY NATURAL HERITAGE DATA

New York Natural Heritage Program, 625 Broadway, 5th Floor, Albany, NY 12233-4757 phone: (518) 402-8935

NATURAL HERITAGE PROGRAM: The NY Natural Heritage Program is a partnership between the NYS Department of Environmental Conservation (NYS DEC) and The Nature Conservancy. Our Mission is to facilitate the conservation of New York's biodiversity by providing comprehensive information and scientific expertise on rare species and natural ecosystems to resource managers and other conservation partners. We accomplish this mission by combining thorough field inventories, scientific analyses, expert interpretation, and the most comprehensive database on New York's distinctive biodiversity to deliver the highest quality information for natural resource planning, protection, and management.

DATA SENSITIVITY: The data provided in the report are ecologically sensitive and should be treated in a sensitive manner. The report is for your in-house use and should **not** be released, distributed or incorporated in a public document without prior permission from the Natural Heritage Program.

EO RANK: A letter code for the quality of the occurrence of the rare species or significant natural community, based on population size or area, condition, and landscape context.

A-E = Extant: A=Excellent, B=Good, C=Fair, D=Poor, E=Extant but with insufficient data to assign a rank of A-D.
F = Failed to find. Did not locate species during a limited search, but habitat is still there and further field work is justified.
H = Historical. Historical occurrence without any recent field information.
X = Extirpated. Field/other data indicates element/habitat is destroyed and the element no longer exists at this location.
U = Extant/Historical status uncertain.
Blank = Not assigned.

LAST REPORT: The date that the rare species or significant natural community was last observed at this location, as documented in the Natural Heritage databases. The format is most often YYYY-MM-DD.

NY LEGAL STATUS – Animals:

Categories of Endangered and Threatened species are defined in New York State Environmental Conservation Law section 11-0535. Animals listed as Endangered, Threatened, or Special Concern are protected against taking, importation, transportation, possession, or sale without a permit. Endangered, Threatened, and Special Concern species are listed in regulation 6NYCRR 182.5.

E - **Endangered Species**: any species which meet one of the following criteria:
- Any native species in imminent danger of extirpation or extinction in New York.
- Any species listed as endangered by the United States Department of the Interior, as enumerated in the Code of Federal Regulations 50 CFR 17.11.

T - **Threatened Species**: any species which meet one of the following criteria:
- Any native species likely to become an endangered species within the foreseeable future in NY.
- Any species listed as threatened by the U.S. Department of the Interior, as enumerated in the Code of the Federal Regulations 50 CFR 17.11.

SC - **Special Concern Species**: those species which are not yet recognized as endangered or threatened, but for which documented concern exists for their continued welfare in New York.

P - **Protected Wildlife** (defined in Environmental Conservation Law section 11-0103): wild game, protected wild birds, and endangered species of wildlife.

U - **Unprotected** (defined in Environmental Conservation Law section 11-0103): the species may be taken at any time without limit; however a license to take may be required.

G - **Game** (defined in Environmental Conservation Law section 11-0103): any of a variety of big game or small game species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year, and are protected at other times.

NY LEGAL STATUS – Plants:

The following categories are defined in regulation 6NYCRR part 193.3 and apply to NYS Environmental Conservation Law section 9-1503.

E - **Endangered Species**: listed species are those with:
- 5 or fewer extant sites, or
- fewer than 1,000 individuals, or
- restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or
- species listed as endangered by U.S. Dept. of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

T - **Threatened**: listed species are those with:
- 6 to fewer than 20 extant sites, or
- 1,000 to fewer than 3,000 individuals, or
- restricted to not less than 4 or more than 7 U.S.G.S. 7 and ½ minute topographical maps, or
- listed as threatened by U.S. Department of Interior, as enumerated in Code of Federal Regulations 50 CFR 17.11.

R - **Rare**: listed species have:
- 20 to 35 extant sites, or
- 3,000 to 5,000 individuals statewide.

V - **Exploitably vulnerable**: listed species are likely to become threatened in the near future throughout all or a significant portion of their range within the state if causal factors continue unchecked.

U - **Unprotected**; no state status.

FEDERAL STATUS (PLANTS and ANIMALS): The categories of federal status are defined by the United States Department of the Interior as part of the 1974 Endangered Species Act (see Code of Federal Regulations 50 CFR 17). The species listed under this law are enumerated in the Federal Register vol. 50, no. 188, pp. 39526 - 39527. The codes below without parentheses are those used in the Federal Register. The codes below in parentheses are created by Heritage to deal with species which have different listings in different parts of their range, and/or different listings for different subspecies or varieties.

(blank) = No Federal Endangered Species Act status.
LE = Formally listed as endangered.
LT = Formally listed as threatened.
C = Candidate for listing.
LE,LT = Formally listed as endangered in part of its range, and as threatened in the other part; or, one or more subspecies or varieties is listed as endangered, and the others are listed as threatened.
LT,PDL = Populations of the species in New York are formally listed as threatened, and proposed for delisting.

GLOBAL AND STATE RANKS (animals, plants, ecological communities and others): Each element has a global and state rank as determined by the NY Natural Heritage Program. These ranks carry no legal weight. The global rank reflects the rarity of the element throughout the world and the state rank reflects the rarity within New York State. Infraspecific taxa are also assigned a taxon rank to reflect the infraspecific taxon's rank throughout the world. ? = Indicates that the state or global rank is uncertain and more information is needed. Range ranks, e.g. S1S2, indicate not enough information is available to distinguish between two ranks.

GLOBAL RANK:

G1 - **Critically imperiled** globally because of extreme rarity (5 or fewer occurrences), or very few remaining acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.

G2 - **Imperiled** globally because of rarity (6 - 20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.

G3 - **Vulnerable**: Either rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g. a physiographic region), or vulnerable to extinction throughout its range because of other factors.

G4 - **Apparently secure** globally, though it may be quite rare in parts of its range, especially at the periphery.

G5 - **Demonstrably secure** globally, though it may be quite rare in parts of its range, especially at the periphery.

GH - Historically known, with the expectation that it might be rediscovered.

GX - Species believed to be extinct.

GU - Lack of information or substantial conflicting information about status or trends makes ranking infeasible at this time.

NYS RANK:

S1 - **Critically imperiled**: Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.

S2 - **Imperiled**: Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.

S3 - **Vulnerable**: Typically 21 to 100 occurrences, limited acreage, or miles of stream in New York State.

S4 - Apparently secure in New York State.

S5 - Demonstrably secure in New York State.

SH - Historically known from New York State, but not seen in the past 20 years.

SX - Apparently extirpated from New York State.

SU - Lack of information or substantial conflicting information about status or trends makes ranking infeasible at this time.

SxB and SxN, where Sx is one of the codes above, are used for migratory animals, and refer to the rarity within New York State of the breeding (B)populations and the non-breeding populations (N),, respectively, of the species.

TAXON (T) RANK: The T-ranks (T1 - T5) are defined the same way as the Global ranks (G1 - G5), but the T-rank refers only to the rarity of the subspecific taxon.

T1 through T5 - See Global Rank definitions above.

Q - Indicates a question exists whether or not the taxon is a good taxonomic entity.

Revised December, 2008

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

JAN 03 2011

REPLY TO
ATTENTION OF:

Regulatory Branch

SUBJECT: Permit Application Number NAN- 2010-01119- ESQ
by New York City Department of Parks and Recreation

New York City
Department of Parks and Recreation
Attn: Michael Browne
Olmstead Center, Flushing Meadows
Flushing, New York 11368

Dear Mr. Browne:

On September 24, 2010, the New York District, U.S. Army Corps of Engineers, received a request for Department of the Army authorization for the upland demolition of (32) bungalows and (5) garages in the Sandy Hook - Staten Island watershed, in the Borough of Staten Island , Richmond County, New York.

Our review indicates that since the proposed work does not appear to include dredging or construction activities in or over any navigable waters of the United States, the placement of any dredged or fill material in any waters of the United States or the accomplishment of any work affecting the course, location, condition or capacity of such areas, a Department of the Army permit, in accordance with 33 CFR 320-330, will not be required provided the proposed work is executed in accordance with the referenced material.

Care should be taken so that any fill or construction materials, including debris, do not enter the waterway to become a drift or pollution hazard. You are to contact appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.

In order for us to better serve you, please complete our Customer Service Survey located at:

http://www.nan.usace.army.mil/business/buslinks/regulat/index.php?survey.

If any questions should arise concerning this matter, please contact Sophia Squires, of my staff, at (917) 790-8401.

Sincerely,

Stacey M. Jensen
Chief
Eastern Permits Section

Appendix D: Hurricane/Tropical Storm Irene Damage to Project Site

Photo 1: View looking north on Cedar Grove Beach, with damaged bungalow in foreground.

Photo 2: View of damaged bungalows looking south along Cedar Grove Beach.

Photo 3: View looking southwest on Cedar Grove Beach, with damaged bungalow in foreground.

Photo 4: View of damaged bungalows looking south along Cedar Grove Beach.

Photo 5: View looking north on Cedar Grove Beach, with damaged bungalow facing the ocean.

Photo 6: View of damaged bungalows looking south along Cedar Grove Beach.

Appendix E: Environmental Assessment Statement for Cedar Grove Beach Rehabilitation

City Environmental Quality Review
ENVIRONMENTAL ASSESSMENT STATEMENT FULL FORM
Please fill out, print and submit to the appropriate agency (see instructions)

PART I: GENERAL INFORMATION

PROJECT NAME

1. Reference Numbers

CEQR REFERENCE NUMBER (To Be Assigned by Lead Agency)	BSA REFERENCE NUMBER (If Applicable)
11DPR004R	
ULURP REFERENCE NUMBER (If Applicable))	OTHER REFERENCE NUMBER(S) (If Applicable) (e.g. Legislative Intro, CAPA, etc)
NEW YORK CITY DEPARTMENT OF PARKS & RECREATION (DPR)	

2A. Lead Agency Information

NAME OF LEAD AGENCY	
NEW YORK CITY DEPARTMENT OF PARKS & RECREATION (DPR	
NAME OF LEAD AGENCY CONTACT PERSON	
JOSHUA LAIRD	
ADDRESS 830 5TH AVENUE, THE ARSENAL	
CITY MANHATTAN / STATE NY / ZIP 10065	
TELEPHONE 212-360-3402 / FAX 212-360-3453	
EMAIL ADDRESS JOSHUA.LAIRD@PARKS.NYC.	

