

APPENDIX A

**DGEIS FINAL SCOPE OF WORK AND REASONABLE WORST CASE
DEVELOPMENT SCENARIO**

Fresh Kills Park

Final Scope of Work to Prepare a Generic Environmental Impact Statement

A. INTRODUCTION

This is the Final Scope of Work for the proposed Fresh Kills Park Draft Generic Environmental Impact Statement (DGEIS). This Final Scope of Work has been prepared to provide the public, community representatives, and the involved and interested agencies that will review the Park plan with an opportunity to comment on the technical areas to be studied in the DGEIS, and the methodologies to be used in examining the potential for environmental impacts associated with the proposed park as illustrated in the Fresh Kills Park Draft Master Plan (the DMP, or the Plan). The DGEIS for Fresh Kills Park will be prepared in conformance with all applicable laws and regulations, including New York City Environmental Quality Review (CEQR), Executive Order No. 91 of 1977, Article 8 of the Environmental Conservation Law and State Environmental Quality Review Act (SEQRA) regulations (N.Y.C.R.R. Part 617), and the National Environmental Policy Act (NEPA). Preparation of the DGEIS will follow the guidance of the *CEQR Technical Manual* (October 2001).

The City of New York, led by the New York City Department of City Planning (DCP), conducted a master planning process for the redevelopment of the Fresh Kills Landfill that will guide the site's transformation to public parkland over the next 30 years. As a product of this extensive planning and community participation process, DCP, in collaboration with other City agencies, has prepared an illustrative DMP for the Fresh Kills Park project. That Plan is summarized in this scope of work and will be described in detail in the "Project Description" chapter of the DGEIS.

As described in greater detail below, a number of discretionary approvals are required from various City, state, and federal agencies in order to develop Fresh Kills Park. Because one of the principal actions is to map the site as a park, the New York City Department of Parks and Recreation (DPR), which will have primary responsibility for developing the park, will be the lead agency in this environmental review process. Since this park proposal also requires a number of critical discretionary approvals from state and federal agencies, among them the New York State Department of Environmental Conservation (DEC) and the U.S. Army Corps of Engineers (ACOE), it is intended that the DGEIS address the environmental issues and concerns of these agencies in this scope of work through a coordinated environmental review. DPR, as lead agency, will facilitate and manage this coordinated review.

A scoping meeting was held to provide the public and all interested and involved agencies with the opportunity to comment on this "Draft Scope of Work to prepare a GEIS." That public scoping meeting was held from 6:30 PM to 9:30 PM on May 24, 2006, at P.S. 58, 77 Marsh Avenue, Staten Island, New York. Subsequent to the scoping meeting, written comments were accepted by the lead agency through June 19, 2006.

B. PROJECT DESCRIPTION

PROJECT SITE

The project site is located on the Arthur Kill waterfront of Staten Island (see Figure 1). Approximately 995 acres, or 45 percent of the 2,200-acre Fresh Kills Landfill Complex, lie within the boundaries of four landfill mounds that range in height from 90 to 225 feet above sea level (see Figure 2). By the closing of the Fresh Kills sanitary landfill in 2001, two mounds (3/4 and 2/8) had closure construction completed, while closure operations for the two remaining mounds are currently ongoing. The status of the four landfill mounds is as follows:

- North Mound (3/4), closure construction is complete;
- South Mound (2/8), closure construction is complete;
- East Mound (6/7), undergoing final closure; and
- West Mound (1/9), undergoing final closure.

The site and immediate vicinity have an extensive infrastructure system that is managed by the New York City Department of Sanitation (DSNY). This includes piping to collect landfill gas and leachate, a leachate treatment plant, Landfill Gas Recovery Facility accessory buildings and parking, detention ponds, bridges and roads, and a significant stretch of bulkheaded waterfront, where much of the solid waste arrived by barge during landfill operations. Because these facilities would remain within the jurisdiction of DSNY and cannot be made publicly accessible for reasons of safety and security, certain of these areas would not be included within the proposed park mapping¹ (see the discussion below under “Proposed Actions”). Among the DSNY facilities currently at the Fresh Kills site that are to remain operational and outside the park mapping area are the:

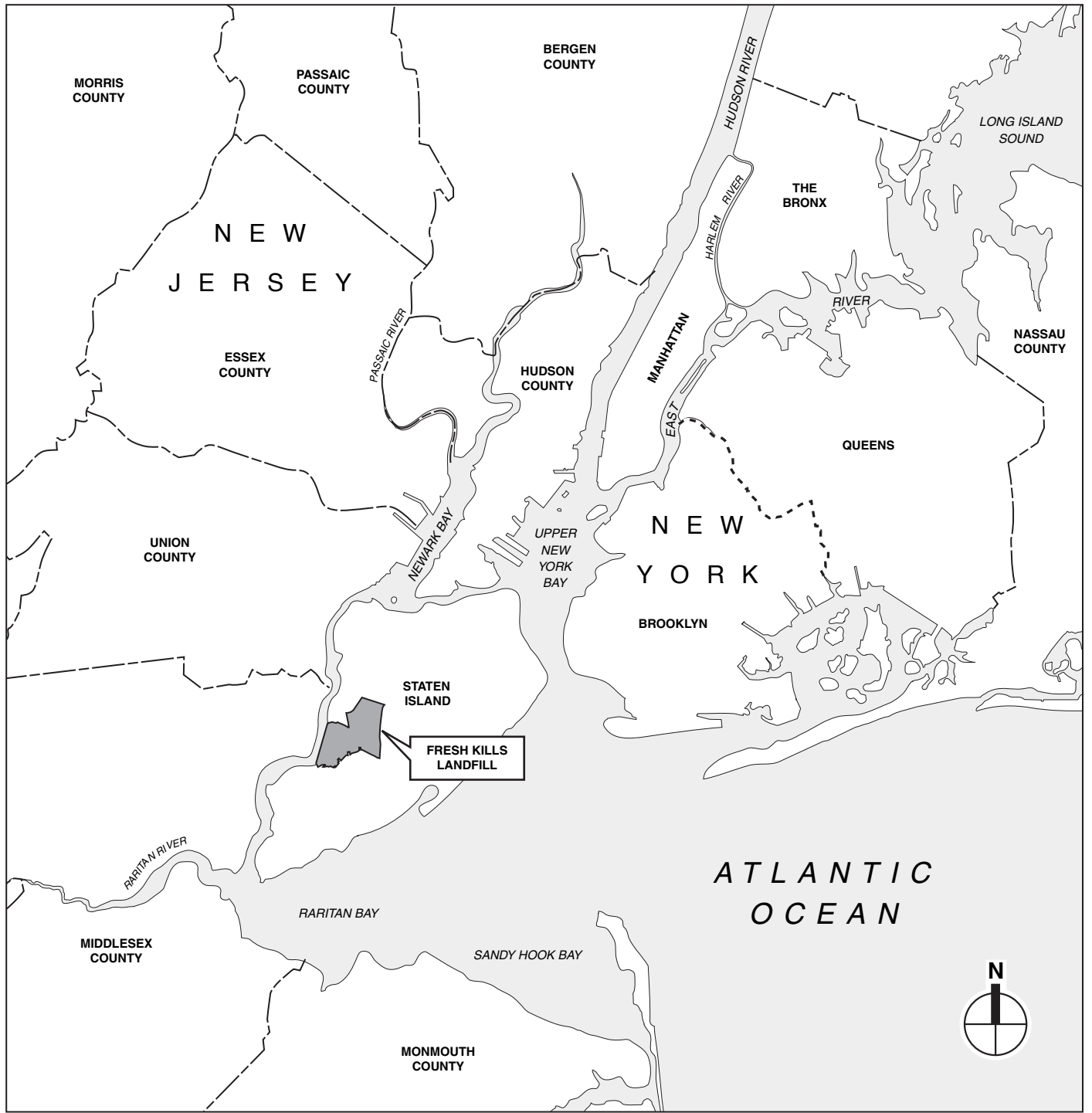
- Waste transfer station;
- Landfill gas and leachate treatment plants;
- District 2 and 3 garages;
- Borough repair shop;
- Composting facility; and
- Crushing and screening facility.

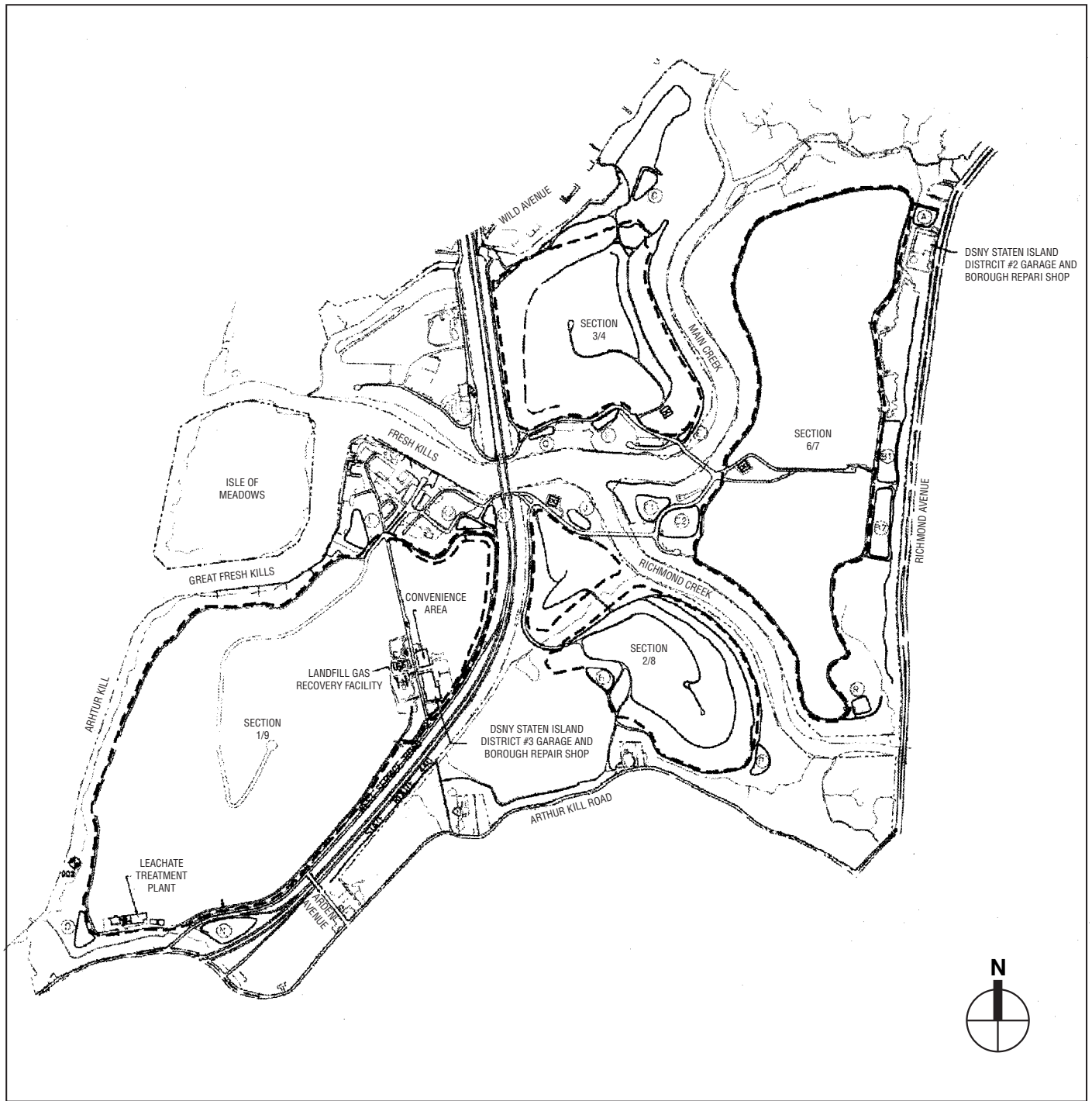
The project site also does not include the corridor for the West Shore Expressway, which is under the jurisdiction of the New York State Department of Transportation (NYSDOT).

In addition to the landfill and its associated infrastructure, the site has approximately 700 acres that are unconstructed land, including natural areas with tidal and freshwater marshes and open water. The creeks and wetlands of Fresh Kills include Fresh Kills Creek, which runs through the site; Richmond Creek, a tributary to the south; and Main Creek, a tributary to the north. Approximately 210 acres of the site are open water and 360 acres are designated wetlands.

A portion of the project area includes the William T. Davis Wildlife Refuge (also referred to as Fresh Kills Park), which is located at the headwaters of Main Creek. The project area also includes the Isle of Meadows. The Plan proposes no programmed activities on the island, which will continue to be used as a bird sanctuary/natural area.

¹ Certain proposed roadways may also be excluded from the park mapping, as they may be mapped as City streets.





----- Solid Waste Management Unit Area

As stated above, the West Shore Expressway (Route 440) essentially bisects the site. The West Shore Expressway is under the jurisdiction of NYSDOT. The eastern boundary of the site is formed by Richmond Avenue, which is a City street under the jurisdiction of the New York City Department of Transportation (NYCDOT). Travis Avenue and Victory Boulevard Extension form the northern boundary of the site. The western boundary is the Arthur Kill (see Figure 3).

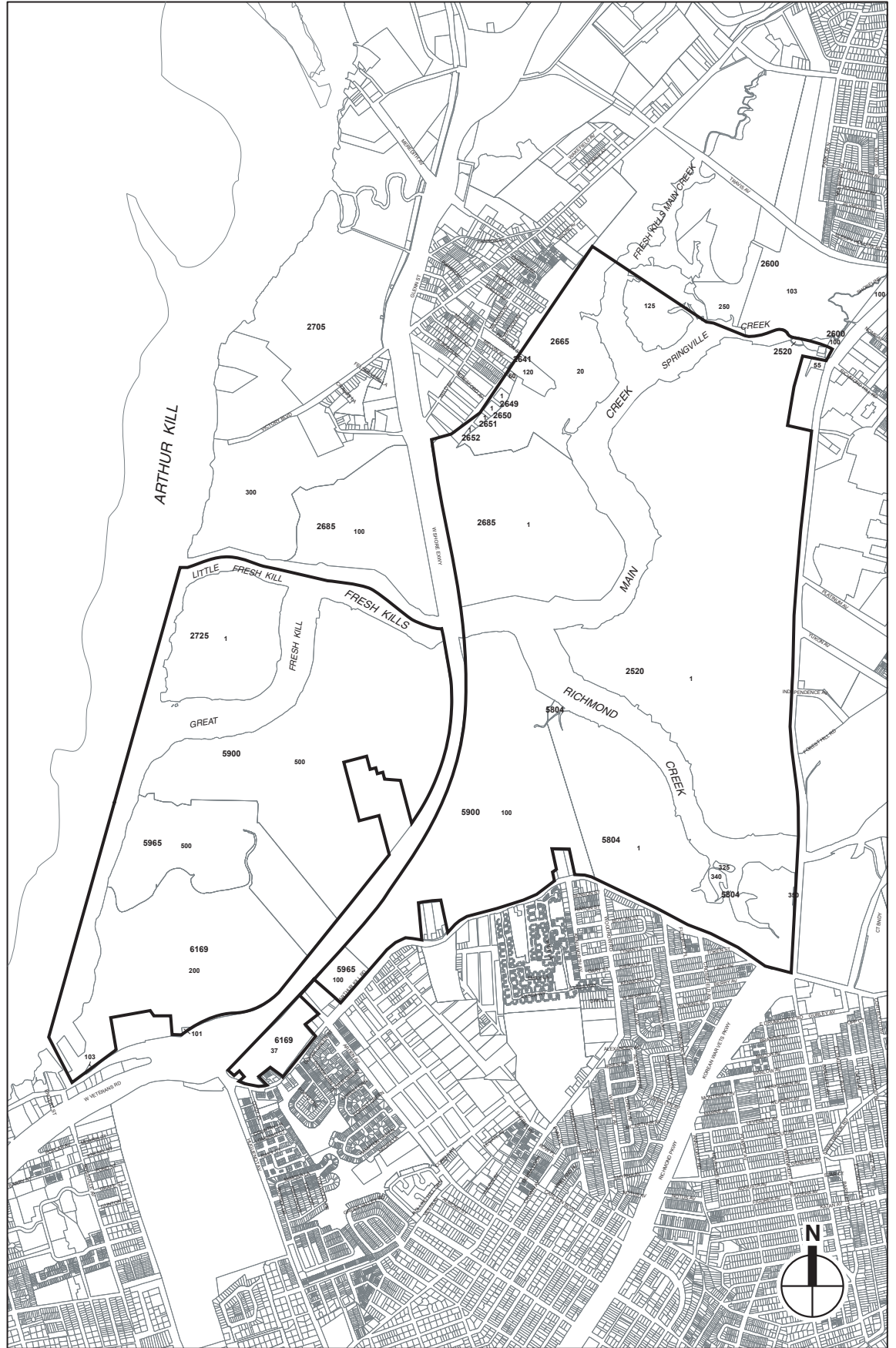
BACKGROUND AND SITE HISTORY

The Fresh Kills site in its natural state was primarily tidal creeks and coastal marsh. In 1948, to address its increasing solid waste disposal needs, the City of New York opened the Fresh Kills Landfill as part of a network of City landfills and related land reclamation projects. Over time, Fresh Kills became the largest landfill in the world, and was the principal landfill for household garbage collected in New York City. At its peak of operation, Fresh Kills received as much as 29,000 tons of trash per day. While the City had a number of operating landfills in the latter half of the 20th century, many were closed as new landfill and environmental regulations came into effect. By 1991, Fresh Kills was New York City's only operating landfill receiving residential garbage. Despite containment provided by natural clay beneath the site, the landfill lacked a liner. The Fresh Kills Landfill, which lacked a State permit and operated under a Consent Order, was required by a 1996 State law to close by December 31, 2001, and it received the last barge of garbage on March 22, 2001. Landfill closure subsequently moved forward pursuant to a DEC-approved Closure Plan and consent order. After the World Trade Center attack of September 11, 2001, the consent order closing the landfill was amended by the Governor to suspend the City's obligation to cease the acceptance of solid waste material at Fresh Kills so that the landfill could handle materials from the World Trade Center site. No other materials were brought to Fresh Kills during this temporary suspension of the closure.