2B. Applicant Information

NAME OF APPLICANT	
Same	
NAME OF APPLICANT'S REPRESENTATIVE OR CONTACT PERSON	
ADDRESS	
CITY / STATE / ZIP	
TELEPHONE / FAX	
EMAIL ADDRESS	

3. Action Classification and Type

SEQRA Classification

☐ UNLISTED ☑ TYPE I; SPECIFY CATEGORY *(see 6 NYCRR 617.4 and NYC Executive Order 91 of 1977, as amended):* 617.4 (b) (9) and 617.4 (b) (10)

Action Type *(refer to Chapter 2, "Establishing the Analysis Framework" for guidance)*

☑ LOCALIZED ACTION, SITE SPECIFIC ☐ LOCALIZED ACTION, SMALL AREA ☐ GENERIC ACTION

4. Project Description:

The project is located in Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay. The project area is approximately 34 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). Although a mapped city park since 1962, the land and beach is generally not publicly accessible. The site contains a collection of approximately 42 1 – 1 ½ story seasonal beach bungalows that pre-date the park mapping, a clubhouse, barn, and a number of ancillary garage structures. The proposed project will demolish the majority of these bungalows so that Cedar Grove Beach can be restored and used by the public as the public parkland that it is, while some of the bungalows would be set aside and rehabilitated for public and ancillary park use in order to provide appropriate amenities for park users.

4A. Project Location: Single Site *(for a project at a single site, complete all the information below)*

ADDRESS N/A DEMOLITION AND ADAPTIVE REUSE OF STRUCTURES F	NEIGHBORHOOD NAME NEW DORP BEACH	
TAX BLOCK AND LOT BLOCK 4108 P/O LOT 45; BLOCK 4105 P/O LOT 50	BOROUGH STATEN ISLAND	COMMUNITY DISTRICT 2 & 3
DESCRIPTION OF PROPERTY BY BOUNDING OR CROSS STREETS: LOCATED ON CEDAR GROVE BEACH WITHIN GREAT KILLS PARK, SOUTH OF EBBITTS STREET, ALONG CEDAR GROVE AVENUE AND CEDAR GROVE BEACH		
EXISTING ZONING DISTRICT, INCLUDING SPECIAL ZONING DISTRICT DESIGNATION IF ANY: Park		ZONING SECTIONAL MAP NO: 34A & 27B

4B. Project Location: Multiple Sites *(Provide a description of the size of the project area in both City Blocks and Lots. If the project would apply to the entire city or to areas that are so extensive that a site-specific description is not appropriate or practicable, describe the area of the project, including bounding streets, etc.)*

The project area is approximately 34 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45).

5. REQUIRED ACTIONS OR APPROVALS *(check all that apply)*

City Planning Commission: YES ☐ NO ☑

- ☐ CITY MAP AMENDMENT
- ☐ ZONING MAP AMENDMENT
- ☐ ZONING TEXT AMENDMENT
- ☐ UNIFORM LAND USE REVIEW PROCEDURE (ULURP)
- ☐ CONCESSION
- ☐ UDAAP
- ☐ REVOCABLE CONSENT
- ☐ ZONING CERTIFICATION
- ☐ ZONING AUTHORIZATION
- ☐ HOUSING PLAN & PROJECT
- ☐ SITE SELECTION — PUBLIC FACILITY
- ☐ FRANCHISE
- ☐ DISPOSITION — REAL PROPERTY

ZONING SPECIAL PERMIT, SPECIFY TYPE:

- ☐ MODIFICATION OF
- ☐ RENEWAL OF
- ☐ OTHER

Board of Standards and Appeals: YES ☐ NO ☑

- ☐ SPECIAL PERMIT

EXPIRATION DATE MONTH DAY YEAR

- ☐ VARIANCE (USE)
- ☐ VARIANCE (BULK)

SPECIFY AFFECTED SECTION(S) OF THE ZONING RESOLUTION

Department of Environmental Protection: YES ☐ NO ☑

Other City Approvals: YES ☐ NO ☑

- ☐ LEGISLATION
- ☐ FUNDING OF CONSTRUCTION; SPECIFY
- ☐ POLICY OR PLAN; SPECIFY
- ☐ LANDMARKS PRESERVATION COMMISSION APPROVAL ***(not subject to CEQR)***
- ☐ 384(b)(4) APPROVAL
- ☐ PERMITS FROM DOT'S OFFICE OF CONSTRUCTION MITIGATION AND COORDINATION (OCMC) ***(not subject to CEQR)***
- ☐ RULEMAKING
- ☐ CONSTRUCTION OF PUBLIC FACILITIES
- ☐ FUNDING OF PROGRAMS; SPECIFY
- ☑ PERMITS; SPECIFY: NYCDOB Approval of building plan changes
- ☑ OTHER; EXPLAIN: Coastal Zone consistency determination from NYC CPC

6. State or Federal Actions / Approvals / Funding: YES ☑ NO ☐ IF "YES," IDENTIFY

NYSDEC Freshwater and/or Tidal Permit; NYSDEC Coastal Erosion Hazard Areas Approval; NYSDEC State Pollution Discharge Elimination System (SPDES) permit; and NYSOPRHP Section 1409 Consultation with NYSDEC

7. Site Description: ***Except where otherwise indicated, provide the following information with regard to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory controls.***

GRAPHICS ***The following graphics must be attached and each box must be checked off before the EAS is complete. Each map must clearly depict the boundaries of the directly affected area or areas and indicate a 400-foot radius drawn from the outer boundaries of the project site. Maps may not exceed 11×17 inches in size and must be folded to 8.5 ×11 inches for submission.***

☑ Site location map ☑ Zoning map ☑ Photographs of the project site taken within 6 months of EAS submission and keyed to the site location map

☑ Sanborn or other land use map ☑ Tax map ☐ For large areas or multiple sites, a GIS shape file that defines the project sites

PHYSICAL SETTING ***(both developed and undeveloped areas)***

Total directly affected area (sq. ft.):	Type of waterbody and surface area (sq. ft.):	Roads, building and other paved surfaces (sq. ft.)
Approx 1,500,000 sq. ft.	Adjacent to Lower New York Bay	Approx 92,000 sq. ft.

Other, describe (sq. ft.):

8. Physical Dimensions and Scale of Project ***(if the project affects multiple sites, provide the total development below facilitated by the action)***

Size of project to be developed: No new buildings proposed on site. Adaptive reuse of some existing structures. (gross sq. ft.)

Does the proposed project involve changes in zoning on one or more sites? YES ☐ NO ☑

If 'Yes,' identify the total square feet owned or controlled by the applicant : Total square feet of non-applicant owned development:

Does the proposed project involve in-ground excavation or subsurface disturbance, including but not limited to foundation work, pilings, utility lines, or grading? YES ☑ NO ☐

If 'Yes,' indicate the estimated area and volume dimensions of subsurface disturbance (if known):

Area: Approx. 3,555 sq. ft. (width × length) Volume: Approx. 5,616 cubic feet (width × length × depth)

Does the proposed project increase the population of residents and/or on-site workers? YES ☐ NO ☑ Number of additional residents? 0 Number of additional workers? 0

Provide a brief explanation of how these numbers were determined:

Caretaker and family to remain.

Does the project create new open space? YES ☑ NO ☐ If Yes: rehab of existing (sq. ft)

Using Table 14-1, estimate the project's projected operational solid waste generation, if applicable: NA (pounds per week)

Using energy modeling or Table 15-1, estimate the project's projected energy use: NA (annual BTUs)

9. Analysis Year ***CEQR Technical Manual Chapter 2***

ANTICIPATED BUILD YEAR (DATE THE PROJECT WOULD BE COMPLETED AND OPERATIONAL):	ANTICIPATED PERIOD OF CONSTRUCTION IN MONTHS:
2014	36months

WOULD THE PROJECT BE IMPLEMENTED IN A SINGLE PHASE? YES ☐ NO ☑ IF MULTIPLE PHASES, HOW MANY PHASES: 2

BRIEFLY DESCRIBE PHASES AND CONSTRUCTION SCHEDULE: See Project Description of Attached Supplemental Studies

10. What is the Predominant Land Use in Vicinity of Project? ***(Check all that apply)***

☑ RESIDENTIAL ☐ MANUFACTURING ☐ COMMERCIAL ☑ PARK/FOREST/OPEN SPACE ☐ OTHER, Describe:

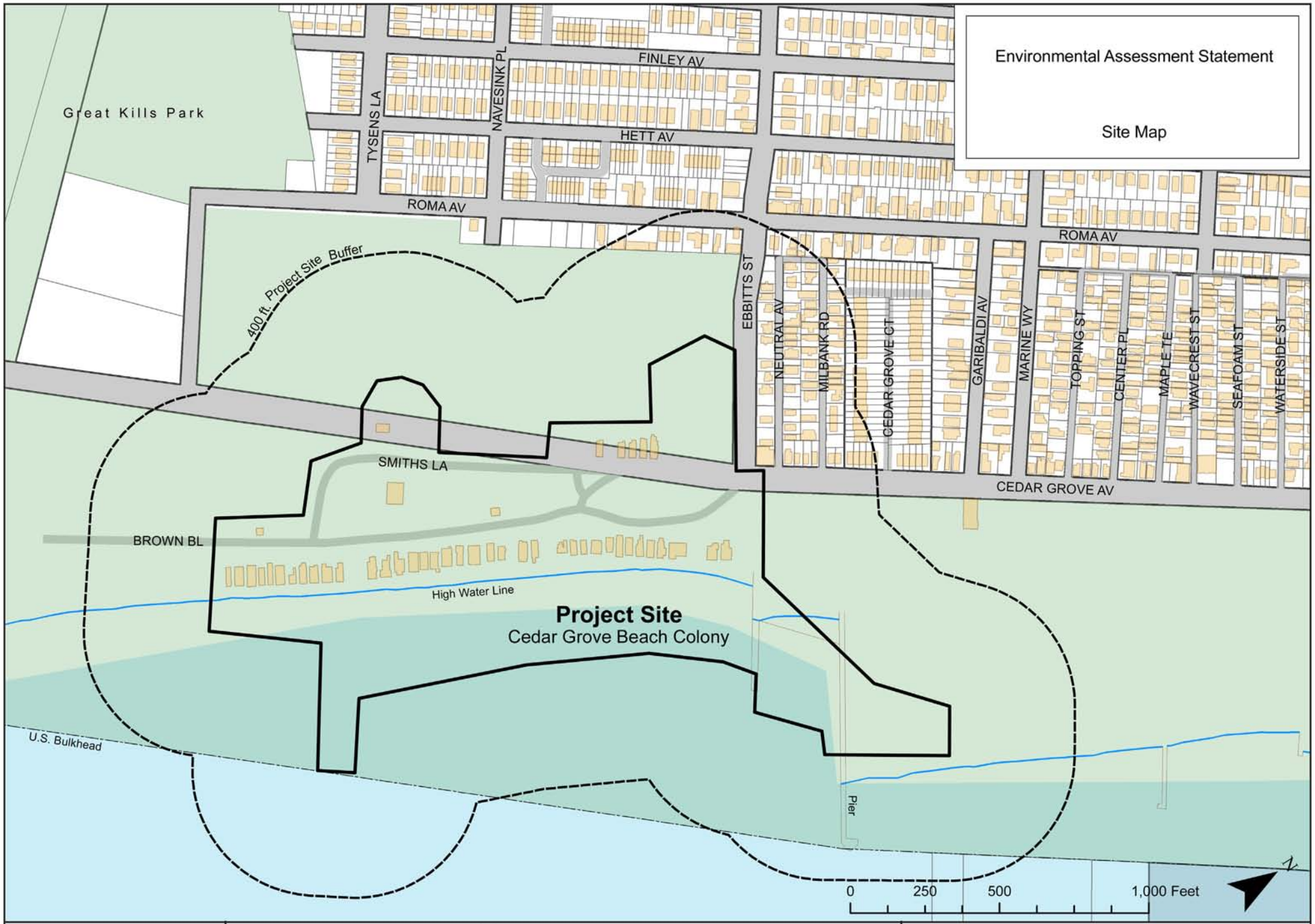
DESCRIPTION OF EXISTING AND PROPOSED CONDITIONS

The information requested in this table applies to the directly affected area. The directly affected area consists of the project site and the area subject to any change in regulatory control. The increment is the difference between the No-Action and the With-Action conditions.

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Land Use				
Residential	YES ☑ NO ☐	YES ☑ NO ☐	YES ☑ NO ☐	
If yes, specify the following				
No. of dwelling units	yearround caretaker unit	yearround caretaker unit	yearround caretaker unit	n/a: reuse of existing bldgs
No. of low- to moderate income units				
No. of stories	1 story existing	1 story existing	1 story existing	n/a: reuse of existing bldgs
Gross Floor Area (sq.ft.)				
Describe Type of Residential Structures	yearround caretaker unit	yearround caretaker unit	yearround caretaker unit	n/a: reuse of existing bldgs
Commercial	YES ☐ NO ☑	YES ☐ NO ☑	YES ☐ NO ☑	
If yes, specify the following:				
Describe type (retail, office, other)				
No. of bldgs				
GFA of each bldg (sq.ft.)				
Manufacturing/Industrial	YES ☐ NO ☑	YES ☐ NO ☑	YES ☐ NO ☑	
If yes, specify the following:				
Type of use				
No. of bldgs				
GFA of each bldg (sq.ft.)				
No. of stories of each bldg				
Height of each bldg				
Open storage area (sq.ft.)				
If any unenclosed activities, specify				
Community Facility	YES ☐ NO ☑	YES ☐ NO ☑	YES ☑ NO ☐	
If yes, specify the following:				
Type	n/a	n/a	Public & Ancillary Park bldgs	n/a: reuse of existing bldgs
No. of bldgs	n/a	n/a	TBD	
GFA of each bldg (sq.ft.)				
No. of stories of each bldg				
Height of each bldg				
Vacant Land	YES ☐ NO ☑	YES ☐ NO ☑	YES ☐ NO ☑	
If yes, describe:				
Publicly Accessible Open Space	YES ☑ NO ☐	YES ☑ NO ☐	YES ☑ NO ☐	
If yes, specify type (mapped City, State, or Federal Parkland, wetland—mapped or otherwise known, other)	Mapped parkland generally not publicly accessible	Mapped parkland generally not publicly accessible	Mapped parkland made publicly accessible	
Other Land Use	YES ☑ NO ☐	YES ☑ NO ☐	YES ☐ NO ☑	
If yes, describe	n/a See Proj Description	n/a See Proj Description	n/a See Proj Description	n/a See Proj Description
Parking				
Garages	YES ☑ NO ☐	YES ☑ NO ☐	YES ☐ NO ☑	
If yes, specify the following:				
No. of public spaces	5 1-2car garage structures	5 1-2car garage structures	All garages to be demolished	
No. of accessory spaces				
Operating hours				
Attended or non-attended				

	EXISTING CONDITION	NO-ACTION CONDITION	WITH-ACTION CONDITION	INCREMENT
Parking (CONTINUED)				
Lots	YES ☐ NO ☑	YES ☐ NO ☑	YES ☑ NO ☐	
If yes, specify the following:				
No. of public spaces			80	
No. of accessory spaces				
Operating hours			When beach is open.	
Other (includes street parking)	YES ☑ NO ☐	YES ☑ NO ☐	YES ☑ NO ☐	
If yes, describe	Existing parking will remain along Cedar Grove Beach Place			
Storage Tanks				
Storage Tanks	YES ☐ NO ☑	YES ☐ NO ☑	YES ☐ NO ☑	
If yes, specify the following:				
Gas/Service stations	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	
Oil storage facility	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	
Other, identify:	YES ☐ NO ☐	YES ☐ NO ☐	YES ☐ NO ☐	
If yes to any of the above, describe:				
Number of tanks				
Size of tanks				
Location of tanks				
Depth of tanks				
Most recent FDNY inspection date				
Population				
Residents	YES ☐ NO ☑	YES ☑ NO ☐	YES ☑ NO ☐	
If any, specify number	3, caretaker & his family	3, caretaker & his family	3, caretaker & his family	0
Briefly explain how the number of residents was calculated:	Existing Condition			
Businesses	YES ☐ NO ☑	YES ☐ NO ☑	YES ☐ NO ☑	
If any, specify the following:				
No. and type				
No. and type of workers by business				
No. and type of non-residents who are not workers				
Briefly explain how the number of businesses was calculated:				
Zoning*				
Zoning classification	Park	Park	Park	Park
Maximum amount of floor area that can be developed (in terms of bulk)	N/A	N/A	N/A	N/A
Predominant land use and zoning classifications within a 0.25 mile radius of proposed project	Residential, Park, Commer	Residential, Park, Commer	Residential, Park, Commer	Residential, Park, Commer
Attach any additional information as may be needed to describe the project. If your project involves changes in regulatory controls that affect one or more sites not associated with a specific development, it is generally appropriate to include the total development projections in the above table and attach separate tables outlining the reasonable development scenarios for each site.				

This section should be completed for all projects, except for such projects that would apply to the entire city or to areas that are so extensive that site-specific zoning information is not appropriate or practicable.