Today, much of the site is a highly engineered complex of man-made infrastructure and artificial landscape. The disturbance to natural ecosystems and the effect of 50 years of landfilling has been significant, and much of the landfill area only supports simple, homogenous ecologies. However, despite these conditions, Fresh Kills retains many ecological assets, including hundreds of acres of salt marsh and a significant network of tidal creeks. Moreover, the proximity to the Staten Island Greenbelt and the William T. Davis Wildlife Refuge offers a rich mix of species with the potential to migrate into Fresh Kills. These adjacent open spaces also create significant opportunities for open space linkages. For these reasons, the creeks and wetland habitats of Fresh Kills have been designated a Significant Coastal Fish and Wildlife Habitat by New York State Department of State.

PURPOSE AND NEED

Closure of Fresh Kills Landfill created the opportunity to transform much of its 2,200 acres containing landfill mounds, wetlands, and creeks into a unique public space. Similar reclamation park projects have been created at a number of locations in the region (e.g., Port Washington Landfill in North Hempstead, New York; Norman J. Levy Park in Merrick, New York), across the country (Shoreline Regional Park in Mountain View, California; Millennium Park in Boston, Massachusetts; Dyer Boulevard Park in West Palm Beach, Florida) and internationally (Nanji Island Park, Seoul, Korea). The transformation of the Fresh Kills Landfill into a public park marks a commitment by the City to create a large new open space for the its residents, along with significant cultural, recreational, and environmental amenities. The proposed new park would create significant wildlife habitat; provide hundreds of acres of land for active and passive recreation; and improve local open space connectivity through new park drives and access points that would connect with existing adjoining parks (e.g., the William T. Davis Wildlife Refuge to the north and LaTourette Park in the Staten Island Greenbelt to the east). Moreover, this proposed park would showcase state-of-the-art environmental reclamation techniques alongside the innovative design of park



 Fresh Kills Proposed Parkland

0 1800 FEET
SCALE

spaces. In sum, the Fresh Kills Park proposal would provide a much-needed and unique public open space for residents of the City and State of New York, and the region as a whole.

PROPOSED PARK PLAN

ILLUSTRATIVE PLAN FOR ANALYSIS

As stated above, the City of New York, led by DCP, conducted a master planning process for the Fresh Kills Landfill that has resulted in a DMP and an Illustrative Park Plan. This Plan and the accompanying reasonable worst-case development scenario (RWCDS), provided as Attachment A to this scope of work, will serve as the basis for the impact analyses to be conducted in the DGEIS. For the purposes of developing the RWCDS, the proposed land uses and activities described in the DMP are considered illustrative categories of park uses. To allow flexibility over the estimated 30 years of the Plan's implementation, the RWCDS accounts more generally for the types of habitat and recreational activities that could be implemented at the proposed Fresh Kills Park. These habitats and activities could vary from those currently presented in the DMP, given the potential for long-term changes in community or Citywide recreational needs, or innovations in landscape design, or storm water management techniques, for example. Therefore, the uses and activities proposed in the DMP have been grouped into illustrative park-element categories of uses and activities (see Figures 4a and 4b). These groupings of park activities and uses are expected to result in similar environmental impacts, thereby allowing for a range of potential future uses and activities that would have similar impacts. (The element categories are described in great detail in Attachment A, where Table A-1 provides representative features and activities for each element category and Table A-2 shows how each park use described the DMP fits within one such element category. Additional uses that are not currently described in the DMP, but which are similar in nature, are also noted in those tables). It is assumed that in drafting the Final Master Plan, as well as during park final design and development, uses or activities of equal or less intensity that fit into these element categories could be substituted without triggering the need for additional or supplemental environmental review. These activities may be incorporated to final design through input from the public, reviewing agencies, and the design team during Project implementation.







A description of the planning process and proposed Illustrative Park Plan are provided below.

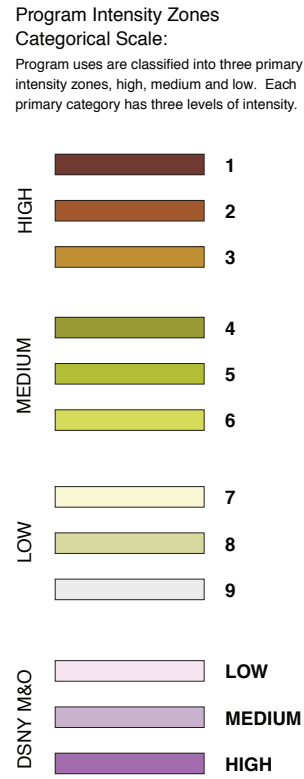
PLAN OVERVIEW

The DMP for the proposed Fresh Kills Park is based on the theme of “lifescape, a new park for New York City.” Lifescape can be defined by three functional layers: program, habitat, and circulation. A diversity of cultural, athletic, and educational programming is planned for the site, as well as an ecological restoration composed of reclaimed wetlands, grasslands, and woodlands that would offer wildlife habitat as well as natural open spaces for park visitors. A park roadway, as well as a secondary road and a series of foot, bicycle, and equestrian paths would allow various transport modes throughout the site. The Fresh Kills Park is intended to be a world-class park with a wide range of public spaces and facilities for social, cultural, and physical activity, for learning and recreation. The site is large enough to support many sports and programs that are unusual in the City. The completion of Fresh Kills Park will create a substantial amount of new parkland and a significant addition to the City park system.

The total Fresh Kills area is approximately 2,200 acres, of which 1,785 acres fall within five designated planning areas (see Figure 5): the Confluence (100 acres), which comprised primarily two main programmatic areas—the Point (50 acres) and Creek Landing (20 acres)—North Park (233 acres), South Park (425 acres), East Park (482 acres), and West Park (545 acres). Acreage within Fresh Kills, but outside the planning areas, includes: the open water and creeks (estimated at 210 acres); the site of the

FRESH KILLS PARK, MASTER PLAN REASONABLE WORST CASE DEVELOPMENT SCENARIO PROGRAM INTENSITY ZONES

- 1**  **Active Recreational-Indoor**
Active recreational uses that occur indoors and would require the construction of buildings.
Ancillary Facilities
Structures that are ancillary to park operations.
Commercial/Concession
Commercial or retail uses requiring the construction of buildings.
Energy/Infrastructure
Uses that could be created on the site to produce energy to offset envisioned energy needs for the park site or to provide a source of energy for sale for revenue generation.
Parking
Public parking, assumed to be constructed using semi-porous surfaces.
Public
Visitors centers/informational kiosks for way finding and educational uses.
 - 2**  **Active Recreational-Constructed Surface**
Active recreational uses that occur outdoors on constructed surfaces. No structured seating for visitors assumed. No accessory buildings required.
Event Space
Entertainment uses that could occur on permeable or semi-permeable surfaces. No accessory buildings required.
Transportation
New roadways and bridges, and roadways and bridges to be improved.
 - 3**  **Water Recreation and Access**
Water-related active recreational uses. Assumed to require the construction of new in-water structures such as piers, docks, and overlooks.
 - 4**  **Active Recreational-Field Sports**
Active recreational uses that occur outdoors and require the construction of playing fields. Playing fields are assumed to be permeable. Structured seating for visitors assumed.
 - 5**  **Passive Recreation**
Passive recreational uses that occur outdoors on permeable surfaces. Related structures include decks and piers.
Cultural
Uses with a cultural or educational component. This category includes uses that could occur on permeable surfaces (e.g., open fields), as well as uses that could require the construction of buildings.
 - 6**  **Linear Recreation**
Active recreational uses that occur outdoors and would be limited in area to linear, paved paths.
 - 7**  **Habitat with People**
New habitat to be created, or existing habitat to be enhanced, which includes the potential for use by the public. Related structures include boardwalks, decks, and [paved or unpaved] trails. No accessory buildings.
 - 8**  **Art Feature**
Constructed elements that are not related to a defined use but are aesthetically interesting. Not assumed to generate auto, transit, or pedestrian trips.
 - 9**  **Habitat without People**
New habitat to be created, or existing habitat to be enhanced, which would not have the potential for public use. In some cases these areas would be fenced off or otherwise made inaccessible. Habitat would be protected and left undisturbed. No accessory buildings.
 - 10**  **DSNY Maintenance and Operations - Municipal Services**
Services related to ongoing DSNY operations at the Fresh Kills site. Assumed as part of the baseline condition and not to generate new traffic or impacts.
-  **Parkland Boundary**

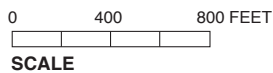


NOTE: For further detail regarding intensity type programming categories and their respective representative features please refer to Table One and Table Two of the Reasonable Worst Case Development Scenario Technical Memo
Prepared for New York City Department of City Planning by field operations 03/20/06




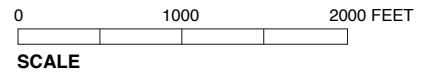
THE POINT

- 1 ferry landing; 6,000 sf
- 2 fishing pier; 4,900 sf
- 3 barge gardens; 43,500 sf
- 4 restaurant row (3 restaurants); 20,000 sf
- 5 marina for small boats; 2 acres
- 6 boat launch; 6,750 sf
- 7 parking bosque; 5 acres
- 8 waterfront promenade; 37,300 sf
- 9 pier overlook; 3,500 sf
- 10 exhibition hall; 8,590 sf
- 11 fishing + family picnic pier; 4,100 sf
- 12 restored wetland; 3 acres
- 13 banquet hall + maintenance facilities; 13,750 sf
- 14 art and community center; 2 acres
- 15 swamp forest exhibit basin; 2 acres
- 16 multi-use sports fields; 14 acres
- 17 bleacher seating; 25,500 sf
- 18 amphitheater (2,000 seats); 50,000 sf
- 19 event lawn; 10 acres
- 20 discovery center; n/a
- 21 landfill machine row; 9,000 sf
- 22 signature bridge; 0.35 miles
- 23 market roof; 32,700 sf
- 24 light towers / media field posts
- 25 park administration center and maintenance building; n/a





 DSNY Facility (or lands outside of proposed project)



new DSNY transfer station, rock crushing plan, and composting operation (85 acres), and other DSNY facilities, such as two district garages, the leachate treatment plant, and the landfill gas recovery plant, which are outside the scope of this assessment and were previously analyzed by DSNY; areas of the site for which no programmatic changes are proposed (e.g., the Isle of Meadows, 100 acres); and the West Shore Expressway right-of-way (25 acres). The North Park, South Park, East Park, and West Park project areas include lands within the boundary of a solid waste management area defined by the Fresh Kills Landfill closure plan. These landfill mounds (named North Mound 3/4, South Mound 2/8, East Mound 6/7, and West Mound 1/9) are either already closed or currently undergoing closure. The Point and Creek Landing planning areas are outside the landfill mound.

The planning objectives for the DMP's five planning areas are summarized below.

The Confluence

The Confluence is the area at the center of the site defined by the meeting of the creeks and their flow toward the Isle of Meadows and Arthur Kill. With a loop road providing access to all four park areas, the Confluence is the main zone of orientation for the entire site. Major markers, such as the existing flare stations that bound this area, a “signature” bridge and the large earthwork “sunken forest,” define this space; the Confluence would orient users of the park. Although there are smaller local access points in each of the park areas, this central area would act as the dominant ingress and egress point to the park and be the center for most of the major event-oriented activities anticipated for the park. The Confluence also represents the most intensively used and designed area of the site—the core where most visitors would park before walking into the larger, quieter natural landscape and habitat. These are the sites where larger parking areas, visitor and information centers, restaurants and event spaces would occur, as well as park landscapes for a range of flexible uses.

The Confluence links all four park planning areas, providing access to all four mounds, but concentrates its major development into two specific locations, the Creek Landing and the Point. These are the large, flat, paved, bulkheaded landings once used for barge deliveries to the site. Although use of these areas is considerably less than when Fresh Kills was an active landfill, these areas still contain the operations necessary for continued mound closure operations and post-closure maintenance and monitoring. However, given their topography—the clearly delineated and regulated boundaries of the mounds and the water—these areas are perfect for the programming of large-scale active public park activities. In addition to these two main areas, the Terrace and the Marsh and Sunken Forest are envisioned as special, bucolic areas, more representative of the preserve nature of much of the park. These areas, also accessible along the central loop, provide exciting opportunities for new habitat that is easily accessible to the public.

The 50-acre Point is a large, level waterfront area that would contain sports fields, event spaces, lawns, art works, and commercial facilities serving park users (e.g., restaurants). The Point is planned as the largest concentration of destination programs in Fresh Kills Park. The area is accessible to and visible from the West Shore Expressway, and would serve as a gateway destination marked by a signature bridge crossing Main Creek. The location is optimal for iconic, waterfront programs and cultural and commercial uses that depend on visibility and proximity to other amenities and structures with large footprints and ample parking areas. The Point is the preferred location for the development of the main park administrative center, a visible structure intended to house the main park functions, but also intended to encourage active community participation in the stewardship and development of the park. The Point offers opportunities to accommodate active recreation programs and multi-use sports facilities and fields with the ability to host athletic events. It could be an active area in daytime and evening, highlighted by media light posts and projection screens. In short, it is a primary location for the gathering of groups for large-scale events and major active recreational, cultural, and commercial uses serving park users.

Fresh Kills Park

Creek Landing is at the heart of the site, at the confluence of the two creeks. It is planned as a concentration of waterfront and cultural activities on the northern side of the loop drive and it would be a key location for access to and interaction with the waterfront, a programming goal of particular importance to Fresh Kills Park stakeholders. Smaller than the Point, the Creek Landing is scaled and oriented primarily toward family and community use, with an emphasis on ecological, educational and participatory water-related programs. The Creek Landing would be the likely base of operations for a family's day trip, which might include a bike ride in the North Park, lunch at one of the waterfront restaurants, a stop at the visitor center or exploration of the creeks in a rented kayak.

This 20-acre area is designed to emphasize waterfront facilities, including a waterfront esplanade, canoe and boat launch, a restaurant, a visitor center, a restored wetland exhibit with boardwalk, fishing piers and overlooks, and a huge event lawn for gatherings, picnics, and sunbathing. It can also be used as a viewing area for fireworks and festivals.

East Park

East Park is characterized by large, vegetated spaces with spectacular views and is the main area for vehicular access into and around the park. East Park is the area closest to Richmond Avenue. East Park is intended to be primarily a habitat restoration area with created and improved wetlands as well as lowland forest. The man-made berm and ponds on the east side of the east mound represent an opportunity for new habitat as well as hiking and walking trails, with an area for parking off of Richmond Avenue to expand access opportunities into the park. Along the sides and on top of the former landfill mound, new habitat and forest areas would be created, with large meadows and open areas on top, and, potentially, a golf course.

A major component of the East Mound are the two critical roadway connections that would traverse the mound. These roads would have a significant impact upon the ultimate placement of entry connections, bicycle and pedestrian routes, maintenance roads and mound-top programming. The alignments would be determined as part of this environmental impact review process.

North Park

North Park is characterized by simple, vast natural settings, meadows, wetlands, and creeks. North Park is envisioned as a lightly programmed natural area connecting with the Travis neighborhood park. This 233-acre area is bordered by the West Shore Expressway and the Travis neighborhood to the west, the William T. Davis Wildlife Refuge and Main Creek to the north and east, and the loop drive to the south. North Park vehicular access and parking is provided from both the Travis neighborhood entrance to the north for localized access and through a much larger central parking area at Creek Landing at the southern end. This sector of the park is primarily planned as a natural area that would extend the rich habitat provided by the adjacent Refuge, improve a degraded edge of the Refuge, and capitalize on one of the quietest and most sheltered areas at Fresh Kills. The proposed character is also responsive to community input suggesting that this area be programmed primarily for wildlife and passive recreation.

South Park

South Park is characterized by large natural settings and active recreational spaces, including soccer fields, an equestrian facility, a mountain biking venue and a neighborhood park. South Park is unique in that it is a zone that contains both ample flat, non-wetland space for active recreational programming and a large area of natural woodland, encompassing, in addition to the 140-acre South Mound, 155 acres of dry lowland and 50 acres of wetland. To take advantage of the size of the flat, dry lowland and its proximity to major roadway destinations, the sector is planned as a major concentration of active

recreation opportunities. Major recreational programming is concentrated in a 38-acre strip in the lowland that lies between Arthur Kill Road and the West Shore Expressway.

Special programs intended for this area include tennis courts, sized to allow for programming of major United States Tennis Association (USTA) events not available elsewhere in Staten Island; a special mountain bike venue in response to public interest and to the fact that none exist at this scale anywhere in the New York metropolitan area; an indoor aquatic and/or track and field facility, which the public has expressed a strong need for; and an equestrian center with stables, show ring, and bridle trails. One of the first projects in the redevelopment of Fresh Kills will be the construction of the Owl Hollow soccer fields, which is currently undergoing a separate environmental review. Although proceeding in advance of the larger Fresh Kills project, the Owl Hollow component will also be included in this GEIS.

West Park

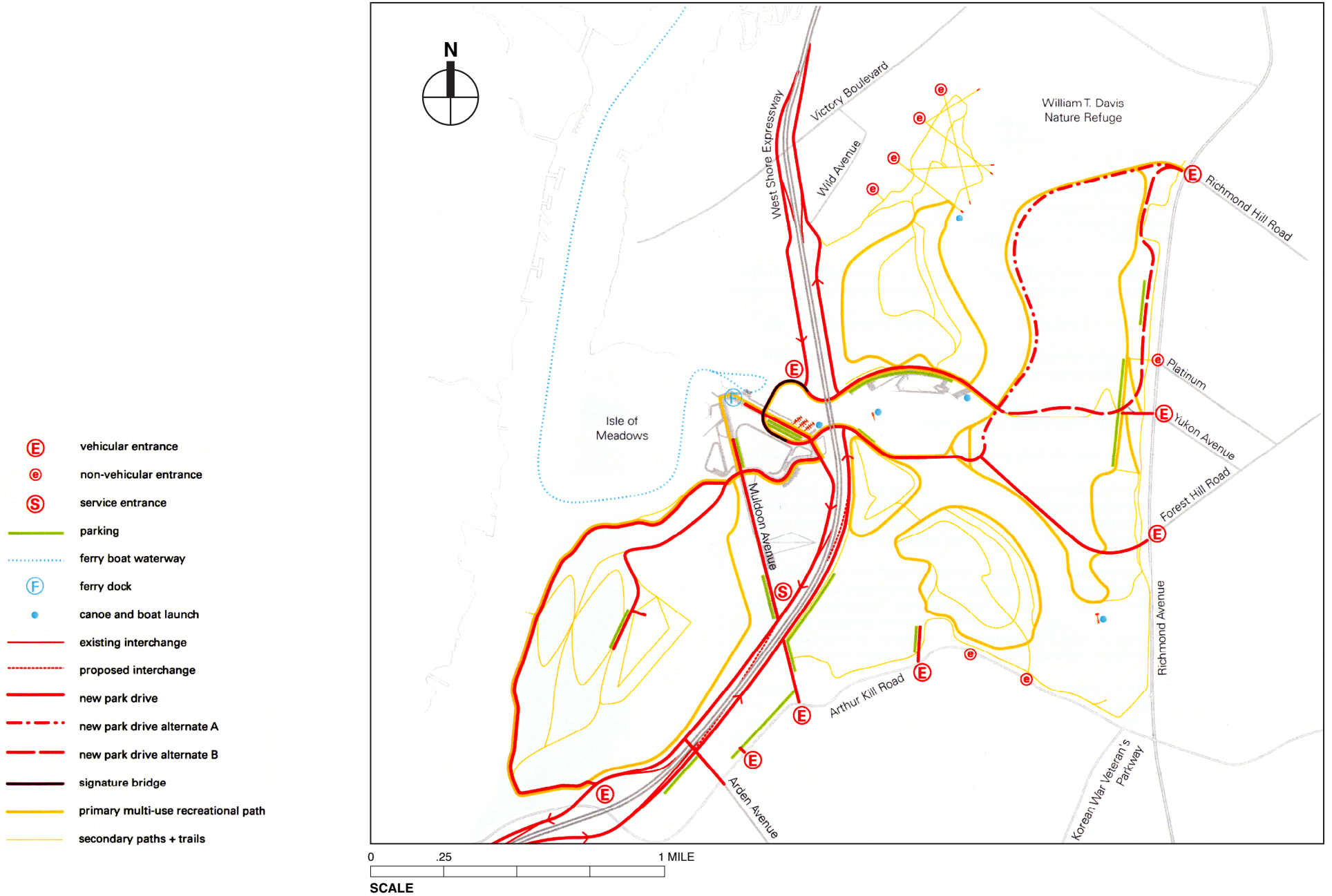
The West Park was the site of the September 11 recovery effort (on Mound 1/9). For 10 months after the tragedy, a team of 16,000 investigators and recovery workers carefully screened and sifted through 1.2 million tons of debris from the World Trade Center to search for traces of the missing. Over 20,000 remains were recovered and brought to the medical examiner's office for identification. When all discernible remains and effects were recovered, the remaining material was placed in a 50-acre area on the West Mound and covered with clean soil. In recognition of the important 9/11 recovery activities that occurred on the site, a 9/11 monument is planned for West Park.

The DMP illustrates a possible earthwork monument at the location of the recovery area. From the top of the monument, visitors could have a 360-degree view of the City, the harbor, and the New Jersey coastline. This monument could mark the site of the recovery effort and provide a large space open to the sky where the visitor could find a place for quiet reflection.

At the northeast edge of the West Mound are major DSNY facilities and operations, both related to Fresh Kills closure and to local sanitation needs that will remain outside the Park area as currently proposed for mapping. It is envisioned that the Muldoon Avenue entrance would, in part, continue to function as a maintenance entrance for DSNY operations for the entire 30-year maintenance period and beyond. As it represents a maintenance location, it makes sense that it also becomes the major back-of-house maintenance entrance for park operations as well. However, it is the intent that this location will also act as a satellite entrance for park usage, providing parking and entrance signage and a direct pedestrian connection across the West Shore Expressway and directly into South Park, providing regional bicycle and horse path connections.

CIRCULATION PLAN

The DMP would accommodate vehicular circulation through the park with the construction of approximately seven miles of new park drives that will include both primary and secondary roadways. This circulation plan includes a new vehicular bridge across Fresh Kills just west of the West Shore Expressway Bridge to provide circulation and access to the western part of the park, and intersection improvements at Richmond Avenue and Richmond Hill Road and Richmond Avenue and Forest Hill Road (see Figure 6). From a center loop road in the Confluence area, service roads would extend north and south along the West Shore Expressway to facilitate regional connectivity south and north. The goal of the Plan is to bring the largest focus of users to the center of the site from which all five park areas could be easily accessed. In addition, smaller scaled entrances with parking are planned in the north, south, and eastern parks to allow for neighborhood access at the edges of the park. In addition to the proposed alignment, alternative vehicular circulation alignments will also be considered in the GEIS (see the discussion below and Task 22: Alternatives, which follows).



In addition to the proposed roadways, the DMP features more than 20 miles of specially designed paths and trails for bicyclers, mountain bikers, horseback riders, pedestrians, and hikers. Creek access would be accommodated via numerous docks and launches along the creeks, as well as a larger boat facility proposed for a site on Fresh Kills, west of the West Shore Expressway where potential ferry service access may be provided. Connections to the surrounding neighborhoods would be aided by numerous park entrances and two pedestrian overpasses, the first overpass crossing the West Shore Expressway at Muldoon Avenue and the second crossing Richmond Avenue in the area of Forest Hill Road, creating a seamless connection between Fresh Kills and the extended Greenbelt to the East.

PLAN TO PROTECT PUBLIC HEALTH

A key objective for the Plan and an area for technical analysis in the DGEIS is the protection of public health as the site becomes publicly accessible, as well as the protection of habitat for wildlife resources. As described below, landfill closure is subject to many local, state, and federal regulations. In New York State, landfills must meet the requirements under the New York State Codified Rules and Regulations, Part 360, "Solid Waste Management Facilities." Subsection 360-2.15 "Landfill Closure and Post Closure Criteria," states the requirements for landfill closure activities. These regulations establish the need to identify and manage current or potential future releases of pollutants, or the mitigation of contaminants from the landfill, and to monitor, control and remediate (as necessary) any impacts. DEC has issued draft revisions to Part 360. The implications of these draft revisions to the regulatory requirements for closure will be examined in the DGEIS. At Fresh Kills, in addition to these regulations, there are also the requirements of the DEC's consent order regarding landfill closure. Among the requirements for final closure at Fresh Kills are: creating an acceptable final cover at the four landfill mounds (two are completed and two are undergoing final cover); maintenance and monitoring of landfill gas control and leachate collection systems; and a post-closure operations and maintenance plan for a minimum 30-year period. These requirements are enforced by DEC. Closure at Fresh Kills is being performed by DSNY in accordance with these requirements. As a result, Fresh Kills has an extensive infrastructure system to capture landfill gas and leachate before it can adversely impact the environment or public health. The proposed park has been designed to minimize any impacts to these environmental management systems and to replace any portions of infrastructure that may be affected, such that the overall system would not be adversely impacted. In addition, the Fresh Kills site has an extensive system of monitoring wells (both gas and groundwater) that are used to monitor performance of the infrastructure.

In addition to protecting the environment, these environmental controls significantly reduce the potential for human exposure to contaminants and are therefore also protective of public health. Moreover, with the ongoing monitoring, the potential pathways for human exposure to pollutants are regularly monitored and tested to ensure that public health and the environment are not at risk.

DSNY has an extensive system in place the goal of which is to protect the environment and public health. The systems include the final cover, landfill gas and leachate control systems, and storm water management. An extensive program for post-closure maintenance and monitoring is in place to protect the integrity of these systems and ensure that they are working effectively. Site-wide, there is the Environmental Monitoring Program to monitor and maintain the facility for the entire post-closure period. As noted above, the post-closure period is a minimum of 30 years and may be extended as necessary. These procedures include monitoring of groundwater quality, surface water and sediment quality, and landfill gas migration monitoring.

The GEIS will demonstrate how the proposed park will be designed to minimize impacts on any of these systems. The need for any modifications to this infrastructure of these monitoring systems to implement the proposed park will be demonstrated in the DGEIS. Protection of these systems is critical to the implementation of the proposed park.

In accordance with the *CEQR Technical Manual*, the DGEIS will include an analysis of any impacts of the Plan on public health or wildlife and natural resources (these DGEIS tasks are described in detail below). For example, the DGEIS will examine proposed areas of public access and the water, air, and soil monitoring data for that area, to determine if there are any potential adverse environmental health impacts resulting from public access or natural resource issues related to the creation of wildlife habitat at these locations.

IMPLEMENTATION AND PHASING PLAN

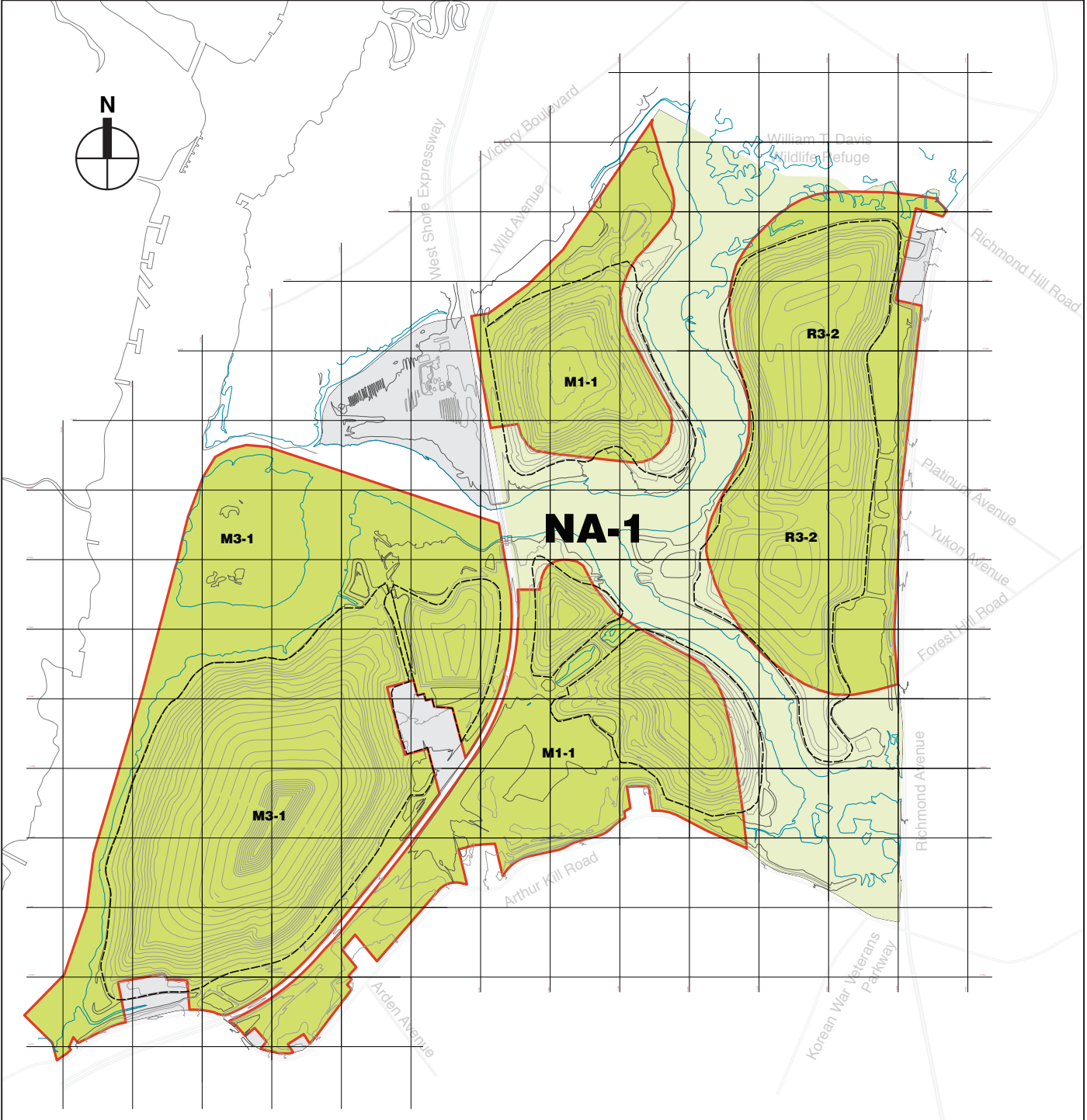
The North and South Mounds at Fresh Kills (landfill mounds 3/4 and 2/8) have already undergone closure and the East and West Mounds (landfill mounds 6/7 and 1/9) are in the process of final closure. Implementation of the proposed park must be coordinated between the obligation of DSNY to continue with final closure of the landfill and post-closure care and implementation of accessible open spaces, constructing new public roadways and access, and creating new habitat cover. These elements of the proposed Plan must allow for the continued operation of the landfill closure and post-closure facilities (e.g., leachate and gas collection and treatment, final cover, and stormwater management systems). The project description in the DGEIS will provide a detailed discussion of the construction and phasing plan for the proposed park, focusing on how the phased implementation would proceed, the protection of landfill infrastructure, the overlapping activities of closure and park construction, and the potential for construction-period impacts from both activities (e.g., truck traffic, erosion and sedimentation runoff control). The phasing plan would account for the staged opening of the park for park users in some locations while final closure continues in other areas. It would further allow for the continued maintenance of the components of the park dedicated to landfill operations for a period that will extend well past the opening of the park.

It is proposed that the GEIS analyze the Fresh Kills Park Plan in two Build years, 2016 and 2036. The year 2036 is selected as the year for full implementation of the park elements. This year may also coincide with the completion of landfill post-closure monitoring and maintenance. The interim year, 2016, is the year by which a number of specific park projects may be completed. Elements of the proposed project that are expected to be completed by the 2016 build year include the Schmul Park entrance, the Travis Neighborhood Park, the North Park multi-use path and wetland restoration, the Arden Heights Neighborhood Park and wetland restoration, the Muldoon Avenue entrance, the Owl Hollow soccer fields, the South Mound loop trail and overlooks, the Central Area (including the Marsh, the Terrace, and the Sunken Forest), the North and South Park mound restorations, the Creek Landing, the September 11 monument, the Point Waterfront Esplanade, and segments one and two of the park drive and landscape ribbon.