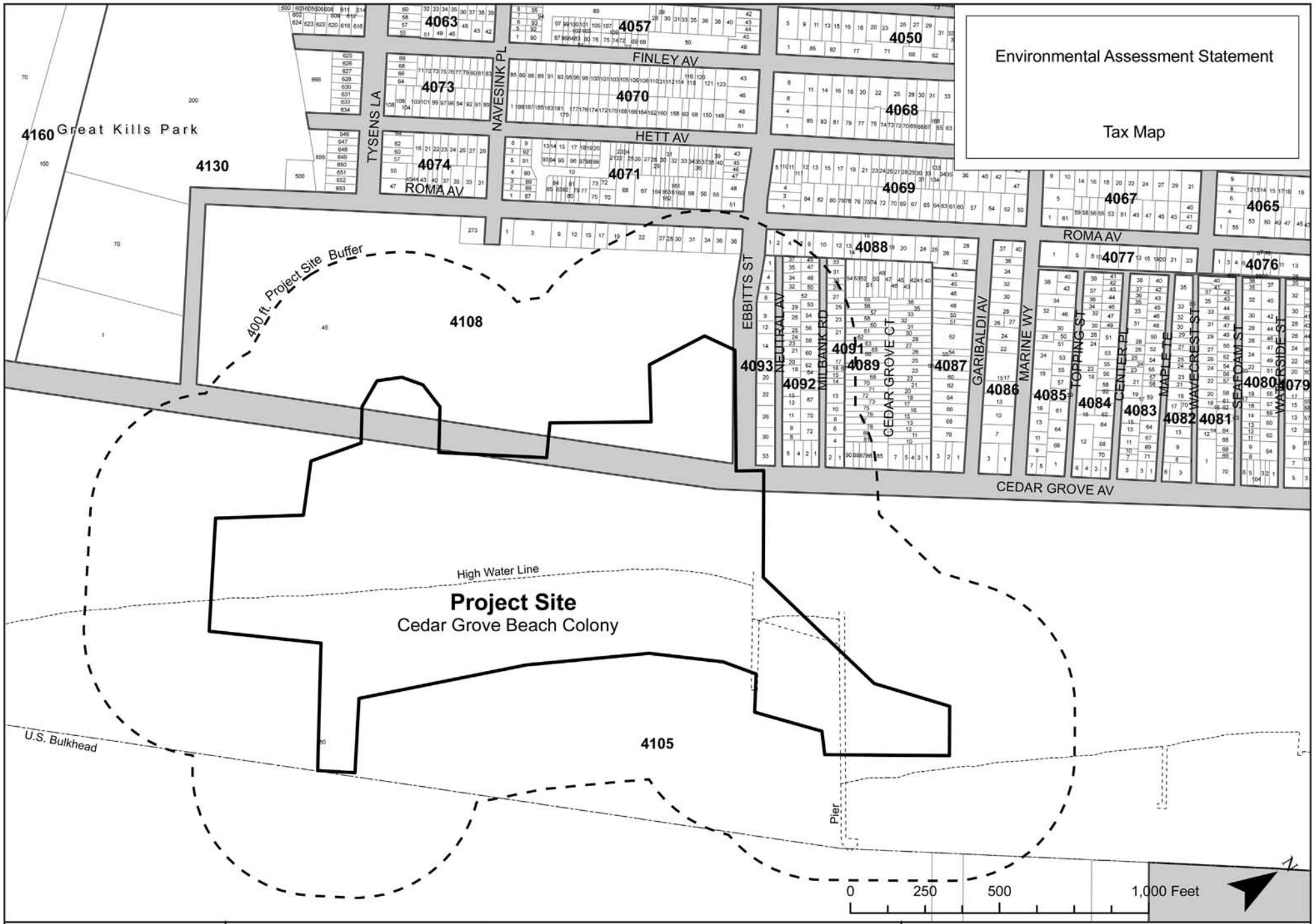


AECOM

Great Kills Park/Cedar Grove Beach Rehabilitation

NYC Department of Parks and Recreation

Figure 1



AECOM

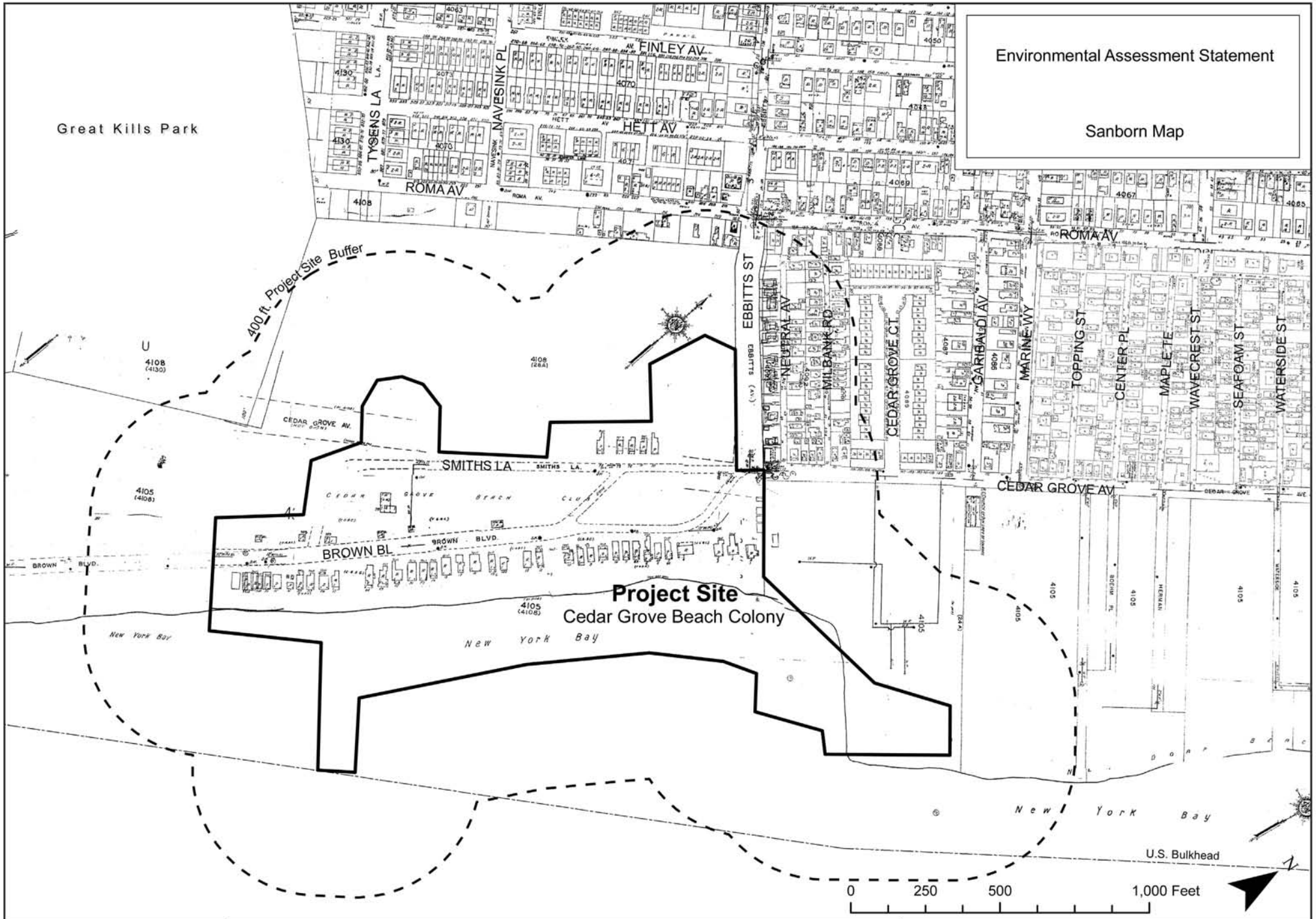
Great Kills Park/Cedar Grove Beach Rehabilitation

NYC Department of Parks and Recreation

Figure 2

Environmental Assessment Statement

Sanborn Map

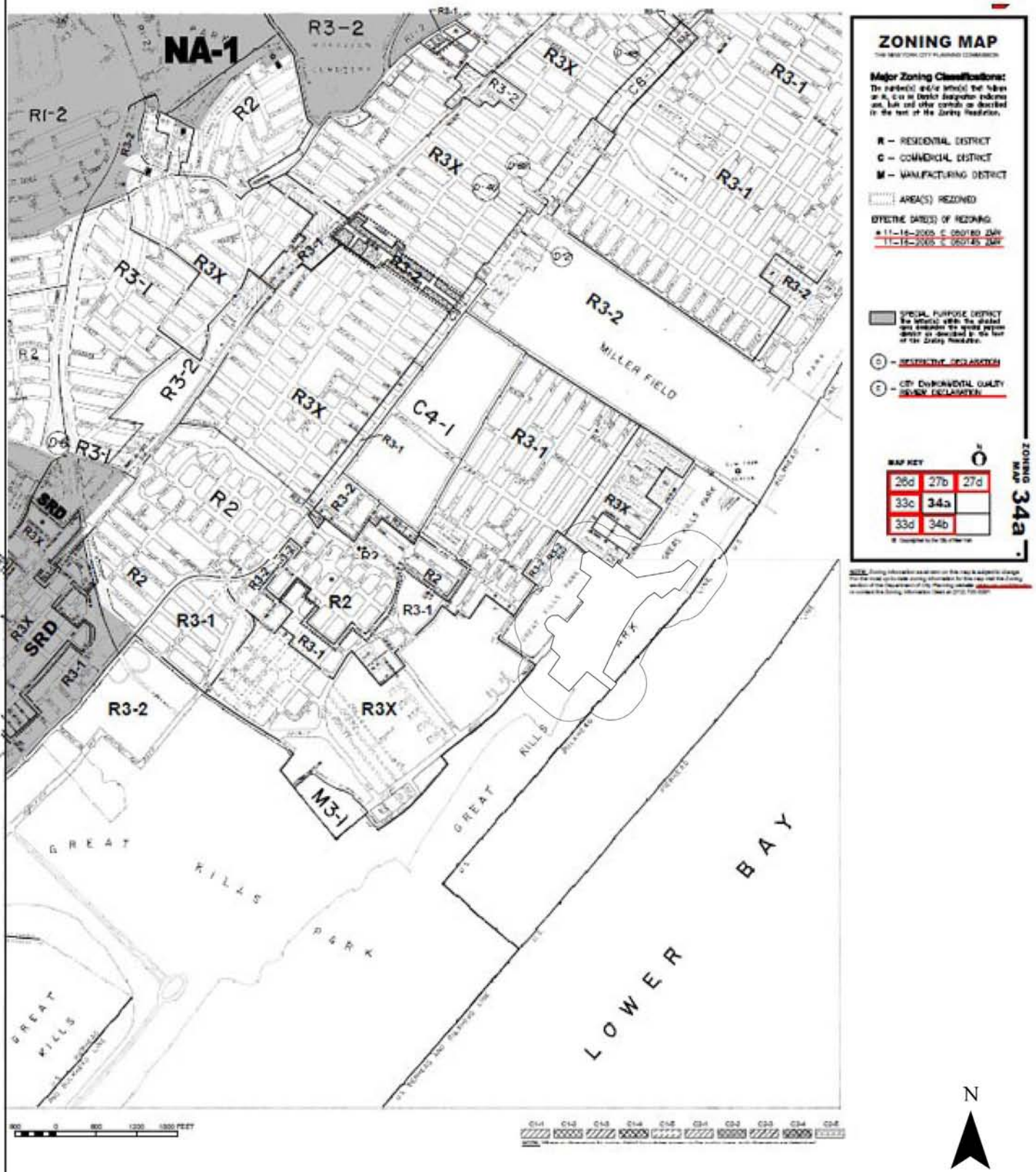


AECOM

Great Kills Park/Cedar Grove Beach Rehabilitation

NYC Department of Parks and Recreation

Figure 3



AECOM	Great Kills Park/ Cedar Grove Beach Rehabilitation NYC Department of Parks and Recreation	Environmental Assessment Statement Figure 4

Photograph 1: Rear of bungalows southeast of Brown Boulevard (aka Cedar Grove Beach Place) bordering beach. View looking southwest.

Photograph 2: Front of bungalows southeast of Brown Boulevard (aka Cedar Grove Beach Place) bordering beach. View looking northeast.

Photos courtesy of Historical Perspectives, Inc.

Photograph 3: Example of disturbed soils surrounding bungalows. View looking northeast.

Photograph 4: Example of disturbed soils surrounding bungalows. View looking northeast.

Photograph 5: Bocce court and horseshoe pit located northeast of clubhouse. View looking north.

Photograph 6: Example of exposed sand in area between Brown Boulevard (aka Cedar Grove Beach Place) and Smiths Lane (aka Cedar Grove Avenue). View looking southeast.

Photograph 7: Area between Brown Boulevard (aka Cedar Grove Beach Place) and Smiths Lane (aka Cedar Grove Avenue) covered with grass and trees. View looking north.

Photograph 8: Baseball field near Ebbitts Street. View looking northwest.

Photograph 9: Bungalows northwest of Smiths Lane (aka Cedar Grove Avenue). View looking southwest.

Photograph 10: Large wooden barn located northwest of Smiths Lane (aka Cedar Grove Avenue). Tennis court in on right and basketball court is behind barn. View looking west.

Photograph 11: Detail of basketball court behind barn. View looking west.

Photograph 12: Foundation remains and debris on the beach off Ebbitts Street and Cedar Grove Court. View looking northeast.

PART II: TECHNICAL ANALYSES

INSTRUCTIONS: For each of the analysis categories listed in this section, assess the proposed project's impacts based on the thresholds and criteria presented in the CEQR Technical Manual. Check each box that applies.

- If the proposed project can be demonstrated not to meet or exceed the threshold, check the '**NO**' box.
- If the proposed project will meet or exceed the threshold, or if this cannot be determined, check the '**YES**' box.
- For each 'Yes' response, answer the subsequent questions for that technical area and consult the relevant chapter of the CEQR Technical Manual for guidance on providing additional analyses (and attach supporting information, if needed) to determine whether the potential for significant impacts exists. Please note that a 'Yes' answer does not mean that an EIS must be prepared—it often only means that more information is required for the lead agency to make a determination of significance.
- The lead agency, upon reviewing Part II, may require an applicant to either provide additional information to support the Full EAS Form. For example, if a question is answered 'No,' an agency may request a short explanation for this response.

	YES	NO
1. LAND USE, ZONING AND PUBLIC POLICY: ***CEQR Technical Manual Chapter 4***		
(A) Would the proposed project result in a change in land use or zoning that is different from surrounding land uses and/or zoning? Is there the potential to affect an applicable public policy? If "Yes", complete a preliminary assessment and attach.		✔
(B) Is the project a large, publicly sponsored project? If "Yes", complete a PlaNYC assessment and attach.		✔
(C) Is any part of the directly affected area within the City's Waterfront Revitalization Program boundaries? If "Yes", complete the Consistency Assessment Form.	✔	
2. SOCIOECONOMIC CONDITIONS: ***CEQR Technical Manual Chapter 5***		
(A) Would the proposed project:		
• Generate a net increase of 200 or more residential units?		✔
• Generate a net increase of 200,000 or more square feet of commercial space?		✔
• Directly displace more than 500 residents?		✔
• Directly displace more than 100 employees?		✔
• Affect conditions in a specific industry?		✔
(B) If 'Yes' to any of the above, attach supporting information to answer the following questions, as appropriate. If 'No' was checked for each category above, the remaining questions in this technical area do not need to be answered.		✔
(1) ***Direct Residential Displacement***		
• If more than 500 residents would be displaced, would these displaced residents represent more than 5% of the primary study area population?		✔
• If 'Yes,' is the average income of the directly displaced population markedly lower than the average income of the rest of the study area population?		✔
(2) ***Indirect Residential Displacement***		
• Would the expected average incomes of the new population exceed the average incomes of the study area populations?		✔
• If 'Yes,' would the population increase represent more than 5% of the primary study area population or otherwise potentially affect real estate market conditions?		✔
• If 'Yes,' would the study area have a significant number of unprotected rental units?		✔
Would more than 10 percent of all the housing units be renter-occupied and unprotected?		✔
Or, would more than 5 percent of all the housing units be renter-occupied and unprotected where no readily observable trend toward increasing rents and new market rate development exists within the study area?		✔