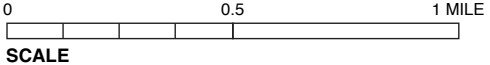
DISCRETIONARY REGULATORY APPROVALS

There are a number of City, state, and federal land use and environmental approvals that are necessary to implement the proposed park. With respect to local regulations (City of New York) these include:

- A City map amendment to map as parkland those portions of the site not currently mapped as parkland, exclusive of the portions that contain DSNY facilities and where public access cannot be provided for reasons of safety and security for DSNY facilities (see Figure 7). All other DSNY facilities and infrastructure within the proposed park (e.g., landfill gas collection and flare stations, leachate collection), both above and below ground, and their use and access by DSNY, are integral to the proposed park, and, as stated above, critical to the continued operation of the environmental compliance and monitoring program that will protect the public health and the environment of the park;
- Site selection for a public facility (public park);
- A zoning map amendment to map the site as public parkland and remove the current zoning districts (see Figure 7);



- SRD** South Richmond District
- NA-1** Natural Area District
- Solid Waste Management Unit Boundary
- Proposed Mapped Parkland Boundary
- Existing Mapped Parkland



Fresh Kills Park

- Capital funding for the construction of public facilities;
- Coastal zone consistency determination; and
- Along with the potential mapping of new roadways, the potential demapping of unbuilt paper streets may also be proposed.
- It is also possible that private land may need to be acquired outside the current landfill property to accommodate the proposed Richmond Hill Road connector in the northeast portion of the site.

At the state level, approvals that apply to the proposed project include the Part 360 landfill closure approvals; approvals for activities in tidal wetlands and adjacent areas; permits for protection of waters; modifications to the DEC consent order on landfill closure; and access to a state highway (Route 440). Federal approvals relate to constructing structures over or in navigable waterways or activities in wetlands as identified by ACOE. The principal objectives of these environmental regulatory requirements are to protect natural resources, air, and water quality. Therefore, meeting these regulatory requirements provides the benefits of natural resources protection as well as the protection of public health as the landfill becomes a public open space. Additionally, because proposed roads may pass through existing parkland, a state legislative action may be necessary for the alienation of parkland. Table 1, below, summarizes the regulatory approvals that would apply to the proposed park by City, state, and federal agencies.

The need for environmental permits and the related impact assessment methodologies are described below in this scope of work, and the impact assessments will be presented in the DGEIS.

Listed below are the agencies that have a discretionary action with respect to the proposed Plan (involved agencies) or an advisory role (interested agencies). All involved and interested agencies have been issued this Draft Scope of Work and requested to comment on its content. DPR will coordinate the project's environmental review with these agencies to ensure proper examination of environmental impacts with respect to their respective discretionary actions. This coordination will continue through the preparation of a FGEIS and the issuance of findings, which concludes the environmental review process.

NEW YORK CITY

- Department of Parks and Recreation (lead agency)
- Department of City Planning (involved)
- Department of Design and Construction (involved)
- Department of Environmental Protection (involved)
- Department of Health and Mental Hygiene (interested)
- Department of Sanitation (involved)
- Department of Transportation (involved)
- Art Commission (involved for early implementation projects only)
- Landmarks Preservation Commission (interested)
- New York City Office of Environmental Coordination (interested)
- New York City Transit Authority (interested)
- Office of the Staten Island Borough President (interested)
- Department of Cultural Affairs (interested)
- Staten Island Transportation Task Force (interested)

Table 1
Involved and Interested Agencies

Agency	Review Area Related to the Proposed Park Elements	Role In Review Process
City of New York		
New York City Department of Parks and Recreation	Leading the planning and development of the park	GEIS Lead Agency, applicant for permits and park mapping and park construction
New York City Planning Commission	Planning, Zoning, and Coastal Zone Consistency	Approval of City map and zoning amendments, coastal zone consistency
New York City Department of Design and Construction	Design and construction of capital improvements	Construction plans for roadways and infrastructure
New York City Department of Environmental Protection	Watershed management, hazardous materials, water and sewer mains, septic systems, air quality, natural resources	Approval of <u>drainage plan</u> for storm water management, best management practices, outlets, <u>and</u> sanitary sewer extensions, water supply connections, air quality permits (Title V)
New York City Department of Health and Mental Hygiene	Public health	Advisory review of public health issues and approval of sanitary systems and drainage plans
New York City Department of Sanitation	Compliance with existing permits and closure operations <u>and consent order</u> , and solid waste management operations	Approval of activities potentially affecting closure operations or maintenance and use of DSNY facilities
New York City Department of Transportation	Design and operation of City Streets	Road design and connections to existing City streets, parking, <u>street lighting</u> , and bicycle/pedestrian improvements <u>as well as</u> associated <u>traffic and pedestrian</u> mitigation. Potential applicant for roadway mapping
New York City Art Commission	Review of art, architecture and landscape architecture proposed for City-owned property	Approval of capital projects
New York City Landmarks Preservation Commission	Activities on or near sites of historic or archeological value	Advisory role in EIS process
New York City Office of Environmental Coordination	Coordinating agency for City Actions subject to CEQR	Advisory role in EIS process and coordination among City agencies
New York City Transit Authority	City bus and rail transportation	Advisory role in EIS process
Office of the Staten Island Borough President	Planning and environmental issues	Advisory role in EIS process
New York City Department of Cultural Affairs	Public art and cultural affairs funding and initiatives	Advisory role in EIS process
New York State		
New York State Department of Environmental Conservation	Landfill management, hazardous materials, water quality, tidal wetlands, rare and endangered species, air quality	Approval of amendments and permits related to landfill closure plans (and Part 360), activities in tidal wetlands or adjacent areas (Article 25), protection of waters (Article <u>15</u>), or air emission permits (Part 201)
New York State Department of Health	Public health	Advisory review of public health issues
New York State Department of State	Coastal Zone Management	Coastal Zone Consistency for actions requiring Federal permits
New York State Department of Transportation	State Highways Access	Approval of connections to the West Shore Expressway (State Route 440)
New York State Office of Parks, Recreation and Historic Preservation	Designation and Protection of State and National Register Listed and Eligible buildings and places	Advisory role in federal permit review process pursuant to Section 106
Federal		
United States Army Corps of Engineers	Activities within wetlands (tidal or freshwater) and protection of navigable waters	Wetland permits or authorizations (Section 404) and structures within navigable waters (Section 10)
United States Coast Guard	Structures over navigable waterways	Approval of structures in navigable waterways, to ensure no impacts on navigation
Environmental Protection Agency, Fish and Wildlife Service, National Marine Fisheries Service	Activities that affect wetlands	Advisory to Army Corps of Engineers during permit review

NEW YORK STATE

- Department of Environmental Conservation (involved)
- Department of State (involved)
- Department of Transportation (involved)
- Office of Parks, Recreation and Historic Preservation (interested)
- Department of Health (interested)
- Metropolitan Transportation Authority (interested)

FEDERAL

- United States Army Corps of Engineers (involved)
- United States Coast Guard (involved)
- United States Environmental Protection Agency (interested)
- United States Fish and Wildlife Service (interested)
- National Marine Fisheries Service (interested)

C. DGEIS SCOPE OF WORK

INTRODUCTION

As described above, the DGEIS for the Fresh Kills Park DMP will be prepared in conformance with all applicable laws and regulations, including CEQR, Executive Order No. 91 of 1977, SEQRA and NEPA regulations, and will follow the guidance of the *CEQR Technical Manual*, October 2001. The environmental review provides a means for decision makers to systematically consider the environmental impacts and consequences of a proposed action; the reasonable alternatives; and to identify and mitigate, where practicable, any significant adverse environmental impacts. Because of its large scale and nearly 30-year development period, specific details about the ultimate programming of Fresh Kills Park are in many instances not available at this time. Therefore, the proposed project is considered a generic action for the purpose of analysis under CEQR and a Generic Environmental Impact Statement will be prepared. In accordance with the *CEQR Technical Manual*, the description of the proposed project will include a “reasonable worst-case development scenario” (RWCDS) so that the full range of potential impacts can be identified. The basis for that RWCDS is presented in Attachment A.

The first step in preparing the DGEIS is the public scoping process. “Scoping,” or creating the scope of work, is the process of identifying the environmental impact analysis and key issues that are to be studied in the DGEIS and the methods by which these impacts would be analyzed. The scope of work for each technical area to be analyzed in the Fresh Kills Park DGEIS is described below.

TASK 1: PROJECT DESCRIPTION

DESCRIPTION OF TASKS

The project description is the first chapter of the DGEIS. It introduces the reader to the proposed project and actions and sets the context for assessing project impacts. The chapter will contain a project identification; a description of the project location and boundaries; a statement of purpose and need for the proposed project, including the objectives in terms of recreational and waterfront access needs of the City, state, and region, protecting the environment, and natural features restoration; a description of the

illustrative DMP; and a detailed description of the required actions and approvals necessary for project implementation, the roles of the involved and interested public agencies, and the Uniform Land Use Review Procedure (ULURP) and CEQR/SEQRA/NEPA processes. The project description will also discuss the planning history, including the community outreach strategy plan (COSP), the role of the Stewardship and Implementation Interagency Team (SIIT), design objectives, techniques for implementation and funding sources, maintenance, stewardship, phasing, and build out. The project description chapter is important to understanding the proposed actions (including coordination with DSNY) and their impacts, and gives the public and decision-makers a base from which to evaluate the proposed project and actions against the baseline or “No Build” condition. The role of the DGEIS as a full disclosure document to aid in decision-making will be identified, as will its relationship to all approval procedures.

Among the major elements to be presented in the “Project Description” for analysis purposes are:

- A list of all actions necessary for park implementation, including proposed mapping, possible mapping of proposed primary roadways and demapping of unbuilt mapped streets;
- Location map showing regional context;
- Landfill closure plan details including design and phasing as proposed by DSNY and any necessary modifications in infrastructure or monitoring required to implement the proposed Plan;
- An overall illustrative plan for the park (e.g., natural habitats, recreational and cultural facilities, recreational fields, land cover types, etc.), organized by the five planning areas and presenting the various element categories and representative uses (see Figures 4 and 5);
- Illustrative drawings, views, and images for the park;
- A description of interim uses;
- A description of early implementation projects;
- A roadway and circulation plan delineating primary and secondary roads, service roads, emergency access roads, as well as design parameters for bridges and culverts, and the applicable Federal, State, and City regulation pertaining to that design (e.g., AASHTO, NYCDOT and NYSDOT design standards); as well as conceptual details for roadways and proposed intersection (signalization, signage); and the projected jurisdiction and management of the proposed street system;
- Parking area sites and locations, as well as the conceptual details and design standards for parking facilities;
- Walkways and bikeways and the design standards that would apply at these park features including ADA requirements, standards at street crossings (including both signalized and unsignalized intersections), and accessory landscaping features;
- Street lighting standards;
- Transit stations and access for public and private buses;
- Locations for ferry or water taxi landings;
- Data on connections with the West Shore Expressway, including ramp operations, controls;
- An infrastructure plan focusing on the proposed storm water management program, as well as the need for any new sanitary sewer or water connections and energy systems;
- Description of in-water structures, such as piers, marinas, boat, and kayak launches as well as any proposed bulkhead extensions or improvements;
- A description of event programming for recreational and cultural activities;

Fresh Kills Park

- Public access and habitat restoration plans with standard planting plans (herbaceous and woody species), as well as soil requirements for areas proposed for habitat restoration and public access;
- Methods and techniques including any monitoring or soil requirements that may be necessary to allow public access;
- Description of the agencies responsible for maintenance and operation of the proposed roads;
- An energy plan and description of potential renewable energy sources (e.g., wind and solar power);
- Construction programming and phasing, including typical sedimentation and erosion control practices, storm water pollution prevention plan techniques, soil creation and delivery, construction staging, and phasing of the park construction with the landfill closure plan; and
- A description of the regulatory history of the site (e.g., list of current permits, consent order, and amendments), and a listing of actions and approvals necessary to implement the plan (see the discussion above), as well as the necessary permits and a proposed permitting strategy for park implementation. This will focus on the short-term projects and would also include a discussion of the current permits and how they could be affected by changes in uses and activities with the proposed park. Specifically, this discussion will address the proposed project's compatibility with current permit requirements for stormwater management and landfill closure compliance. Permits necessary to move the plan forward will be listed and described with respect to the relevant regulatory jurisdiction and permitting requirements.

Because it is anticipated that the DGEIS will analyze two phases of park implementation (2016 and 2036), it is expected that the overall illustrative plan and roadway and circulation plans, as well as the description of programming and events will also be presented for the two phases. For the purposes of determining project impacts, it is expected that the supporting documentation to be prepared for the GEIS will depict areas of ground and soil disturbance, such as grading and excavation or filling, and a description of fill material parameters and standards. These areas of ground disturbance will be used to assess impacts for site-specific analyses in a number of technical areas, such as historic resources, natural resources, hazardous materials, and construction.

FRAMEWORK FOR ANALYSIS

The purpose of developing the framework for analysis as part of the project description is to establish the structure of the analyses in the DGEIS. This includes determining the analysis years, including existing conditions, the future conditions with and without the proposed project, and the incremental development changes generated as a result of the proposed actions. As the proposed Fresh Kills Park is a phased project with an analysis year some 30 years into the future, and is based on an illustrative plan, this framework for analysis will be developed based on the RWCDs that has been developed for analysis in the DGEIS. This RWCDs is provided as Attachment A to this scope of work. The RWCDs describes the various park design element categories (see Figure 4) and representative park features and activities within those element categories that represent a “worst-case” for DGEIS analysis.

The DGEIS analyses will be conducted for the park's Build years (the year in which the proposed project is expected to be completed), which are 2016 and 2036. The interim Build year conforms to the DMP's illustrative build-out of Phase I of construction. The DGEIS analyses will include the cumulative impacts of other projects that would also affect conditions in the study area. The list of other proposed projects and plans expected to be completed by the proposed analysis years (i.e., the “No Build list”) will be presented in this framework for analysis and used in the GEIS impact analyses. In addition, the analysis will integrate any early action projects that are being considered, such as the proposed recreational fields at Owl Hollow.

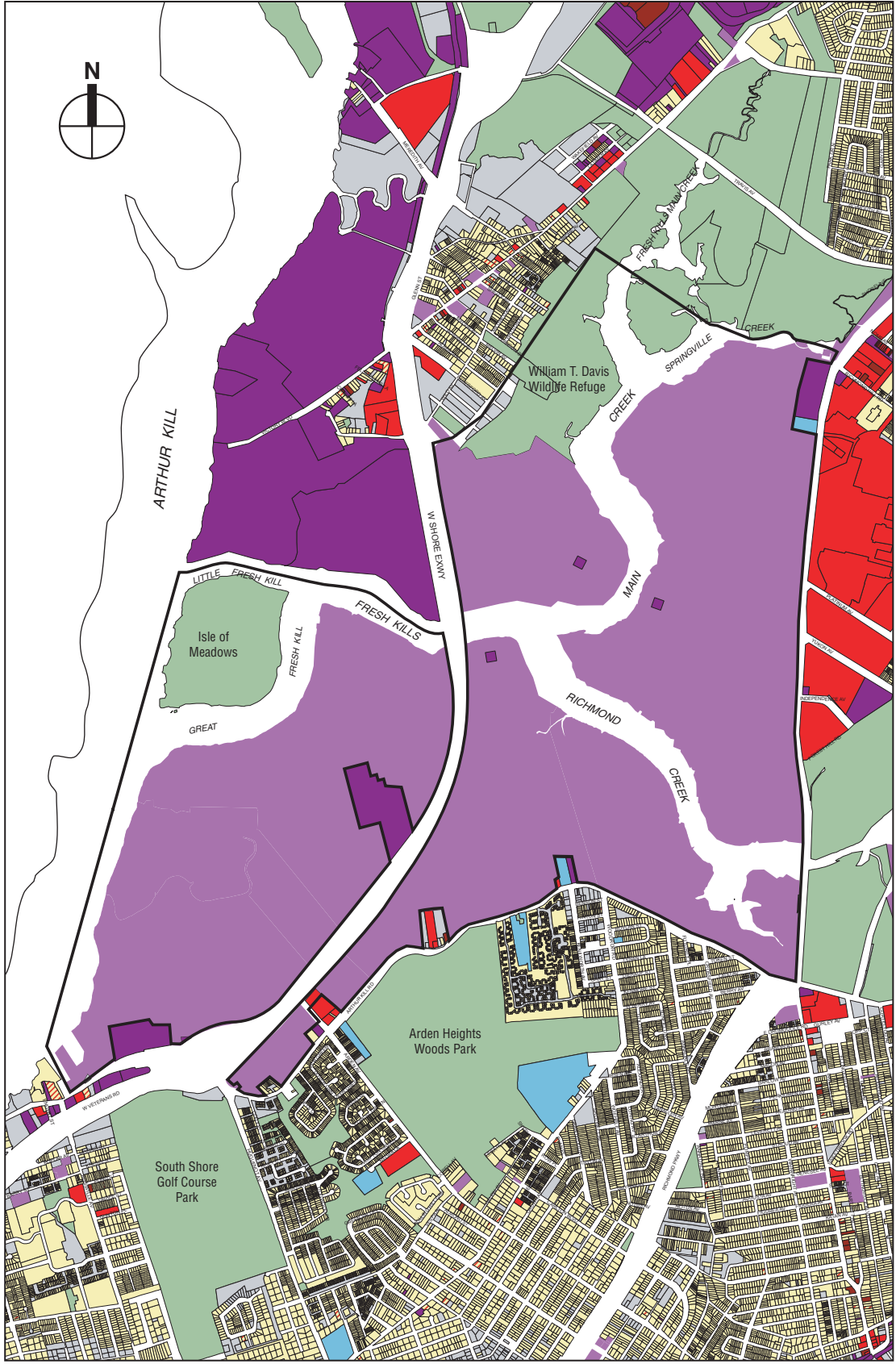
TASK 2: LAND USE, ZONING, AND PUBLIC POLICY

This chapter will assess any land use impacts of the proposed project and present land use information necessary for other tasks. It will set the regional context for the proposed park, the location within the City of New York, the borough of Staten Island, and the region as a whole, and provide a more detailed land use for the study area. Subtasks are as follows:

- A. Describe the context of the project site within the City and the region, as well as its historical use and the planning history of the proposed project.
- B. Field survey the project site and surrounding study area. The study area will be defined during the analysis, but typically a detailed land use study area will extend approximately ½ mile from the boundary of the project site. The study area will include those neighborhoods with the greatest potential to be affected by development and implementation of the project with a more detailed analysis of land uses for the site and surrounding area (see Figure 8).
- C. Identify, describe, and map the existing land use patterns and development trends for the project site and study area, including a detailed description of nearby commercial and waterfront uses and public access opportunities to the waterfront. Projects and land use studies conducted for this area of Staten Island by DCP or other City agencies will also be referenced and described.
- D. Describe and map the existing zoning classifications of the project site (see Figure 9) and study area.
- E. Describe public policy as it applies to the project site and study area, with a particular emphasis on the Fresh Kills plan, the waterfront plan for Staten Island, and the City's waterfront zoning.
- F. Describe conditions that will exist in the future without the proposed Plan. Such changes in future conditions could include private development projects, public works projects, public agency plans for the relocation or upgrade of facilities, proposed zoning changes, and any other changes that are likely to occur by the Build years. Describe how future projects anticipated for the study area might affect land use patterns and development trends in the study area in the future without the project. Identify any pending zoning changes or other public policy actions that could affect land use patterns and trends in the study area.
- G. Assess the impacts of the proposed Plan on land use patterns and development trends, zoning, and public policy. Waterfront zoning and other public policies will also be discussed. This analysis will focus on issues of compatibility with surrounding land uses, consistency with zoning and other public policies, and compliance with waterfront zoning, policies, and plans.

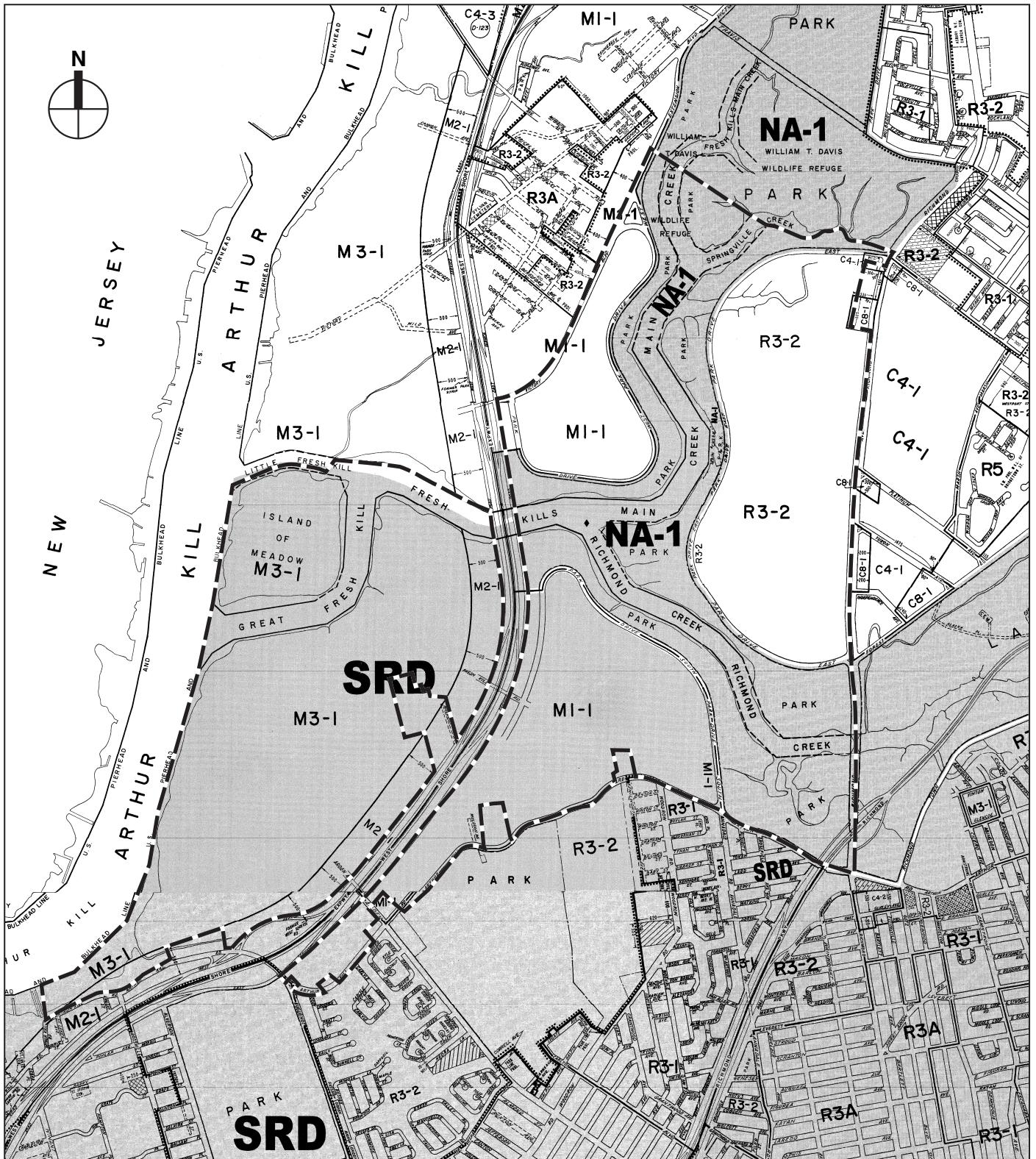
TASK 3: SOCIOECONOMIC CONDITIONS

According to the CEQR Technical Manual, the five principal issues of concern with respect to socioeconomic conditions are whether a proposed action would result in significant impacts due to: (1) direct residential displacement, (2) direct business and institutional displacement, (3) indirect residential displacement, (4) indirect business and institutional displacement, and (5) adverse effects on a specific industry. The proposed project would not add any residential units, and is not anticipated to directly displace any residential, commercial, or institutional operations; however, it is possible that private land may need to be acquired outside the current landfill property to accommodate the proposed Richmond Hill Road connector. The proposed actions would establish Fresh Kills Park and could potentially result in indirect residential and commercial displacement by increasing property values and rents throughout the area. Therefore, in conformance with CEQR Technical Manual guidelines, the assessment of these five areas of concern will begin with a preliminary assessment. Detailed assessments will be conducted

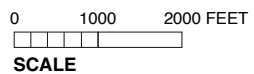


- Project Site Boundary
- Fresh Kills Project Area
- Industrial/ DSNY Facilities
- Residential
- Residential (with Ground-Floor Retail)
- Commercial
- Office
- Entertainment
- Community Facility
- Open Space
- Vacant Parcels
- Vacant Building
- Under Construction

0 1,800 3,600 FEET
SCALE



- - - -** Project Site Boundary
- Zoning District Boundary
- Special Purpose District
- C1-1 Overlay
- C1-2 Overlay
- C1-3 Overlay
- C2-1 Overlay
- C2-2 Overlay
- SRD** South Richmond District
- NA-1** Natural Area District



for those areas in which the preliminary assessment cannot definitively rule out the potential for significant adverse impacts. Subtasks for this analysis are as follows:

- A. Develop demographic and housing profiles of the socioeconomic study area using information gathered from the Census Bureau, the New York State Department of Labor, and other sources. The study area will be established according to *CEQR Technical Manual* guidelines and is expected to fall within a ½-mile area as measured from the project site perimeter. The profile would include: demographic characteristics; economic characteristics, including employment and numbers and types of existing businesses; recent residential and commercial development trends, including the identification of new and/or rehabilitated properties in the study area, as well as information on rents and sales prices; identification of portion(s) of the project and study area in which businesses or institutions may be vulnerable to direct or indirect displacement; and identification of portion(s) of the study area in which residents may be vulnerable to displacement. Provide an overview of the general context of housing in the study area, including the existence of public publicly assisted housing.
- B. Based on the information gathered above, estimate the socioeconomic conditions likely to occur in the project and study areas in the future without the project.
- C. Estimate the changes in population and employment attributed to the proposed project.
- D. Evaluate the potential for indirect residential displacement based on the characteristics of the study area. The preliminary assessment will present information about conditions in the study area so that the *relative* effect of the change can be better understood. The assessment will provide the following:
 - Total population and number of housing units in census tracts in the study area, so that the action's addition can be expressed as a percent increase over existing conditions.
 - Median household income and other indicators of economic conditions of residents, such as percent of persons living below the poverty level, etc.
 - Housing value and median contract rent, which can be compared to the levels expected to be introduced by the proposed action.
 - Vacancy rate, and percent of units that are renter-occupied.
 - Presence of any unique or predominant population groups.
 - Presence of populations particularly vulnerable to economic changes. These typically include low-income residents or occupants of lower-rent housing or single-room occupancy (SRO) units. For the preliminary assessment, census data on income and renter in structures containing fewer than six units can be used, supplemented with available information on land use, the presence of subsidized housing, and other factors. If the source of data indicates that these populations *may* be present, a detailed assessment may be required. For the preliminary assessment, census data on income and renters in structures containing fewer than six units can be used, supplemented with available information on land use, the presence of subsidized housing, and other factors. If the source of data indicates that these populations *may* be present, a detailed assessment will be conducted following *CEQR Technical Manual* guidelines.
 - Development trends in the area. The ability of the action to influence development trends depends, in part, on the type and extent of existing trends.

If an examination of the characteristics of the proposed action compared with conditions in the study area clearly shows that the action's effects would not be significant in the context of existing conditions and

future trends, then a detailed assessment is not required. If the significance of the action's effects is unclear after a preliminary assessment, then a more detailed assessment should be undertaken as follows.

- E. The assessment of potential indirect business, employment, and/or institutional displacements will be based on available relevant data sources and studies, including employment data from the New York State Department of Labor (ES_202 data), commercial property value data from the New York City Department of Finance or DCP, existing reports regarding commercial property values and rent trends, 1990 and 2000 census data, and supplementary secondary data obtained as necessary through field surveys and interviews with real estate brokers, public officials, local businesses, and other business- and real estate-related representatives. This assessment will:
- Describe existing economic activity within the ½-mile study area, including the number and types of businesses/institutions and employment by key sectors. This will also include identifying potentially vulnerable categories of businesses or institutions.
 - Describe the physical characteristics of the buildings currently used for economic activities, including the general size of the structures, configurations, and conditions. The approximate vacancy rate and rent levels for these buildings will also be described. This will be based on field visits and discussions with DCP and real estate brokers.
 - Based on No Build projects identified in the “Framework for Analysis” section of Chapter 1 and pertinent economic and real estate data, discuss the potential economic trends that would be anticipated in the future without the proposed project through the Build analysis year, including commercial rents and property values and employment by key sectors.
 - Evaluate the potential for indirect business, employment, and/or institutional displacement impacts from the proposed project, including effects of potential increases in property values and rental rates. Potential nearby relocation areas will be identified, as appropriate.

F. Assuming that private land will need to be acquired outside the current landfill property to accommodate the proposed Richmond Hill Road connector, the analysis of direct business and institutional displacement will:

- Identify the number of existing employees, and number of types of businesses and/or institutions that would be displaced by the proposed project, and describe the type of relocation benefits that would be available to the displaced property owners and commercial tenants.
- Determine whether any of the businesses to be displaced are of substantial economic value to the City or region and can only be relocated with great difficulty or not at all.
- Determine whether any of the businesses to be displaced are subject to regulations or publicly adopted plans to preserve, enhance, or protect them, or are a defining element of the character of the study area.
- Determine whether the businesses or institutions to be displaced define or contribute substantially to a defining element of neighborhood character.

TASK 4: COMMUNITY FACILITIES AND SERVICES

This analysis examines the potential impacts of the proposed project on community facilities. Since the proposed project would not add any residential units, no additional demand would be placed on public schools, publicly funded daycare facilities, libraries, and outpatient and emergency healthcare facilities. Furthermore, the proposed project is not anticipated to physically alter or displace any existing community facilities. This analysis will therefore focus on the additional demands on fire and police

services that could occur with the proposed project. The analysis will include correspondence with representatives of the New York Police Department (NYPD) and the New York Fire Department (FDNY), and disclose any potential effects the proposed park may have on fire and police protection services in these districts. An analysis of any potential impacts on DSNY services is presented below under Task 14: Solid Waste and Sanitation Services.

This chapter will include the following subtasks:

- A. Describe the current NYPD and FDNY districts and services in the area, based on City service area maps and conversations with local district representatives.
- B. Assess conditions in the future without the proposed project and changes in facilities (including the NYPD facility).
- C. Assess the potential needs of the proposed park based on the design plan—examining the projections of new populations, roadways, and parking structures—and the potential need for additional services within the police and fire districts. Describe any on-site facilities that may be provided as part of the proposed Plan.

TASK 5: OPEN SPACE

This chapter of the DGEIS will assess the project's potential effects on open space for the area. The proposed project would create a significant amount of new publicly accessible open space, but would also add workers to the area. Subtasks for the open space analysis are as follows:

- A. Inventory existing publicly accessible open space within a ½ mile of the project site, adjusted for census tract boundaries. The condition and use of existing facilities will be described based on the inventory.
- B. Prepare a demographic analysis of the study area worker and residential population, using information available from the 2000 Census.
- C. In conformance with *CEQR Technical Manual* methodologies, assess the adequacy of existing publicly accessible open space facilities based on a comparison of the ratio of open space per 1,000 workers and residents to city guidelines.
- D. Assess expected changes in future levels of open space supply and demand in the future without the project, based on other planned development projects within the study area. The analysis for future conditions will also consider the creation of new public open spaces in the study area, if any. Open space ratios will be developed for future conditions and compared with existing ratios to determine changes in future levels of adequacy.
- E. Assess the project's potential effects on future levels of open space supply and demand. The assessment of impacts will be based on a comparison of open space ratios with the proposed project and its associated public space, and open space ratios in the future without the proposed project. This assessment will include the addition of a significant amount of new, publicly accessible open space. It will also describe any losses of open space due to the creation of new public roadways through areas of the site that are currently mapped as parkland.

TASK 6: SHADOWS

The *CEQR Technical Manual* states that a shadow impact analysis should be prepared for projects that include buildings (or structures) greater than 50 feet in height that could cast shadows on open spaces or historic buildings or buildings of heights less than 50 feet that may cast shadows potentially affecting natural resources (e.g., tidal wetlands). There are relatively few new structures proposed in the DMP; however, some proposed structures including wind turbines could potentially be more than 50 feet tall.

None of the proposed buildings would cast shadows on any existing historic architectural resources with sunlight-sensitive features, since there are no such features on the site. Depending on the design and location of structures and the potential for impacts on proposed open spaces or natural features, a modeling analysis of potential shadow impacts will be performed.

TASK 7: HISTORIC RESOURCES

The purpose of this chapter is to assess whether the proposed project could affect any historic architectural or archaeological resources, either directly through construction activities or indirectly through alteration of the context or visual environment of the resources. Tasks within this chapter are as follows:

- A. Define the project's Area of Potential Effect (APE) for archaeological resources. This is the area where in-ground disturbance would occur that could potentially affect archaeological resources.
- B. Consult with the New York City Landmarks Preservation Commission (LPC) regarding the APE's potential archaeological sensitivity. Seek concurrence of the determination of sensitivity from the New York State Historic Preservation Officer (SHPO). Should LPC or SHPO request an archaeological study of the site, perform a Phase 1a archaeological investigation.
- C. Define the project's APE for architectural resources. This includes the area where direct physical impacts may occur and also accounts for a larger area where potential visual or contextual effects may occur. The study area will be defined during the analysis, but typically a project's APE will include the area of the proposed park and will extend 400 feet from the perimeter of the proposed park boundary. Identify and describe any designated architectural resources within the APE. Designated architectural resources include any New York City Landmarks, properties that appear eligible for New York City Landmark designation, sites listed on or determined eligible for inclusion on the State and/or National Register of Historic Places, and National Historic Landmarks.
- D. Field survey the APE to determine whether there are any potential architectural resources that could be affected by the project. Identification of potential resources will be based on NR criteria for listing as found in 36 CFR Part 63. For properties within the study area that appear to meet S/NR eligibility criteria, Historic Resource Inventory Forms ("blue forms") will be prepared for submission to SHPO and LPC for determinations of eligibility.
- E. Map and briefly describe all designated and potential architectural resources within the study area.
- F. Describe the potential for any changes to the APE and its archaeological and architectural resources in the future without the project.
- G. Assess the project's impacts on any designated or potential architectural resources, including visual and contextual impacts as well as any direct physical impacts. Assess any direct physical impacts of the project on archaeological resources.
- H. If necessary, develop mitigation measures (including additional studies and plans) to avoid or reduce any significant adverse impacts on architectural or archaeological resources in consultation with SHPO and LPC.