	YES	NO
(3) ***Direct Business Displacement***		
• Do any of the displaced businesses provide goods or services that otherwise could not be found within the trade area, either under existing conditions or in the future with the proposed project?		✔
• Do any of the displaced businesses provide goods or services that otherwise could not be found within the trade area, either under existing conditions or in the future with the proposed project?		✔
• Or, is any category of business to be displaced the subject of other regulations or publicly adopted plans to preserve, enhance, or otherwise protect it?		✔
(4) ***Indirect Business Displacement***		
• Would the project potentially introduce trends that make it difficult for businesses to remain in the area?		✔
• Would the project capture the retail sales in a particular category of goods to the extent that the market for such goods would become saturated as a result, potentially resulting in vacancies and disinvestment on neighborhood commercial streets?		✔
(5) ***Affects on Industry***		✔
• Would the project significantly affect business conditions in any industry or any category of businesses within or outside the study area?		✔
• Would the project indirectly substantially reduce employment or impair the economic viability in the industry or category of businesses?		✔
3. COMMUNITY FACILITIES: ***CEQR Technical Manual Chapter 6***		
(A) Would the project directly eliminate, displace, or alter public or publicly funded community facilities such as educational facilities, libraries, hospitals and other health care facilities, day care centers, police stations, or fire stations?		✔
(B) Would the project exceed any of the thresholds outlined in Table 6-1 in Chapter 6?		✔
(C) If 'No' was checked above, the remaining questions in this technical area do not need to be answered. If 'Yes' was checked, attach supporting information to answer the following, if applicable.		✔
(1) ***Child Care Centers***		
• Would the project result in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent?		✔
• If Yes, would the project increase the collective utilization rate by 5 percent from the No-Action scenario?		✔
(2) ***Libraries***		
• Would the project increase the study area population by 5 percent from the No-Action levels?		✔
• If Yes, would the additional population impair the delivery of library services in the study area?		
(3) ***Public Schools***		
• Would the project result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 105 percent?		✔
• If Yes, would the project increase this collective utilization rate by 5 percent from the No-Action scenario?		
(4) ***Health Care Facilities***		
• Would the project affect the operation of health care facilities in the area?		✔
(5) ***Fire and Police Protection***		
• Would the project affect the operation of fire or police protection in the area?		✔
4. OPEN SPACE: ***CEQR Technical Manual Chapter 7***		
(A) Would the project change or eliminate existing open space?	✔	
(B) Is the project located within an underserved area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?		✔
(C) If 'Yes,' would the proposed project generate more than 50 additional residents or 125 additional employees?		
(D) Is the project located within a well-served area in the Bronx, Brooklyn, Manhattan, Queens, or Staten Island?		✔
(E) If 'Yes,' would the project generate more than 350 additional residents or 750 additional employees?		
(F) If the project is not located within an underserved or well-served area, would it generate more than 200 additional residents or 500 additional employees?		✔
(G) If 'Yes' to any of the above questions, attach supporting information to answer the following: • Does the project result in a decrease in the open space ratio of more then 5%?		
• If the project is within an underserved area, is the decrease in open space between 1% and 5%?		
• If 'Yes," are there qualitative considerations, such as the quality of open space, that need to be considered?		

	YES	NO
5. SHADOWS: ***CEQR Technical Manual Chapter 8***		
(A) Would the proposed project result in a net height increase of any structure of 50 feet or more?		✔
(B) Would the proposed project result in any increase in structure height and be located adjacent to or across the street from a sunlight-sensitive resource?		✔
(C) If 'Yes' to either of the above questions, attach supporting information explaining whether the project's shadow reach any sunlight-sensitive resource at any time of the year.		
6. HISTORIC AND CULTURAL RESOURCES: ***CEQR Technical Manual Chapter 9***		
(A) Does the proposed project site or an adjacent site contain any architectural and/or archaeological resource that is eligible for, or has been designated (or is calendared for consideration) as a New York City Landmark, Interior Landmark or Scenic Landmark; is listed or eligible for listing on the New York State or National Register of Historic Places; or is within a designated or eligible New York City, New York State, or National Register Historic District? If "Yes," list the resources and attach supporting information on whether the proposed project would affect any of these resources.	✔	
7. URBAN DESIGN AND VISUAL RESOURCES: ***CEQR Technical Manual Chapter 10***		
(A) Would the proposed project introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning?		✔
(B) Would the proposed project result in obstruction of publicly accessible views to visual resources that is not currently allowed by existing zoning?		✔
(C) If "Yes" to either of the above, please provide the information requested in Chapter 10.		
8. NATURAL RESOURCES: ***CEQR Technical Manual Chapter 11***		
(A) Is any part of the directly affected area within the Jamaica Bay Watershed? If "Yes", complete the Jamaica Bay Watershed Form.		✔
(B) Does the proposed project site or a site adjacent to the project contain natural resources as defined in Section 100 of Chapter 11? If "Yes," list the resources: Attach supporting information on whether the proposed project would affect any of these resources.	✔	
9. HAZARDOUS MATERIALS: ***CEQR Technical Manual Chapter 12***		
(A) Would the proposed project allow commercial or residential use in an area that is currently, or was historically, a manufacturing area that involved hazardous materials?		✔
(B) Does the proposed project site have existing institutional controls (e.g. (E) designations or a Restrictive Declaration) relating to hazardous materials that preclude the potential for significant adverse impacts?		✔
(C) Does the project require soil disturbance in a manufacturing zone or any development on or near a manufacturing zone or existing/historic facilities listed in Appendix 1 (including nonconforming uses)?		✔
(D) Does the project result in the development of a site where there is reason to suspect the presence of hazardous materials, contamination, illegal dumping or fill, or fill material of unknown origin?	✔	
(E) Does the project result in development where underground and/or aboveground storage tanks (e.g. gas stations) are or were on or near the site?		✔
(F) Does the project result in renovation of interior existing space on a site with potential compromised air quality, vapor intrusion from on-site or off-site sources, asbestos, PCBs or lead-based paint?	✔	
(G) Does the project result in development on or near a government-listed voluntary cleanup/brownfield site, current or former power generation/transmission facilities, municipal incinerators, coal gasification or gas storage sites, or railroad tracks and rights-of-way?		✔
(H) Has a Phase I Environmental Site Assessment been performed for the site? If 'Yes," were RECs identified? Briefly identify: currently being performed	✔	
(I) Based on a Phase I Assessment, is a Phase II Assessment needed?		
10. WATER AND SEWER INFRASTRUCTURE: ***CEQR Technical Manual Chapter 13***		
(A) Would the project result in water demand of more than one million gallons per day?		✔
(B) Is the proposed project located in a combined sewer area and result in at least 1,000 residential units or 250,000 SF or more of commercial space in Manhattan or at least 400 residential units or 150,000 SF or more of commercial space in the Bronx, Brooklyn, Staten Island or Queens?		✔
(C) Is the proposed project located in a separately sewered area and result in the same or greater development than that listed in Table 13-1 in Chapter 13?		✔
(D) Does the proposed project involve development on a site five acres or larger where the amount of impervious surface would increase?		✔
(E) Would the proposed project involve development on a site one acre or larger where the amount of impervious surface would increase and is located within the Jamaica Bay Watershed or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek?		✔
(F) Would the proposed project be located in an area that is partially sewered or currently unsewered?		✔
(G) Is the project proposing an industrial facility or activity that would contribute industrial discharges to a WWTP and/or generate contaminated stormwater in a separate storm sewer system?		✔
(H) Would the project involve construction of a new stormwater outfall that requires federal and/or state permits?		✔
(I) If "Yes" to any of the above, conduct the appopriate preliminary analyses and attach supporting documentation.		✔
11. SOLID WASTE AND SANITATION SERVICES: ***CEQR Technical Manual Chapter 14***		
(A) Would the proposed project have the potential to generate 1000,000 pounds (50 tons) or more of solid waste per week?		✔
(B) Would the proposed project involve a reduction in capacity at a solid waste management facility used for refuse or recyclables generated within the City?		✔

	YES	NO
12. ENERGY: *CEQR Technical Manual Chapter 15*		
(A) Would the proposed project affect the transmission or generation of energy?		✔
13. TRANSPORTATION: *CEQR Technical Manual Chapter 16*		
(A) Would the proposed project exceed any threshold identified in Table 16-1 in Chapter 16?	✔	
(B) If "Yes," conduct the screening analyses, attach appropriate back up data as needed for each stage, and answer the following questions:		
(1) Would the proposed project result in 50 or more Passenger Car Equivalents (PCEs) per project peak hour? If "Yes," would the proposed project result in 50 or more vehicle trips per project peak hour at any given intersection? *****It should be noted that the lead agency may require further analysis of intersections of concern even when a project generates fewer than 50 vehicles in the peakhour. See Subsection 313 in Chapter 16 for more information.***	✔	
(2) Would the proposed project result in more than 200 subway/rail or bus trips per project peak hour? If "Yes," would the proposed project result, per project peak hour, in 50 or more bus trips on a single line (in one direction) or 200 subway trips per station or line?		✔
(3) Would the proposed project result in more than 200 pedestrian trips per project peak hour? If "Yes," would the proposed project result in more than 200 pedestrian trips per project peak hour to any given pedestrian or transit element, crosswalk, subway stair, or bus stop?		✔
14. AIR QUALITY: *CEQR Technical Manual Chapter 17*		
(A) ***Mobile Sources:*** Would the proposed project result in the conditions outlined in Section 210 in Chapter 17?		✔
(B) ***Stationary Sources:*** Would the proposed project result in the conditions outlined in Section 220 in Chapter 17? If 'Yes,' would the proposed project exceed the thresholds in the Figure 17-3, Stationary Source Screen Graph? (attach graph as needed)		✔
(C) Does the proposed project involve multiple buildings on the project site?		✔
(D) Does the proposed project require Federal approvals, support, licensing, or permits subject to conformity requirements?		✔
(E) Does the proposed project site have existing institutional controls (***e.g.*** E) designations or a Restrictive Declaration) relating to air quality that preclude the potential for significant adverse impacts?		✔
(F) If "Yes," conduct the appropriate analyses and attach any supporting documentation.		
15. GREENHOUSE GAS EMISSIONS: *CEQR Technical Manual Chapter 18*		
(A) Is the proposed project a city capital project, a power plant, or would fundamentally change the City's solid waste management system?	✔	
(B) If "Yes," would the proposed project require a GHG emissions assessment based on the guidance in Chapter 18?		✔
(C) If "Yes," attach supporting documentation to answer the following; Would the project be consistent with the City's GHG reduction goal?		
16. NOISE: *CEQR Technical Manual Chapter 19*		
(A) Would the proposed project generate or reroute vehicular traffic?	✔	
(B) Would the proposed project introduce new or additional receptors (see Section 124 in Chapter 19) near heavily trafficked roadways, within one horizontal mile of an existing or proposed flight path, or within 1,500 feet of an existing or proposed rail line with a direct line of site to that rail line?		✔
(C) Would the proposed project cause a stationary noise source to operate within 1,500 feet of a receptor with a direct line of sight to that receptor or introduce receptors into an area with high ambient stationary noise?		✔
(D) Does the proposed project site have existing institutional controls (***e.g.*** E-designations or a Restrictive Declaration) relating to noise that preclude the potential for significant adverse impacts?		✔
(E) If "Yes," conduct the appropriate analyses and attach any supporting documentation.		
17. PUBLIC HEALTH: *CEQR Technical Manual Chapter 20*		✔
(A) Would the proposed project warrant a public health assessment based upon the guidance in Chapter 20?		
18. NEIGHBORHOOD CHARACTER: *CEQR Technical Manual Chapter 21*		
(A) Based upon the analyses conducted for the following technical areas, check Yes if any of the following technical areas required a detailed analysis: Land Use, Zoning, and Public Policy, Socioeconomic Conditions, Open Space, Historic and Cultural Resources, Urban Design and Visual Resources, Shadows, Transportation, Noise.	✔	
(B) If "Yes," explain here why or why not an assessment of neighborhood character is warranted based on the guidance in Chapter 21, "Neighborhood Character." Attach a preliminary analysis, if necessary.		
See attached supplemental studies to the eas.		