TASK 8: URBAN DESIGN AND VISUAL RESOURCES

This chapter will evaluate the potential effects of the proposed action on urban design and visual resources. The proposed action would result in habitat restoration, new open space, a new street network and new and different uses on the project site than currently exists.

As described in the *CEQR Technical Manual*, the urban design characteristics of an area are composed of the following elements: building bulk, use and type; building arrangement; block form and street pattern;

streetscape elements; street hierarchy; and natural features. The urban design assessment will consider the potential effects of the proposed project on the elements described above, with particular focus on building bulk, use and type, street hierarchy and natural features. The visual resources assessment considers the impact of the proposed action on important views of visual resources from public and publicly accessible locations.

The proposed developments, facilities, and activities within the park will also be assessed within the context of the existing urban design characteristics of the project site and surrounding area. As defined in Chapter 3G, Section 310 of the *CEQR Technical Manual*, the urban design and visual resources study area will be the same as that used for the land use analysis. The analysis will:

- A. Describe the urban design characteristics and visual resources of the proposed project area and adjacent areas, using photographs and other graphic material as necessary to identify critical features, use, bulk, form, and scale;
- B. Discuss specific relationships between the proposed project area and adjacent areas regarding light, air, and views, including views from the West Shore Expressway;
- C. Describe the changes expected in the urban design and visual character of the study area resulting from the various developments in the study area in the future without the action (assume a study area of ¼-mile);
- D. Describe the potential changes that could occur in the urban design character of the project site in the future with the proposed project. Photographs and/or other graphic material will be utilized, where applicable, to assess the potential effects on urban design and visual resources in the study area, including resources of visual or historic significance; and
- E. Describe the potential changes, if any, that could occur in the urban design character and visual resources of the surrounding area and evaluate the significance of the changes.

TASK 9: NEIGHBORHOOD CHARACTER

Neighborhood character is an analysis that examines the combination of distinct community elements, including land use, zoning, socioeconomic conditions, urban design and visual resources, open space, historic resources, natural features, traffic, and noise, that together create neighborhood character. The technical analyses for this chapter are described elsewhere in the scope. The neighborhood character chapter will be developed based on the following subtasks:

- A. The predominant factors that contribute to defining the character of the neighborhood will be summarized. Typically, this includes land use, socioeconomic conditions, traffic and noise levels, urban design features, and historic resources.
- B. Based on planned development projects, public policy initiatives, and planned public improvements, changes that can be expected in the character of the project site's surrounding neighborhoods in the future without the project will be described.
- C. The impact of the proposed Plan on neighborhood character will be assessed and summarized. This assessment will consider the benefits that the proposed project will provide to the community, including waterfront open space, natural habitats, and recreational facilities, and also will summarize how the proposed project could affect local traffic patterns and what, if any, secondary effects (e.g., noise and air) this traffic could have on the community.

TASK 10: NATURAL RESOURCES

Under CEQR, a natural resource is defined as plant and animal species and any area capable of providing habitat for plant and animal species or capable of functioning to support ecological systems and maintain the City's environmental balance.

The purpose of the natural resources chapter is to assess the potential effects of the proposed project, both positive and adverse, on natural resources and the quality of surface waters within the project area. Surface waters within the William T. Davis Wildlife Refuge, the Fresh Kills Creek system (Main, Richmond, and Fresh Kills Creeks), and the Arthur Kill will be included in this analysis. The extent of the analyses will depend on both the character and amount of activity with the potential to affect water quality that would occur within the project area. The project's in-water activities are expected to be limited to roadway infrastructure (including a bridge) and public access facilities, such as marinas, small floating docks, boardwalk and canoe tie-up, a 150-slip marina, repair and/or reconstruction of some existing bulkheads, and restoration of tidal salt marshes and freshwater wetlands. The subtasks are as follows:

- A. Summarize relevant information on existing water quality and sediment conditions in the Arthur Kill, Fresh Kills Creek, Richmond Creek, and other waterbodies in the vicinity of the proposed project. The description of existing water quality and sediment conditions will be based on existing information available from such sources as the New York-New Jersey Harbor Estuary Program, DEC, New York City Department of Environmental Protection (DEP), and ACOE.
- B. Describe the existing natural resources habitats and features for the site and surrounding area. The existing aquatic and terrestrial resources will be characterized based on information compiled through literature review, from state and federal agencies, and from field investigations. The field investigations will verify and augment the information compiled from the literature and previously conducted studies of the site. The literature review will include the extensive body of existing information on aquatic resources, birds, and other wildlife and plant communities that has been prepared by agencies such as DPR, DEC, DEP, the U.S. Fish and Wildlife Service (USFWS), the New York District of the ACOE as part of the New York and New Jersey Harbor Navigation Project, and the National Marine Fisheries Service (NMFS), as well as other sources. Federal, state, and local resource and regulatory agencies will also be contacted to identify any resources of concern within the project area. Habitats will be characterized based on the New York State Natural Heritage Program communities (January, 2002).
- C. Provide an assessment of the future conditions for water and sediment quality within the project area in the future without the proposed project. This will consider future effects on water quality and sedimentation rates of in-water activities that may occur independently of the project.
- D. Assess the future conditions of the natural resources without the proposed project, considering potential effects of ongoing and proposed projects in the vicinity of the proposed project, such as: the DSNY waste transfer station; West Shore Expressway improvements; and ongoing closure and maintenance operations.
- E. Assess the potential effects of proposed project activities on water and sediment quality. The assessment will consider potential water quality effects from project construction and operation, including potential water quality impacts associated with the construction and operation of the potential marina, construction of other proposed overwater structures and shoreline stabilization measures, and storm water runoff from the proposed project and potential effects to storm water quality resulting from vegetation management activities (i.e., application of herbicides, pesticides, and fertilizers).

Fresh Kills Park

- F. Assess the potential risk to aquatic biota from the resuspension of bottom sediments during construction and operation of the proposed project based on the summary of existing sediment conditions.
- G. Assess the potential effects of the proposed project on the terrestrial and aquatic biota within the project area using existing data as compared with the areas of impact under the proposed project. Issues to be addressed with respect to terrestrial organisms include potential habitat loss or modification; potential impacts to the harbor herons associated with the proposed project, such as increased recreational boat traffic, and other effects resulting from the increase in human activity that would result from the proposed project; shoreline habitat disturbed due to the construction of the proposed park facilities; habitat enhancement resulting from development of upland habitats, such as grassland, meadow, and woodland habitats, and wetland enhancement, restoration and creation; and potential impacts to upland and wetland resources associated with management of roadways and vegetation management (i.e., application of herbicides, pesticides and fertilizers). Assess the impacts on freshwater and tidal wetlands (e.g., impacts on total acreage, wetland quality, and habitat) based on CEQR guidelines and state SEQRA wetland impact guidelines as it relates to any impacts from ramp connections to the West Shore Expressway.
- H. Address issues related to aquatic organisms, including potential effects associated with temporary water quality changes during in-water construction activities, temporary loss of benthic organisms and habitat during any shoreline construction activities, potential habitat enhancement from tidal wetland restoration and restoration of other shoreline areas, longer-term potential impacts to fish and benthos due to increased shading from overwater structures, loss of fish and benthic habitat due to new in-water structures, discharge of storm water and potential effects to storm water quality resulting from vegetation management activities (i.e., application of herbicides, pesticides, and fertilizers), and changes in aquatic habitat resulting from the development and operation of the potential marina or other marine facilities, including increased recreational boating activity, as well as access from land.

TASK 11: HAZARDOUS MATERIALS

Implementation of the DSNY Fresh Kills Landfill closure plan would involve final capping of the mounds. The proposed project would include additional soil cover on the mounds that would be planted to create new vegetative habitat as well as the creation of open spaces and trails. The Plan also entails bringing the public to the site and the construction of recreational facilities in areas between the mounds and “off-mound.” These elements of the proposed Plan must demonstrate that they can be approved, without compromising public health, safety, or welfare. These activities will also be examined for any potential impacts on public health under Task 21: Public Health (see the discussion below). It is noted that the need for any work plans and site sampling will be subject to NYCDEP approval. Tasks in this analysis are as follows:

- A. Review existing plans and reports related to the closure of Fresh Kills Landfill and the regulated and non-regulated areas, including the analytes found in existing cover material, and any relevant risk assessment and existing and proposed standards and specifications for site cover soils under the proposed park, in relation to background levels in the area.
- B. Review United States Geological Service (USGS) mapping and historic aerial photographs to determine the topography and geology of the project site.
- C. Review state and federal agency databases regarding underground or above-ground storage tanks, spills of petroleum products and/or hazardous materials for the site and surrounding area.

- D. Review current and historic Sanborn Fire Insurance Maps and USGS topographic maps to develop a profile on the historical use and development of the project site.
- E. Determine any potential impact for the exposure to hazardous materials within the areas of soil disturbance under the proposed Plan, which will include: (1) areas proposed for roadways and parking (and the associated infrastructure), as well as bikeways and trails; (2) areas proposed for habitat creation and restoration, and (3) areas proposed for new structures (e.g., passive and active recreational facilities, cultural facilities, and revenue-generating facilities). Determine impacts based on CEQR/SEQRA guidance and other environmental regulations that pertain to landfill management and operation (e.g., RCRA regulations).
- F. Determine potential impacts for the exposure to hazardous materials, including asbestos and lead paint, from the reuse and/or demolition of existing buildings and facilities.
- G. Determine any potential impacts of proposed infrastructure on existing landfill infrastructure in place to protect the public from potentially hazardous materials located below ground.

TASK 12: WATERFRONT REVITALIZATION PROGRAM

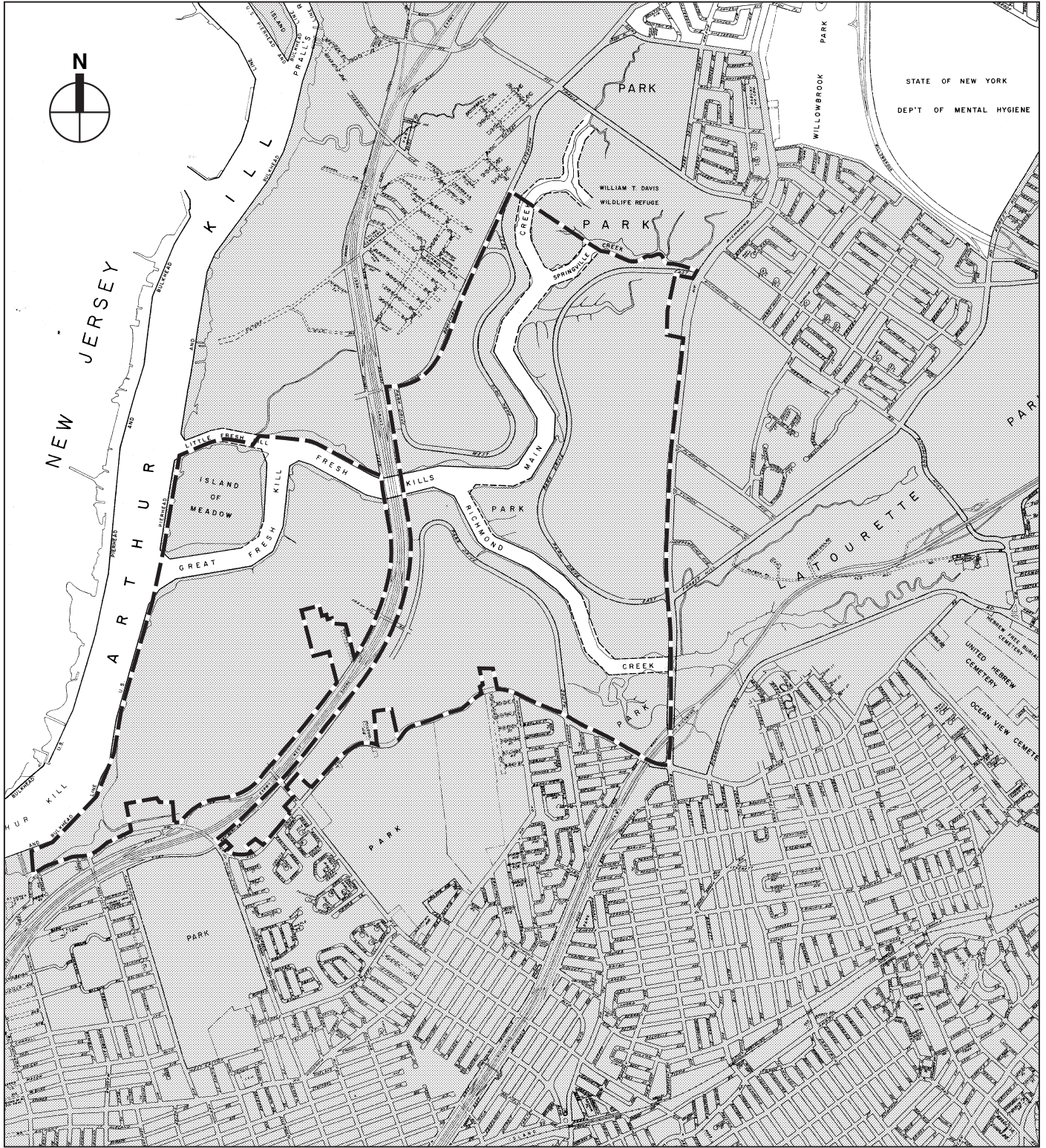
The project site is located entirely within the City's coastal zone (see Figure 10). Actions subject to CEQR, such as the proposed project, that are within the designated boundaries of the coastal zone must be assessed for their consistency with the City's Local Waterfront Revitalization Program (LWRP). Adopted under the federal Coastal Zone Management Act of 1972, the LWRP is administered by City Planning Commission acting as City Coastal Commission. This task will involve a review of the 10 policies and assessment of the consistency of the proposed project with these policies. This consistency determination will also be used in support of federal and state permits that are necessary for the proposed project.

TASK 13: INFRASTRUCTURE

This chapter will describe the utilities and services available at the project site, including water supply, sewage treatment, and stormwater runoff, and consider the potential impacts on these infrastructure systems and the need for any improvements in the infrastructure systems. For example, the design of the proposed new storm water outlets will also be examined for any potential impacts to natural resources (see the discussion above under Task 10: Natural Resources). Subtasks are as follows:

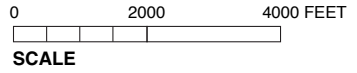
WATER SUPPLY

- A. Describe existing water supply systems and current usage and any planned changes to the system. The description will include the location and size of water lines serving the site and City sewer lines and the water pollution control plant (WPCP) serving the area. Future trends, effects of incremental demand, and potential on-site demands could include: swimming pools, restaurant facilities, and other indoor and outdoor recreation facilities; maintenance for new plantings; and irrigation systems.
- B. Discuss proposed water conservation strategies, such as integrated storm water runoff/site irrigation system, gray and black water recycling for the site's structures, and rainwater capture features.
- C. Assess estimated water demand for the proposed project and determine whether the effects of this incremental increase on demand would strain the existing system or alter existing flow patterns. Determine project water needs based on data provided by the project sponsor and on published usage rates. Any new water lines serving the site and their tie-in locations will be described.



STATE OF NEW YORK
DEPT' OF MENTAL HYGIENE

- Project Site Boundary
- Coastal Zone Boundary



WASTEWATER

- D. Describe the existing on-site sanitary sewer system, including estimated incremental demand as the proposed project develops. Present the projected annual actual monthly flow for the future No Build condition.
- E. Estimate the project's sanitary sewage generation and assess the capacity of the sewer system to accommodate the incremental increase in sewage.
- F. Identify areas needing additional sanitary sewer connections and consider any impacts on the WPCP.

STORM WATER

- G. Describe the existing storm water drainage system and the amount of storm water generated by the site. The volumes of storm water will be calculated using DEP's standard rainfall events.
- H. Describe the quantity of the storm water using typical New York City runoff data from DEP.
- I. Describe any changes that are likely to happen to the storm water system in the future without the project.
- J. Describe the storm water management plan for the proposed project, and describe changes in the volume and quality of storm water runoff that would be expected to occur. Discuss the types of roadway runoff drainage that could be employed (i.e., best management practices).
- K. Summarize the potential storm water runoff impacts on water quality in Main and Richmond Creeks and on Arthur Kill. The analysis will also be summarized in Task 10: Natural Resources (see the discussion above).