		YES	NO
19.	***CONSTRUCTION IMPACTS:*** *CEQR Technical Manual Chapter 22* Would the project's construction activities involve (check all that apply):		✓
	• Construction activities lasting longer than two years;	✓	
	• Construction activities within a Central Business District or along an arterial or major thoroughfare;		✓
	• Require closing, narrowing, or otherwise impeding traffic, transit or pedestrian elements (roadways, parking spaces, bicycle routes, sidewalks, crosswalks, corners, etc);		✓
	• Construction of multiple buildings where there is a potential for on-site receptors on buildings completed before the final build-out;		✓
	• The operation of several pieces of diesel equipment in a single location at peak construction;		✓
	• Closure of community facilities or disruption in its service;		✓
	• Activities within 400 feet of a historic or cultural resource; or	✓	
	• Disturbance of a site containing natural resources.	✓	

If any boxes are checked, explain why or why not a preliminary construction assessment is warranted based on the guidance of in Chapter 22, "Construction." It should be noted that the nature and extent of any commitment to use the Best Available Technology for construction equipment or Best Management Practices for construction activities should be considered when making this determination.

See attached supplemental studies to the eas.

20. *APPLICANT'S CERTIFICATION*

I swear or affirm under oath and subject to the penalties for perjury that the information provided in this Environmental Assessment Statement (EAS) is true and accurate to the best of my knowledge and belief, based upon my personal knowledge and familiarity with the information described herein and after examination of pertinent books and records and/or after inquiry of persons who have personal knowledge of such information or who have examined pertinent books and records.

Still under oath, I further swear or affirm that I make this statement in my capacity as the

Joshua Laird, Assistant Commissioner — APPLICANT/SPONSOR

of

New York City Department of Parks & Recreation — NAME THE ENTITY OR OWNER

the entity which seeks the permits, approvals, funding or other governmental action described in this EAS.

Check if prepared by: ☑ APPLICANT/REPRESENTATIVE or ☐ LEAD AGENCY REPRESENTATIVE (FOR CITY-SPONSORED PROJECTS)

David Cuff, AICP
APPLICANT/SPONSOR NAME:

LEAD AGENCY REPRESENTATIVE NAME:

SIGNATURE:

February 10, 2010
DATE:

PLEASE NOTE THAT APPLICANTS MAY BE REQUIRED TO SUBSTANTIATE RESPONSES IN THIS FORM AT THE DISCRETION OF THE LEAD AGENCY SO THAT IT MAY SUPPORT ITS DETERMINATION OF SIGNIFICANCE.

PART III: DETERMINATION OF SIGNIFICANCE (To Be Completed By Lead Agency)

INSTRUCTIONS:
In completing Part III, the lead agency should consult 6 NYCRR 617.7 and 43 RCNY §6-06 (Executive Order 91 of 1977, as amended) which contain the State and City criteria for determining significance.

1. For each of the impact categories listed below, consider whether the project may have a significant effect on the environment. For each of the impact categories listed below, consider whether the project may have a significant adverse effect on the environment, taking into account its (a) location; (b) probability of occurring; (c) duration; (d) irreversibility; (e) geographic scope; and (f) magnitude.

IMPACT CATEGORY	Potential Significant Adverse Impact: YES	NO
Land Use, Zoning, and Public Policy	✔	
Socioeconomic Conditions		✔
Community Facilities and Services		✔
Open Space	✔	
Shadows		✔
Historic and Cultural Resources	✔	
Urban Design/Visual Resources		✔
Natural Resources	✔	
Hazardous Materials	✔	
Water and Sewer Infrastructure		✔
Solid Waste and Sanitation Services		✔
Energy		✔
Transportation	✔	
Air Quality		✔
Greenhouse Gas Emissions	✔	
Noise	✔	
Public Health		✔
Neighborhood Character	✔	
Construction Impacts	✔	

2. Are there any aspects of the project relevant to the determination whether the project may have a significant impact on the environment, such as combined or cumulative impacts, that were not fully covered by other responses and supporting materials? If there are such impacts, explain them and state where, as a result of them, the project may have a significant impact on the environment.

3. ***LEAD AGENCY'S CERTIFICATION***

Asisstant Commissioner for Planning and Parklands	NYC Department of Parks and Recreation
TITLE	LEAD AGENCY
Joshua Laird	
NAME	SIGNATURE

☑ **Check this box if the lead agency has identified one or more potentially significant adverse impacts that MAY occur.**

☐ Issue **Conditional Negative Declaration**

A ***Conditional Negative Declaration*** **(CND)** may be appropriate if there is a private applicant for an Unlisted action AND when conditions imposed by the lead agency will modify the proposed project so that no significant adverse environmental impacts would result. The CND is prepared as a separate document and is subject to the requirements in 6 NYCRR Part 617.

☐ Issue **Positive Declaration** and proceed to a draft scope of work for the Environmental Impact Statement.

If the lead agency has determined that the project may have a significant impact on the environment, and if a conditional negative declaration is not appropriate, then the lead agency issues a ***Positive Declaration***.

NEGATIVE DECLARATION (To Be Completed By Lead Agency)

Statement of No Significant Effect

Pursuant to Executive Order 91 of 1977, as amended, and the Rules of Procedure for City Environmental Quality Review, found at Title 62, Chapter 5 of the Rules of the City of New York and 6NYCRR, Part 617, State Environmental Quality Review, the [ ] assumed the role of lead agency for the environmental review of the proposed project. Based on a review of information about the project contained in this environmental assessment statement and any attachments hereto, which are incorporated by reference herein, the [ ] has determined that the proposed project would not have a significant adverse impact on the environment.

Reasons Supporting this Determination

The above determination is based on information contained in this EAS that finds, because the proposed project:

No other signficant effects upon the environment that would require the preparation of a Draft Environmental Impact Statement are foreseeable. This Negative Declaration has been prepared in accordance with Article 8 of the New York State Environmental Conservation Law (SEQRA).

TITLE

LEAD AGENCY

NAME

SIGNATURE

SCREENING OF POTENTIAL IMPACTS

The following technical sections are provided as supplemental assessments to the Environmental Assessment Statement ("EAS") long form. In "Part II: Technical Analyses" of the EAS form, there is a series of technical thresholds for each analysis area in the respective chapter of the *CEQR Technical Manual*. If the proposed project was expected to meet or exceed the threshold, or if this was not able be determined, the 'YES' box was checked on the EAS form, resulting in a preliminary analysis to determine whether further analyses were needed. In addition, all other CEQR categories checked "No" are presented below to demonstrate that the proposed action would not meet or exceed the CEQR threshold in these categories that would require further review and are not expected to result in significant adverse environmental impacts. For those technical sections, the relevant chapter of the *CEQR Technical Manual* was consulted for guidance on providing additional analyses (and supporting information was attached, if needed) to determine whether detailed analysis was needed.

A 'YES' answer was provided in the following technical analyses areas on the EAS Full Form:

1. Land Use, Zoning and Public Policy (Waterfront Revitalization Plan only)
2. Open Space
3. Historic and Cultural Resources
4. Natural Resources
5. Hazardous Materials
6. Transportation
7. Greenhouse Gas Emissions
8. Noise
9. Neighborhood Character
10. Construction Impacts

Project Description

The project site is located in Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay, in Staten Island. The Cedar Grove Beach is approximately 34 acres located south of Ebbitts Street (Block 4105 p/o Lot 50 and Block 4108 p/o Lot 45). Although a mapped city park since 1962, the configuration of the land and beach discouraged public use. The site contains a collection of approximately 42[1] one and one and one-half story seasonal beach bungalows that pre-date the park mapping, a clubhouse, barn, and five ancillary garage structures (49 total structures). The New York State Office of Parks Recreation and Historic Preservation (OPRHP) recently determined that the project area is eligible for listing on the State and National Registers of Historic Places (S/NR eligible).

[1]A July 7, 2010 OPRHP "Resource Evaluation" references "…38 primarily one-story frame cottages or bungalows…". However, NYCDPR site reconnaissance has indicated that there are approximately 42 such bungalows in the project area.

The proposed action involves the rehabilitation of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. As stated, the project site currently contains a number of structures, which had historically been used for seasonal summer occupancy by the Cedar Grove Beach Club. Pursuant to a written agreement between the New York City Department of Parks & recreation (NYCDPR) and the Cedar Grove Beach Club, all of the properties, including all the bungalows, were vacated by September 30, 2010. Some of these structures are anticipated to be adaptively reused, while others are proposed for demolition. The project is divided into two phases: Phase One includes demolition of a majority of the structures on site and adaptive reuse of other structures for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will also remove the foundation remains and debris on the beach off Ebbitts Street and Cedar Grove Court. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase One will also include repair of existing parking areas on site and minor rehabilitation of the existing pick up sport (softball/junior soccer) play area. Phase Two involves construction of a new playground and new bike path.

Land Use, Zoning and Public Policy

According to the *City Environmental Quality Review Technical Manual ("CEQR Technical Manual")*, a detailed assessment of land use, zoning, and public policy is appropriate if an action would be expected to result in a significant change in land use. In addition, a land use analysis characterizes the uses and development trends in the area that may be affected by a proposed action. The analysis also considers the action's compliance with and effect on the area's zoning and other applicable public policies. Even when there is little potential for an action to be inconsistent with or affect land use, zoning, or public policy, a description of these issues is usually appropriate to establish conditions and provide information for use in other technical areas. A detailed assessment of land use is appropriate if the action would result in a significant change in land use or would substantially affect zoning regulations or policies governing land use. Zoning is not applicable to lands under the jurisdiction of NYCDPR. Additionally, the type of land use is not changing, as the area is currently parkland and will remain parkland in the future. No significant adverse land use or zoning impacts are anticipated and further analysis of these areas is not warranted. The project, however, is located within the Waterfront Revitalization Program boundaries and, therefore, will be analyzed for consistency with New York City's Waterfront Revitalization Program (See attached New York City Waterfront Revitalization Program Consistency Assessment Form).

Socioeconomic Conditions

A socioeconomic assessment may be necessary if the proposed action is expected to create substantial socioeconomic changes that would not be expected to occur in the absence of the proposed action. Such socioeconomic changes include direct displacement of residential population, businesses, or employees; a new development that is markedly different from existing uses and activities within the neighborhood; an adverse effect on conditions in the real estate market in the area; or an adverse effect on the economic viability of a specific industry.

Following the methodologies in the *CEQR Technical Manual*, an initial screening analysis was performed to determine whether the proposed action would require a socioeconomic assessment. The initial screening indicates whether an action may be reasonably expected to create substantial socioeconomic changes. The *CEQR Technical Manual* identifies the following circumstances that would typically require a socioeconomic assessment:

- The proposed action would directly displace 200 residential units.
- The proposed action would directly displace 500 employees.
- The proposed action consists of residential development of 200 units or more.
- The proposed action consists of commercial development of 200,000 SF or more.
- The proposed action would adversely affect economic conditions in a specific industry.

The proposed action involves the rehabilitation of Cedar Grove Beach. It will involve demolition of fewer than 50 seasonally-used bungalows which were previously vacated and would not exceed any of the CEQR thresholds listed above. No significant adverse socioeconomic impacts are anticipated and further analysis is not warranted.

Community Facilities and Services

The demand for community facilities and services is directly related to the type and size of the new population generated by the proposed project. New residential developments tend to affect facilities such as public schools, libraries, and hospitals. According to the *CEQR Technical Manual*, a detailed community facilities analysis is conducted when a project would have a direct or indirect effect on a community facility. A direct effect would occur if a project would physically alter a community facility, whether by displacement of the facility or other physical change. The following are the CEQR preliminary thresholds for a community service assessment for potential indirect effects:

- If the project results in a collective utilization rate of the group child care/Head Start centers in the study area that is greater than 100 percent.
- If the project would result in a collective utilization rate of the elementary and/or intermediate schools in the study area that is equal to or greater than 105 percent.
- The project would affect libraries if the project would increase the study area population by 5 percent from the No-Action.
- If the project would affect the operation of health care facilities in the area.
- If the project would affect the operation of fire or police protection in the area.

The proposed project does not include a residential component and would not introduce or induce a new residential population in the area of the project site. The proposed project would not displace any existing community facilities in the project study area. Therefore, a detailed analysis of the effects of the proposed actions on community facilities is not warranted and no significant community facilities and services impacts are anticipated.

Open Space

According to CEQR, an analysis of open space is conducted to determine whether or not a proposed project would have a direct impact resulting from the elimination or alteration of open space and/or an indirect impact resulting from the overtaxing of available open space. Open space is defined as publicly or privately owned land that is publicly accessible and operates, functions, or is available for leisure, play, or sport, or set aside for the protection and/or enhancement of the natural environment.

The proposed project involves the rehabilitation of the Cedar Grove Beach and would allow the beach to be expanded and provide necessary active recreation areas and beach space along with enhancing the area's natural resources. As the proposed action would lead to the rehabilitation of the beach and surrounding area, no significant adverse impacts to open space resources are anticipated and no further assessment is considered warranted.

Nonetheless, because the project consists of altering a site with structures in a beach area to make it more accessible to the public, the DEIS will describe and disclose this in the Open Space chapter.

Shadows

According to the *CEQR Technical Manual*, a shadow is defined as the circumstance in which a building or other built structure blocks the sun from the land. An adverse shadow impact occurs when the shadow from a proposed project falls on a publicly accessible open space; historic landscape; or other historic resource if the features that make the resource significant depend on sunlight; or if the shadow falls on an important natural feature and adversely affects its use; and/or important landscaping and vegetation.

The proposed action would rehabilitate the Cedar Grove Beach in Staten Island. No new structures would be built as part of the proposed project and no new shadows would be created. No significant shadow impacts are expected as a result of the proposed action and no further assessment is warranted.

Historic and Cultural Resources

According to the *CEQR Technical Manual*, a historic resources assessment is required if there is the potential to affect a historic resource. Historic resources encompass districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archaeological importance.

These include designated New York City Landmarks, Interior Landmarks, Scenic Landmarks, and properties within designated New York City Historic Districts; properties calendared for consideration as one of the above by the New York City Landmarks Preservation Commission (LPC); properties listed on or formally determined eligible for inclusion on the State and/or National Register of Historic Places (S/NR), or contained within a district listed on or formally determined eligible for the S/NR; properties recommended by the New York State Board for listing on the S/NR; National Historic Landmarks; and properties not identified by one of the programs listed above, but that meet their eligibility requirements.

Historic resources include both architectural and archaeological resources. Actions that could affect archaeological resources and that typically require an assessment are those that involve above-ground construction resulting in ground disturbance or below-ground construction, such as excavation. Actions that trigger an architectural resources assessment include new construction, demolition, or significant alteration to any building, structure, or object; a change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; construction, including but not limited to, excavation, vibration, subsidence, dewatering, and the possibility of falling objects; additions to or significant removal, grading, or replanting of significant historic landscape features; screening or elimination of publicly accessible views; and the introduction of significant new shadows or significant lengthening of the duration of existing shadows over an historic landscape or on an historic structure with sunlight dependent features.

The project site is located in the State/National Register eligible "Cedar Grove Beach Club Historic District." The potential for a historic and cultural resources impact cannot be ruled out. Please refer to the attached Scope of Work for a targeted Environmental Impact Statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

Urban Design and Visual Resources

According to the *CEQR Technical Manual*, a detailed assessment of urban design and visual resources is undertaken when a proposed action would introduce a new building, a new building height, or result in any substantial physical alteration to the streetscape or public space in the vicinity of the proposed project that is not currently allowed by existing zoning, or would result in obstruction of publicly accessible views to visual resources that is not currently allowed by existing zoning.

The proposed action would rehabilitate the Cedar Grove Beach in Staten Island. No new development would occur as part of the proposed project. The proposed action would enhance access to Cedar Grove Beach and as a result enhance the public's access to the visual resources the beach area offers. No significant urban design and visual resources impacts are expected as a result of the proposed action and no further assessment is warranted.

Natural Resources

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 *CEQR Technical Manual* defines natural resources as water resources, including surface water bodies and

groundwater; wetland resources, including freshwater and tidal wetlands; upland resources, including beaches, dunes, and bluffs, thickets, grasslands, meadows and old fields, woodlands and forests, and gardens and other ornamental landscaping; and built resources, including piers and other waterfront structures.

The project site contains wetlands and is located in a wetland buffer and Coastal Erosion Hazard Area. There may be additional pavement created as part of the project; however, the overall objective is to rehabilitate the beach environment. The proposed action will involve the removal of structures and restoration of natural landscape and features. In addition, the Army Corps of Engineers has determined that since no dredging or construction would take place in a waterway, no Department of Army permit would be required for the project. Because the project site contains wetlands, is located in a wetland buffer area and Coastal Erosion Hazard Area, and consists of maritime beach, dune, shrubland, and wooded wetlands, the potential for the proposed action to generate significant adverse natural resources impacts cannot be ruled out. Please refer to the attached Scope of Work for a targeted environmental impact statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

Hazardous Materials

A hazardous material is any substance that poses a threat to human health or the environment. Substances that may be of concern include, but are not limited to, heavy metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), methane, polychlorinated biphenyls (PCBs), pesticides, dioxins, hazardous wastes, radiation sources, etc. For hazardous materials, the goal for CEQR is to determine whether the proposed project would increase the exposure of people or the environment to hazardous materials, and, if so, whether this increased exposure would result in potential significant public health or environmental impacts. If significant adverse impacts are identified, CEQR requires that the impacts be disclosed and mitigated or avoided to the greatest extent practicable.

Due to the age of the structures on the project site, the presence of lead and/or asbestos containing materials (ACM) is considered likely and lead an/or asbestos abatement work is anticipated to be necessary on all or most of the buildings on the sited. Thus, the potential for a hazardous materials impact cannot be ruled out. Please refer to the attached Scope of Work for a targeted environmental impact statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

Water and Sewer Infrastructure

For CEQR, the City's "infrastructure" comprises the physical systems supporting its population, including water supply, wastewater treatment and storm water management. Other infrastructure components are addressed separately under CEQR. Given the size of New York City's water supply system and the City's commitment to maintaining adequate water supply and pressures, few actions have the potential to cause significant impacts on this system. Typically, only project that exceed the following criteria require a detailed assessment:

- A project that results in water demand of more than one million gallons per day.
- A proposed project located in a combined sewer area and result in at least 1,000 residential units or 250,000 SF or more of commercial space in Manhattan or at least 400 residential units or 150,000 SF or more of commercial space in the Bronx, Brooklyn, Staten Island or Queens.
- A proposed project located in a separately sewered area.
- A proposed project that involves development on a site five acres or larger where the amount of impervious surface would increase.
- A proposed project that involves development on a site one acre or larger where the amount of impervious surface would increase and is located within the Jamaica Bay Watershed or in certain specific drainage areas including: Bronx River, Coney Island Creek, Flushing Bay and Creek, Gowanus Canal, Hutchinson River, Newtown Creek, or Westchester Creek.
- A proposed project that would be located in an area that is partially sewered or currently unsewered.
- A proposed project proposing an industrial facility or activity that would contribute industrial discharges to a WWTP and/or generate contaminated stormwater in a separate storm sewer system.
- A proposed project that involves construction of a new stormwater outfall that requires federal and/or state permits.

The proposed action involves the rehabilitation of an existing beach area and would not exceed any of the CEQR thresholds listed above. No significant adverse water and sewer infrastructure impacts are anticipated and further analysis is not warranted.

Solid Waste and Sanitation Services

The *CEQR Technical Manual* states that actions involving construction of housing or other development generally do not require an evaluation of solid waste impacts unless they are unusually large. Few projects have the potential to generate substantial amounts of solid waste (50 tons, or 100,000 pounds, per week or more) that would result in a significant adverse impact.

The proposed action would rehabilitate the Cedar Grove Beach in Staten Island. No new development would occur as part of the proposed project and the proposed project is not expected to generate substantial amounts of solid waste that would warrant a detailed assessment. No significant solid waste and sanitation services impacts are expected as a result of the proposed action and no further assessment is warranted.

Energy

A detailed assessment of potential energy impacts is limited to actions that could significantly affect the transmission or generation of energy or that generate substantial indirect consumption of energy (e.g. a new roadway that would lead to a significant increase in vehicle miles traveled). The proposed project would rehabilitee Great Kills Park and, therefore, it would not be expected

to create a significant adverse energy impact and no further assessment of energy impacts is warranted.