TASK 14: SOLID WASTE AND SANITATION SERVICES

Currently, the project site is used by a number of DSNY facilities, the employees of which generate some solid waste. In the future with the proposed project, the thousands of new visitors to and employees of the proposed park would generate solid waste. This task will examine existing DSNY facilities on the site and surrounding area and any potential impacts of the proposed project on those facilities. This assessment will also examine the volumes of waste to be generated with the proposed park, the solid waste collection program, and any recycling plans for solid waste or compostable materials. Subtasks are as follows:

- A. Describe the existing DSNY facilities on the site and in the surrounding area. This would include any DSNY garages, offices, operations centers, the yard waste composting facility, rock crushing operation and related fill material transfer station, and the putrescible waste transfer station.
- B. Describe existing and future City solid waste disposal practices, including solid waste, collection, recycling, and disposal methods. Current estimates of solid waste generation at the project site will be assessed, and any changes in solid waste collection and management that may be expected in the future without the project will be described.
- C. Describe any anticipated changes in the future without the proposed project with respect to DSNY facilities and operations through the years 2016 and 2036.
- D. Estimate the volume of solid waste and recyclable materials to be generated by the project, using published factors for New York City parks and facilities. Assess the project's potential impact on the City's waste services industry and disposal capacity. Describe recycling programs and collection systems for the park, based on programs at other large City parks.

- E. Analyze the impacts of the proposed park on DSNY facilities or operations. This impact assessment would examine any conflicts between the proposed uses and the DSNY activities that are expected to be operating at the site through the No Build year. The analysis will include identification of potential impacts of the proposed park on DSNY facilities, including DSNY regulatory compliance responsibilities, in particular with respect to landfill closure, maintaining the geotextile and clay landfill caps, the landfill gas collection and control system, and the leachate treatment plant. Circulation routes to and from the waste transfer station and the district garages will be described.
- F. Analyze the potential for yard waste composting to take place within the park to provide the soil amendment for park construction, and for such soil construction to occur on site.
- G. Analyze the potential role for DSNY's rock crushing and screening operation for interagency material to supply material for park construction, and the potential for inert fill material such as glass to be used for this purpose
- H. This assessment will also determine if there are any conflicts between the proposed uses and the City's Solid Waste Management Plan.

TASK 15: ENERGY

This task will describe the energy systems serving the project site and their availability to the facilities of the proposed project, as well as any project plans for energy conservation. The specific tasks are as follows:

- Describe the existing energy systems that would supply the proposed project with electricity, natural gas, and steam. This would include the existing landfill gas collection systems at the site. Existing DSNY contractual obligations concerning the operation of the landfill gas collection and recovery system will be discussed. In accordance with the Mayor's November 2004 directive concerning incorporating sustainability into City programs and policies, the sustainability of the proposed park will be discussed in this chapter.
- Characterize the capacity of these systems and assess the impacts of the proposed project, including any expansion of existing utility lines and facilities; impacts of siting and development of wind power; capacity of the existing energy systems; and the design elements of the proposed project with respect to energy conservation strategies employed by green architectural design and landscape techniques that would be part of the design guidelines.

TASK 16: TRAFFIC AND PARKING

A traffic and parking analysis will be conducted based on the range of uses identified in the RWCDs to account for the different travel demand characteristics associated with the possible uses and potential development size. In addition to the uses planned, the proposed project would incorporate new roadways, connections to existing roadways and highways, and other infrastructure improvements. This task, therefore, will involve not only an assessment of the impact of new trips generated by the proposed project, but also coordination with the planning and design efforts necessary to assess trip diversions from existing streets, as well as to ensure adequate access and circulation within the project area and study area. The analysis will also include DSNY access to and from the waste transfer station and use of the proposed park drives. Looking at multiple alternatives, subtasks are as follows:

- A. Travel rates and characteristics will be identified for the various development components of the proposed project through the research of standard references and published studies, such as the *ITE Trip Generation Manual* and park and recreational facility projects in the area. Applicable data developed from open space studies for the area will also be considered. A transportation scenario will

be developed that considers the trip rates of the different possible uses and the functional feasibility of potential development sizes. Once the specific development components for the transportation analysis have been determined, future trips by mode, temporal distribution, and directional characteristic for each component will be projected. While annual visitation projections have been developed for the proposed park, the travel demand projections used for the EIS analyses are expected to be a conservatively higher annual total. The results developed from the above will set the framework based on which of the detailed transportation analyses will be conducted. It is assumed that trips specific to the open space uses will be developed for analysis. In addition, the new roadway connections are expected to result in traffic deliveries during the AM and PM commuter hours. Therefore, a traffic analysis for the project will be performed for the weekday AM, midday, and PM peak hours. In addition, an analysis will be performed for the Saturday midday and PM peak hours. If appropriate, seasonal variations will be factored into the travel demand projections, and reasonable linkages among the various uses within the proposed park will be presented. In addition, trips associated with No Build projects not developed as part of other approved studies and growth factors for background traffic will be identified. These data will be summarized in a “Transportation Planning Factors” memo that will be prepared prior to initiating the traffic analysis. Among the transportation issues to be addressed in this memo are the following:

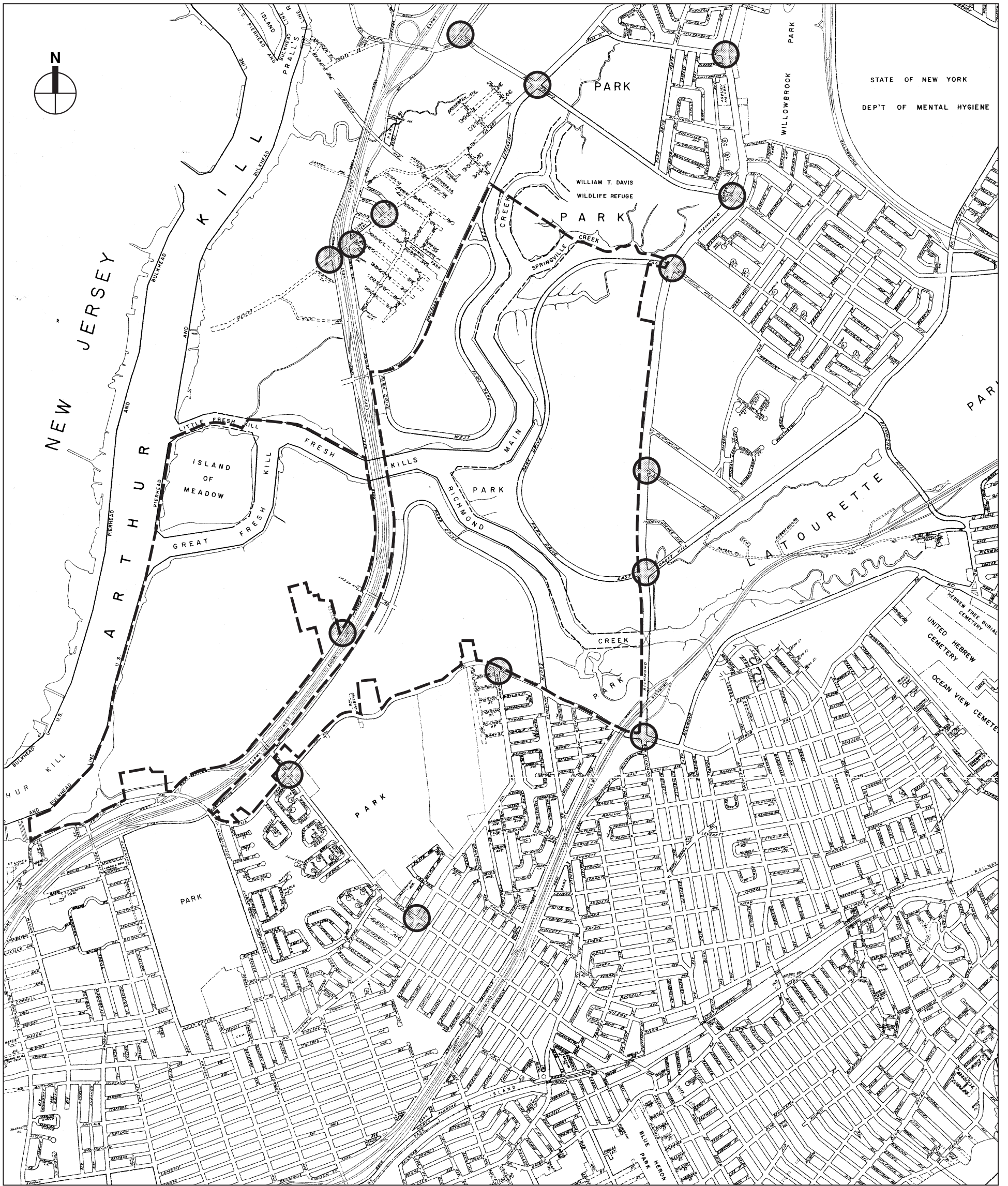
- The number of trips generated by the proposed project, including the modal split (i.e., vehicular, transit, and pedestrian trips) and the temporal distribution (this would take into account the park’s hours of operation), including assumptions regarding linked trips and special events;
- Vehicular trips that would be diverted off local roadways and onto new roadways through the park;
- All data would be provided for the peak hours proposed for analysis which would include weekday and weekend (Saturday or Sunday) peak hours, and assumptions regarding seasonal and event use of the park;
- Projects that are assumed to be completed in the No Action condition (e.g., the Goethals Bridge Replacement, NYSDOT West Shore Expressway Improvements, the Motorsports Entertainment Complex [NASCAR], Bricktown Centre at Charleston, Victory/Travis intersection improvements);
- Travel demand assumptions with trip assignment maps for the purposes of determining the traffic expected to be generated by the proposed project and the intersections for analysis;
- Locations of proposed vehicle classification counts and locations of automated traffic recorders;
- Assumptions regarding pedestrian and transit trips and the impact analyses to be conducted in these technical areas in accordance with the City’s *CEQR Technical Manual*; and
- Parking demand, parking locations, and the assumptions by which a parking accumulation analysis will be performed.

This “Transportation Planning Factors” memo would be distributed to the involved and interested agencies that would review the traffic and transit analyses (e.g., NYCDOT, NYSDOT, MTA, NYCTA, Staten Island Transportation Task Force) for their review prior to commencing with the traffic and parking as well as the transit and pedestrian analyses (see also Task 17, “Transit and Pedestrians, below).

- B. Define the traffic study area. This subtask will consider key access locations, major travel corridors, potential new roadway elements incorporated as part of the proposed project, and the anticipated levels of traffic attributed to the projected activities within the proposed park. It is anticipated that up to 20 intersections, including several new intersections within the project area—in particular, those

connecting to a proposed new interchange with the West Shore Expressway—would comprise the primary study area (see Figure 11). In addition to the 20 intersections, up to 8 highway ramps (interchanges) have been assumed for quantified analysis. Since the number of peak hour trips attributed to the proposed project is expected to be substantial, it is assumed that a secondary study area, consisting of key intersections along major travel corridors, intersections connecting to key highway exits, and several critical highway segments and ramps, will also be analyzed. This secondary study area is likely to require a similar level of analysis as the primary study area intersections. It is assumed that 10 additional intersections would be analyzed in this secondary study area. The selection of intersections for the secondary study area will be based on trip assignment data that will be developed as part of the “Transportation Planning Factors” memo.

- C. Collect traffic data. Existing traffic data in the study area will be collected according to methods established in the *CEQR Technical Manual*. The count program will consist of manual turning movement and vehicle classification counts to be performed during representative weekday and weekend peak periods, continuous automatic traffic recorder (ATR) counts to be recorded for a minimum of seven continuous days (at up to eight locations), and travel time and delay runs using the floating car technique (along up to six analysis routes) to be conducted at the same times as the manual counts to established peak period travel speeds for air quality modeling. In addition, physical geometries of the area, including street widths, travel directions, lane markings, traffic control devices, curbside regulations, and other operational features, will be inventoried to support the traffic analysis. The most recent signal timings from the New York City Department of Transportation (NYCDOT) will also be acquired.
- D. Analyze existing traffic conditions. Peak hour traffic volume networks and analysis parameters will be developed from the collected data. The capacity and operations of the roadway system will be analyzed using the *Highway Capacity Manual* methodology with the most recent version of the *Highway Capacity Software (accepted by NYCDOT and NYSDOT) for City streets and CORSIM for the proposed ramp connections to the West Shore Expressway*. Existing levels of service, volume-to-capacity ratios, and delays of lane groups, approaches, and overall intersections and ramp conditions will be determined for each analysis peak hour.
- E. Analyze future No Build traffic conditions. In coordination with the framework for analysis task, the future No Build projects in the area and the associated traffic volumes will be determined. These projects will include any large residential and commercial developments, as well as projects sponsored by public agencies, including the waste transfer station. The projection of the future No Build conditions will account for the incremental traffic generated by these projects plus background growth as recommended in the *CEQR Technical Manual*, which for most of Staten Island is 1.5 percent annually. In addition, improvements approved or considered for these future projects and as part of large-scale roadway projects, such as the West Shore Expressway and the Korean War Veterans Memorial Highway projects, and operational considerations associated with the landfill closure will be incorporated into the future No Build analysis, as appropriate. As with existing conditions, this analysis will determine the future levels of service, volume-to-capacity ratios, and delays for each analysis peak hour, absent the proposed project.
- F. Analyze future Build traffic conditions. The project-generated trips will be distributed to the respective travel modes in each peak hour using the travel demand estimates developed in task A. The vehicle assignments will be based on available market studies conducted for the proposed project, existing travel patterns, and possibly census data to define high residential zones in the surrounding catchment area. Where applicable, trips associated with uses anticipated to be displaced by the proposed project will also be incorporated as a negative increment in the Build traffic networks. A



STATE OF NEW YORK
DEPT OF MENTAL HYGIENE

- Project Site Boundary
- Intersection to be Analyzed

0 1000 2000 FEET
SCALE

traffic impact assessment of the proposed project will be performed by first assigning and mapping project-generated trips onto the study area and internal roadway traffic networks for each analysis period. The project's potential impact on v/c ratios, delays, and level-of-service will be evaluated, in accordance with the criteria established in the *CEQR Technical Manual*. If required, potential operational and physical mitigation measures will be evaluated to alleviate adverse conditions identified as part of the Build traffic analysis. These measures could include roadway geometry changes, new signal installations, signal timing modifications, and curbside regulation changes. This analysis would also compare the alignment of the proposed roadway with the roadway alignment as currently presented on the City map.

- G. Analyze future parking conditions. Since the proposed project would incorporate on-site parking facilities, impacts to surrounding parking conditions are not anticipated. Based on the travel demand projections, parking accumulation estimates will be developed to determine if the proposed numbers of parking spaces within different parts of the proposed park and in total would satisfy the projected demand. Where appropriate, the results of this analysis could be used to inform the design efforts of specific parking needs.
- H. Support air quality and noise analyses. Traffic inputs will be prepared for the analysis of air quality receptors in the study area. Volumes, speeds, and vehicle classifications will be provided for principal study area corridors. Average travel speeds, which are based on field measurements, will include time spent in queues. Noise analysis inputs will be prepared to include 24-hour volumes and classifications for existing, No Build, and Build conditions.
- I. Assess vehicular and pedestrian safety. Since the proposed project is anticipated to generate a substantial number of new vehicles to the surrounding area, an assessment of potential safety hazards is required. A review of the *CEQR Technical Manual* will be conducted to identify high accident locations within the traffic study area, and accident data for the most recent 3-year period will be obtained from the NYSDOT. Based on a detailed review of the accident data and the findings of the traffic analyses, potential safety hazards will be identified and viable improvement measures will be recommended.

TASK 17: TRANSIT AND PEDESTRIANS

The site of the proposed project is not currently accessible to the public and is therefore not served by public transit. This chapter will describe the current availability of bus and rail service in the area, and the potential improvements to that service that are presented as part of the proposed Plan with respect to bus, ferry, bike, and pedestrian access to the site. The subtasks are as follows:

- A. Assess transit service in the study area. This will include a description of area train (Staten Island Rapid Transit) and bus routes, typical service frequencies, and ridership levels.
- B. Assess bicycle and pedestrian conditions. The focus of this effort will be describing the local bike and pedestrian conditions with an emphasis on access, circulation, and safety considerations.
- C. Assess non-motorized transport. For the anticipated uses, it is expected that there could be many individuals accessing the proposed park via bicycles, rollerblades, skateboards, and other non-motorized means. In addition to the projection of future activities associated with the proposed project, an assessment of future bikeway plans and potential access and linkage with adjacent systems, such as Greenbelt and Staten Island Greenway, will be conducted.

- D. Describe the transit access demands of the proposed project. This would include a description of any proposed improvements that would allow bus, shuttle bus, or ferry access to the site. Assess the potential for any impacts on the City's transit systems.

The transit and pedestrians analysis would also rely on the "Transportation Planning Factors" memo described above with respect to travel characteristics for transit, pedestrians, and bicycle users.

TASK 18: AIR QUALITY

The air quality analysis will focus on two potential air quality impacts under the proposed Plan: stationary sources from proposed structures (e.g., emissions from heating system boilers) and surrounding uses on park users; and potential impacts from mobile sources (e.g., trucks, buses, and automobiles). The EIS also will include an assessment of the potential impacts from air toxics. The scope of work for that assessment is presented below under Task 21: Public Health.