Transportation

According to the *CEQR Technical Manual*, if a proposed action is projected to result in more than 50 peak hour incremental vehicular trip ends, the potential for traffic impacts cannot be ruled out and a detailed traffic study is warranted. The proposed action is expected to generate more than 50 additional (net) vehicular trips in the project study area. Thus, the potential for the proposed action to generate significant adverse transportation impacts cannot be ruled out. Please refer to the attached Scope of Work for a targeted environmental impact statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

Air Quality

According to the *CEQR Technical Manual*, air quality may be affected by air pollutants produced from two main sources: mobile sources (e.g., motor vehicles); and stationary sources (e.g., fixed facilities).

Mobile Sources

As stated in the *CEQR Technical Manual*, projects may result in significant mobile source air quality impacts when they increase or cause a redistribution of traffic, create other mobile sources of pollutants (such as diesel trains, helicopters, etc.), or add new uses near mobile sources (roadways, garages, parking lots, etc.). A project may result in significant adverse air quality impacts from mobile sources and therefore require further analyses, if the project would generate peak hour auto traffic or divert existing peak hour traffic resulting in 170 or more auto trips in this area of Staten Island, or if a project would generate over posted thresholds of peak hour heavy-duty diesel vehicle traffic trips. The proposed project would rehabilitate Cedar Grove Beach and is not expected to exceed the air quality preliminary screening thresholds that would require a mobile source air quality analysis.

Stationary Sources

According to CEQR, projects may result in stationary source air quality impacts when they would create new stationary sources of pollutants (such as emission stacks for industrial plants other large institutional uses), introduce certain new uses near existing (or planned) emissions stacks that may affect the use, or introduce structures near such stacks so that the structures may change the dispersion of emissions from the stacks so that surrounding uses are affected. For projects that would use fossil fuels for heating/hot water, ventilation, and air conditioning systems, a screening analysis is required. The proposed project would rehabilitate Cedar Grove Beach and would not introduce any new structures. No significant impacts from air quality stationary sources would be expected from the proposed action.

No significant air quality impacts are expected as a result of the proposed action and no further assessment is warranted.

Greenhouse Gas Emissions

According to the *CEQR Technical Manual*, a greenhouse gas emissions assessment is warranted if a proposed project is a city capital project, a power plant, or would fundamentally change the city's solid waste management system. The proposed project would not be expected to create a significant adverse greenhouse gas emissions impact and no further assessment of greenhouse gas emissions is warranted.

Noise

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 or if an action is located near a heavily trafficked thoroughfare. A noise assessment would also be appropriate if the action would result in a playground or would 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, or if the action would be located in an area with high ambient noise levels resulting from stationary sources. For CEQR purposes, the principal types of noise sources that affect the environment are mobile and stationary sources.

Mobile Sources

Mobile sources are those noise sources (principally automobiles, buses, trucks, aircraft, and trains) that move in relation to a noise-sensitive receptor (such as a residence). Each source has its own distinctive noise character, and, consequently, an associated set of noise assessment descriptors. The proposed action is not expected to result in impacts or require assessment pertaining to aircraft or train noise.

According to CEQR guidelines, a project would typically need to double the traffic on adjacent streets in order to produce an audible change in noise levels and potentially create a significant adverse mobile source noise impact. It is unlikely that the traffic on adjacent streets would double and no mobile source impacts are expected.

Stationary Sources

Stationary sources of noise do not move in relation to a noise-sensitive receptor. Typical stationary noise sources of concern for CEQR include machinery or mechanical equipment associated with industrial and manufacturing operations, or building heating, ventilating, and air-conditioning (HVAC) systems. According to CEQR, a detailed analysis of stationary sources may be appropriate if the proposed project would cause a substantial stationary source (i.e. unenclosed mechanical equipment for manufacturing or building

ventilation purposes, a playground, etc.) to be operating within 1,500 feet of a receptor with a direct line of sight to that receptor, or introduce a receptor in an area with high ambient noise levels resulting from existing stationary sources, such as unenclosed manufacturing activities or other loud uses. The proposed project would not be within 1,500 feet of a sensitive receptor and no stationary source noise impacts are expected.

No significant noise impacts are expected as a result of the proposed action and no further assessment is warranted.

Neighborhood Character

Neighborhood character is an amalgam of various elements that give neighborhoods their distinct "personality." These elements may include a neighborhood's land use, zoning, public policy; socioeconomic conditions, open space, historic and cultural resources, urban design and visual resources, shadows, transportation, or noise. In a neighborhood character assessment under CEQR, the assessment considers how elements of the environment combine to create the context and feeling of a neighborhood, and how a project may affect that context and feeling. An assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in any of the technical areas presented above, or when the project may have moderate effects on several of the elements that define a neighborhood's character.

The Cedar Grove Beach Club Historic District area has a distinct character that has been cited in support of its preservation. Thus, the potential for the proposed action to generate significant adverse neighborhood character impacts cannot be ruled out. Please refer to the attached Scope of Work for a targeted environmental impact statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

Public Health

Public health is the organized effort to protect and improve the health and well-being of the population through monitoring; assessment and surveillance; health promotion; prevention of disease, injury, disorder, disability and premature death; and reducing inequalities in health status. The goal of CEQR with respect to public health is to determine whether adverse impacts on public health may occur as a result of a proposed project, and if so, to identify measures to mitigate such effects. For most proposed projects, a public health analysis is not necessary. Where no significant unmitigated adverse impact is found in other CEQR analysis areas (such as air quality, water quality, hazardous materials, or noise), no public health analysis is warranted.

The proposed project would rehabilitate Great Kills Park/Cedar Grove Beach and it is unlikely that the proposed action would result in significant adverse environmental impacts that would affect public health. No significant public health impacts are expected as a result of the proposed action and no further assessment is warranted.

Construction Impacts

As per the *CEQR Technical Manual*, construction-related impacts are typically analyzed to determine any disruptive or noticeable effects arising during a project's construction. Construction analyses for most projects typically include an assessment of traffic related impacts, air quality and noise. In the case of the proposed action, because soils would be disturbed during demolition and the site has been found to have the potential to contain hazardous materials possible construction impacts due to contamination cannot be ruled out. Furthermore the project site is State/National Register-eligible as the Cedar Grove Beach Club Historic District. Thus, the potential for construction impacts cannot be ruled out. Please refer to the attached Scope of Work for a targeted environmental impact statement for the proposed Great Kills Park/Cedar Grove Beach Rehabilitation.

For Internal Use Only:	WRP no.
Date Received:	DOS no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the *New York City Waterfront Revitalization Program (WRP)*. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A. APPLICANT

1. Name: City of New York Department of Parks & Recreation (NYCDPR)
2. Address: The Arsenal - Central Park, 830 5th Avenue, NY NY 10065
3. Telephone: 212-360-3402 Fax: 212-360-3453 E-mail: joshua.laird@parks.nyc.gov
4. Project site owner: NYCDPR

B. PROPOSED ACTIVITY

1. Brief description of activity:

   Under the proposed project, the majority of the existing structures on site vacant as of September 30, 2010, would be demolished so that Cedar Grove Beach can be properly restored and used more appropriately as public parkland, while others would be set aside and rehabilitated for public and ancillary park use.

2. Purpose of activity:

   The proposed action involves the rehabilitation of Cedar Grove Beach, with the main goal being to provide improved access to this area for the general public. The project is divided into two phases: Phase one includes demolition of a majority of the structures on site and adaptive reuse of other structures to be later reused for park related purposes. This work will include the shutdown and capping of utilities and removal of in-ground and/or above ground oil tanks as necessary, as well as abatement of any hazardous materials found pursuant to all applicable local, state and federal regulations. NYCDPR will also remove the remains of foundation remains and debris on the beach off Ebbitts Street and Cedar Grove Court. NYCDPR will restore the demolition sites with beach grass and other native plantings. Phase one will also include repair of existing parking areas on site and minor rehabilitation of the existing pick up sport (softball/junior soccer) play area. Phase two will involve construction of a new playground and new bike path.

3. Location of activity: (street address/borough or site description):

   The project is located in Great Kills Park, a 307 acre park, which extends from Miller Field to Great Kills Gateway National Recreation Area, along Lower New York Bay. The project area is in the Cedar Grove Beach section south of Ebbitts Avenue.

Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:
   - NYSDEC Freshwater and/or Tidal Wetlands Permit
   - NYSDEC Coastal Erosion Hazard Areas Approval
   - NYSDEC State Pollution Discharge Elimination System (SPDES) permit for stormwater discharges associated with construction activities.
   - OPRHP approval due to potential S/NR eligibility

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

   NO

6. Will the proposed project require the preparation of an environmental impact statement?
   Yes ✔ No _____ If yes, identify Lead Agency:

   NYC Department of Parks & Recreation

7. Identify **city** discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.

   See the prepared EAS

C. COASTAL ASSESSMENT

Location Questions:	**Yes**	**No**
1. Is the project site on the waterfront or at the water's edge?	✔	
2. Does the proposed project require a waterfront site?	✔	
3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?	✔	

Policy Questions	**Yes**	**No**

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)	✔	
5. Is the project site appropriate for residential or commercial redevelopment? (1.1)		✔
6. Will the action result in a change in scale or character of a neighborhood? (1.2)		✔

Policy Questions cont'd	Yes	No
7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)	✔	
8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)	✔	
9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		✔
10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		✔
11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		✔
12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		✔
13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		✔
14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)	✔	
15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		✔
16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		✔
17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)		✔
18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		✔
19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		✔
20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)	✔	
21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)	✔	
22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		✔
23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)		✔
24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		✔
25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		✔
26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		✔
27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		✔
28. Would the action cause violations of the National or State air quality standards? (5.2)		✔

Policy Questions cont'd	Yes	No
29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		✔
30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		✔
31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		✔
32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)	✔	
33. Would the action result in any construction activities that would lead to erosion? (6)		✔
34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)		✔
35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)	✔	
36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)	✔	
37. Would the proposed project affect a non-renewable source of sand ? (6.3)		✔
38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)	✔	
39. Would the action affect any sites that have been used as landfills? (7.1)		✔
40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)	✔	
41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)	✔	
42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		✔
43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)	✔	
44. Would the action result in the provision of open space without provision for its maintenance? (8.1)		✔
45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)		✔
46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		✔
47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)	✔	
48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)	✔	
49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)	✔	
50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)	✔	

Policy Questions cont'd	Yes	No
51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)	✔	
52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)		✔

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

Applicant/Agent Name: Joshua Laird, Assistant Commissioner, NYCDPR

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Applicant/Agent Signature: Date: 2/10/11

About AECOM
AECOM (NYSE: ACM) is a global provider of professional technical and management support services to a broad range of markets, including transportation, facilities, environmental and energy. With more than 40,000 employees around the world, AECOM is a leader in all of the key markets that it serves. AECOM provides a blend of global reach, local knowledge, innovation, and technical excellence in delivering solutions that enhance and sustain the world's built, natural, and social environments.

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