The description of existing and future No Build conditions will note information about air emissions from the landfill and related operations—including the ongoing closure operations, the anticipated end of active landfill gas extraction for processing as gas production declines, and subsequent control of landfill gas by other means—and will reference prior studies on air quality and public health, including the 2000 Agency for Toxic Substances Disease Registry (ATSDR) report. It is noted that if the AERMOD dispersion model is the preferred model of the USEPA, NYSDEC, and NYCDEP, it will replace the use of the ISCST3 model, where identified below.

STATIONARY SOURCE ANALYSES

The stationary source analysis will determine potential impacts from heating ventilation and air conditioning (HVAC) and industrial sources of air emissions. Impacts from park buildings with HVAC air emissions are expected to be minor; therefore, a screening analysis of potential HVAC impacts on the surrounding area will be conducted. The stationary industrial source analysis will include identification of any existing manufacturing uses within 400 feet of the project site, based on DEP and DEC emissions permits for existing or planned operations, as well as operations on the project site. It will also include, as appropriate, emissions from DSNY's rock crushing operation, transfer station, and compost facility adjacent to the project site. Information on on-site operations may also be supplemented by U.S. Environmental Protection Agency (EPA), DEP, DSNY, or other data sources.

The industrial source analysis will be performed using the screening methodology outlined in the *CEQR Technical Manual*. The ISCST3 dispersion model screening database will be used to estimate the short-term and annual concentrations of critical pollutants at the potential receptor sites. Predicted worst-case impacts on the proposed project will be compared with the short-term guideline concentrations (SGC) and annual guideline concentrations (AGC) reported in the DEC's DAR-1 AGC/SGC Tables (December 2003) to determine the potential for significant impacts.

MOBILE SOURCE ANALYSES

It is anticipated that the proposed project's incremental traffic will exceed the *CEQR Technical Manual* screening threshold for analysis of carbon monoxide (CO) at a number of area intersections. The proposed project will also incorporate a new interchange along the West Shore Expressway to allow access to and from the proposed park. To address these issues, a microscale analysis will be performed to evaluate potential impacts of CO from the proposed project's mobile sources and particulate matter (PM). The need to perform a PM_{2.5} analysis will be based on the trip generation characteristics of the proposed park.

Fresh Kills Park

If necessary, the DEP interim guidance criteria for determining impacts from PM_{2.5} will be used as the basis for impact assessment.

EPA's screening mobile source CAL3QHC dispersion model will initially be used for the CO microscale analysis. EPA's refined CAL3QHCR dispersion model may be employed at intersections where potential exceedances are expected with CAL3QHC. For CAL3QHC, conservative worst-case meteorological conditions will be assumed in the dispersion modeling. Subtasks are as follows:

- A. Determine appropriate CO background levels for the study area from data collected by DEC monitoring stations and recommended backgrounds adjusted for future years by DEP. Calculate the methodology and input parameters needed to compute emission source strengths based on project data. Compute vehicular emissions using EPA's MOBILE6.2 emissions model using the most current DEP-supplied information and guidance.
- B. Examine air quality impacts based on updated air quality data for the area as a whole. Collect and summarize existing ambient air quality data for the study area. Determine receptor locations for microscale analysis based on locations of point sources, their proximity to gathering areas, and intersections analyzed in the traffic study area. Selection of final receptor locations will be determined based on the results of the traffic analysis. It is assumed that up to three intersections will be analyzed. Compare expected changes in traffic volumes with the *CEQR Technical Manual* screening threshold. Analyze multiple receptor sites at the intersections selected for detailed analysis, in accordance with CEQR guidelines.
- C. Analyze input data for the mobile source analysis based on volumes and speeds, and prepare vehicle classifications as part of the traffic task above for the peak hours. At each microscale receptor site, maximum 1- and 8-hour CO concentrations for existing conditions, the future years without the project, and the future years with the project. Analyses will be conducted for two peak traffic periods with one Build alternative. Impact analyses will be based on comparing existing and future CO pollutant levels with National Ambient Air Quality Standards (NAAQS) to determine compliance with standards and applicable de minimis criteria, and with one another to determine trends and, more important, project impacts.
- D. To address long-term issues associated with new connections to the West Shore Expressway, a separate analysis of mobile source air quality issues will be performed. In coordination with the traffic analysis, critical locations will be evaluated for the microscale CO analysis using the NYSDOT's Environmental Procedures Manual (EPM). These sites will include locations of critical roadway links and congested intersections predicted to be affected by the proposed interchange. A screening analysis will be performed to determine which locations should be chosen for further detailed study. Candidate intersections (intersections analyzed for the traffic and transportation study) will be ranked based on the methodology developed by the NYSDOT and DEC. Vehicular CO emissions will be predicted using EPA's MOBILE6 mobile source emissions model. Emissions will be estimated using the latest assumptions from DEC on the state's anticipated enhanced inspection and maintenance program. Operating modes for various vehicle types and roadway functional classes will be based on data contained in the EPM. It is assumed that input data for the mobile source analysis—including volumes, speeds, and vehicle classifications for No Build and Build conditions—will be prepared as part of the traffic task above. For each of the analysis sites selected for detailed study, maximum predicted 1- and 8-hour average CO concentrations will be calculated for two peak periods for the future analysis years without the project and with the project using EPA's CAL3QHC model. The 8-hour CO concentrations will be estimated using the applicable persistence factor in the EPM.

- E. Projected CO levels will be compared in the future with and without the proposed project with NAAQS. Predicted levels with and without the project will be compared to determine project impacts. If necessary, the DEP PM_{2.5} *de minimis* criteria for CO will be used as the guidance value for determining impacts.
- F. The connection to the interchange will include a mesoscale (area-wide) air quality analysis by computing pollutant burdens for the study area. Pollutant burdens represent the total expected quantities of pollutant emissions for the region for a known time period. Pollutant burdens for annual quantities of CO, volatile organic compounds (VOCs), and nitrogen oxides (NO_x)—primary air pollutants related to motor vehicle exhaust—will be calculated for emissions from changes in vehicular activity within the roadway network. Vehicular pollutant burdens will be computed based on the most recent EPA mobile source emission estimating procedures and the vehicle miles traveled (VMT) for the analysis years.
- G. The proposed project also will be evaluated to determine its consistency with the applicable portion of the SIP.
- H. Qualitatively assess potential impacts to future park users from any residual ambient odors, through a discussion of design measures to minimize fugitive odors from the landfill, and potential exposure to visitors from landfill infrastructure or No Build activities.

TASK 19: NOISE

For the noise analysis, there are two major areas of concern: the effect of noise from project-generated vehicular traffic on the local community; and acceptability of ambient noise levels in the proposed park. Existing noise levels in the area immediately adjacent to the project site reflect the level of activity (particularly vehicular activity) in the area. Autos and trucks along with noise generated by aircraft flyovers, mechanical equipment, and people going about their normal business all contribute to the total ambient noise levels. While a large number of truck trips that previously used local roadways when the landfill was functioning have been eliminated, the proposed project would result in a major park with a wide variety of facilities, including some facilities that may result in significantly increased traffic volumes (compared with existing traffic volumes) on some roadways. The effects of these increases in traffic volumes on ambient noise levels will be assessed as part of the noise task.

Existing and future noise levels, both with and without the proposed project, will be examined to determine conformance with CEQR criteria. The existing and future noise levels will include, as appropriate, references to DSNY's ongoing sanitation operations, including the two district garages, the leachate treatment plant, the landfill gas recovery plant, the rail-based waste transfer station, the rock crushing and screening operation, and the composting facility, as well as ongoing landfill closure operations. In conformance with the *CEQR Technical Manual* requirements, aircraft noise will be separated from vehicular and other noise sources for purposes of determining project impacts. In addition, the *CEQR Technical Manual* requires the use of the L_{eq} and L_{10} noise descriptors for vehicular noise analyses. Our measurement program and analyses will be performed in a manner to satisfy these requirements. In terms of the effects of the proposed project on community noise levels, the CEQR noise criteria considers a 3 dBA increase in noise to be a significant impact. To achieve a 3 dBA increase in noise level from traffic, there would have to be approximately a doubling of traffic (and/or a significant increase in the number of trucks). In the unlikely event that the project results in a significant community noise impact, mitigation measures will have to be examined.

In terms of noise levels in the proposed park, the CEQR exposure criteria requires that noise levels in parks not exceed 55 dBA L_{10} . When new parks are proposed, if the noise level exceeds 55 dBA L_{10} , the

Fresh Kills Park

park is considered to have a significant noise impact on park users, and noise mitigation must be explored and considered. An analysis of noise levels within the proposed park will be provided. The subtasks are as follows:

- A. Select appropriate noise descriptors. Appropriate noise descriptors to describe the noise environment and the impact of the proposed project will be selected. The L_{10} , and $L_{eq(1)}$ levels will be examined.
- B. Select receptor locations for detailed analysis. These sites will include sensitive locations, representative locations in the study area, and locations within the proposed park. A maximum of 12 receptor sites will be selected. Selection of the receptor sites for noise will be based on the results of the traffic investigations.
- C. Determine existing noise levels. Existing noise levels will be determined primarily by field measurements. Measurements will be made during two weekday and two weekend time periods. Measurements will be made using a Type I noise analyzer and include measurements of L_{eq} , L_1 , L_{10} , L_{50} , and L_{90} noise levels. Where necessary, measurements will be supplemented by mathematical model results to determine an appropriate base of existing noise levels.
- D. Determine future noise levels without the proposed project for the Build analysis years. At each receptor location identified above, noise levels without the proposed project will be determined for the Build analysis years using the Federal Highway Administration's Traffic Noise Model (TNM) model, proportional modeling techniques, or other approved analysis methodologies.
- E. Determine future noise levels with the proposed project for the Build analysis years. At each receptor location identified above, noise levels with the proposed project for the Build analysis years will be determined using TNM, proportional modeling techniques, or other approved analysis methodologies.
- F. Compare noise levels with standards, guidelines, and other criteria, and impact evaluation. Existing noise levels and future noise levels with and without the proposed project will be compared with various noise standards, guidelines, and other noise criteria, including CEQR noise impact criteria.
- G. Examine mitigation measures. Recommendations of measures to attain acceptable noise levels and to reduce noise impacts to within acceptable levels will be developed, if needed.

TASK 20: CONSTRUCTION IMPACTS

This chapter will assess construction-related impacts and describe the construction phasing and sequencing. It will also provide an estimate of activity on-site to the extent possible. Road building, planting scheme preparation, plant installation, and construction of buildings are major construction elements for the proposed project. If it is determined that a significant impact could occur during construction based on a qualitative analysis, a quantified analysis for construction-period traffic and air quality would be prepared. Technical areas to be analyzed include:

- A. Construction Phasing and Existing Closure Plan—The coordination of construction with ongoing landfill closure activities (existing infrastructure impacts, monitoring impacts, etc.) and the prevention of interference with existing landfill infrastructure monitoring and operations activities will be described.
- B. Soil Erosion and Sediment Control Plan—Discuss techniques for reducing soil erosion and sedimentation during project construction. Storm water discharges during construction and operation of the proposed project would be managed with an approved storm water pollution prevention plan (SWPPP) and conformity with established regulatory programs, which will be described in the GEIS, to minimize potential impacts to water quality and aquatic organisms.

- C. Contaminated Materials—Plans for the identification, collection, and mitigation of solid waste and/or hazardous materials uncovered during construction will be described.
- D. Traffic—Qualitatively consider temporary closures of traffic lanes or sidewalks, project any impacts on other transportation services during the various phases of construction, and identify the increase in vehicle trips from construction workers, equipment, and soil deliveries.
- E. Water Quality—Methods to prevent any water quality degradation will be described.
- F. Air Quality—Qualitatively discuss mobile source emissions from construction equipment and worker and delivery vehicles, fugitive dust emissions, including particulates, and measures to minimize impacts.
- G. Noise—Construction noise levels and any resulting impacts on adjacent land uses will be analyzed, including a description of the requirements for noise control under the recently amended New York City Noise Code.
- H. Natural Resources Protections—As appropriate, discuss the other areas of environmental assessment for potential construction-related impacts. This could involve such approaches as flagging the limits of construction to protect tidal and freshwater wetlands.

TASK 21: PUBLIC HEALTH

In accordance with the *CEQR Technical Manual*, this chapter will examine in detail the proposed locations of public access and the available surface water, ground water, and air monitoring data to determine if there is the potential for any adverse public health impacts resulting from public access. The subtasks are as follows:

- A. Provide a brief overview of the site history in terms of location/timing of solid waste filling and existing and proposed closure/control systems, and a preliminary environmental site assessment (Phase I) of the portions of the project site that were not filled with solid waste.
- B. Determine whether the current control systems (e.g., multi-layer cap and gas/leachate collection systems) are sufficient (in terms of potential additional exposure to hazardous materials) to allow the type of public access envisioned for each element of the park Plan. Describe these additional exposures qualitatively and, if possible, quantitatively, using existing landfill gas data and the most recent air monitoring data. Where these additional exposures have the potential to be significant, determine use restrictions for certain areas (e.g., on-mound or near passive vents) or upgrades to the systems (e.g., enhanced gas collection) or changes to the scope or schedule of particular elements to allow the element without the potential for significant adverse impacts. Where no combination of use restrictions, control system upgrades, or element modifications avoid the potential for significant adverse impacts, examine those exposures in more detail.
- C. The existing Fresh Kills Landfill has a number of pollution control facilities, including leachate treatment facilities, landfill gas flares, passive vents, and a landfill gas processing and recovery system. A detailed discussion of these systems will be presented to describe the measures currently in place and proposed to minimize emissions of air toxic compounds and leachate generated by the closed landfill. A review will be undertaken to identify previous studies that characterized emissions or ambient levels of air toxic compounds and/or odors from the landfill. The purpose of this review will be to obtain information that can be used to assess potential exposures to visitors to the proposed park. The conclusions of the May 2000 Agency for Toxic Substances Disease Registry (ATSDR) report will be discussed.

Fresh Kills Park

- D. Determine what, if any, impacts to public health may be present with the proposed project and what protections may be necessary for public safety during the overlapping phases of landfill closure and park accessibility.
- E. Determine any potential impact of proposed infrastructure on existing landfill infrastructure in place to protect the public from potentially hazardous materials located below ground.

TASK 22: ALTERNATIVES

CEQR and SEQRA require the examination of alternatives that compare the impacts of the proposed project with those alternatives. Alternatives to be analyzed are finalized with the lead agency as project impacts become identified. However, certain alternatives, such as the No Action Alternative, are required under CEQR and SEQRA. Alternatives that are expected to be analyzed in the DGEIS include:

- A No Action Alternative that assumes only the completion of landfill closure and no implementation of the Fresh Kills Park;
- A Lesser Impact Alternative that would reduce or eliminate potential effects of the proposed project (this alternative would be developed after completion of the DGEIS impact analyses); and
- Project alternatives that meet the Plan's goals and objectives through alternative designs of certain project elements, which could include alternative roadway alignments or alternative project phasing, such as:
 - A. Four-lane roadways for portions of the proposed circulation system.
 - B. Alternative road alignment.
- It is assumed that up to four alternatives will be analyzed in the GEIS.

TASK 23: MITIGATION

Where significant project impacts have been identified in Tasks 2 through 21, mitigation measures will be described to minimize or eliminate those impact (e.g., street intersection or culvert improvements). These measures would be developed and coordinated with the City, state, and federal agencies, as appropriate. Where impacts cannot be mitigated, they would be described as unavoidable adverse impacts.

TASK 24: UNAVOIDABLE ADVERSE IMPACTS

Any significant impacts for which no mitigation can be put forth or implemented will be presented as unavoidable adverse impacts.

TASK 25: GROWTH-INDUCING ASPECTS OF THE PROPOSED ACTION

Describe any growth-inducing aspects of the proposed Plan, focusing on whether it is expected to trigger development in the area.

TASK 26: IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This chapter summarizes impacts in terms of the loss of environmental resources, both in the immediate future and the long term.

TASK 27: ENVIRONMENTAL JUSTICE

The DGEIS will include an assessment of any potential environmental justice issues relative to the proposed park. This assessment will including assembling the relative land use, demographic, and environmental data in order to provide a screening analysis in conformance with State and Federal regulations for preparing Environmental Justice analyses.

TASK 28: EXECUTIVE SUMMARY

An Executive Summary will be drafted for the DGEIS and will be provided at the beginning of the document. The Executive Summary will draw on relevant material from the main body of the DGEIS to describe the proposed Plan and its actions, the environmental impacts (particularly any significant adverse impacts), measures to mitigate any significant adverse impacts, and alternatives to the proposed Plan. *



field operations
architecture . landscape . urbanism

Prepared for
New York City
Department of City Planning
22 Reade Street
New York, NY 10007-1216

Field Operations

475 Tenth Avenue, 10th Floor
New York, NY 10018
212.433.1450

+

Skidmore, Owings & Merrill
14 Wall Street
New York, NY 10005

Hamilton, Rabinovitz & Alschuler (HR&A)
1790 Broadway
New York, NY 10019

AKRF, Inc.
440 Park Avenue South
New York, NY 10016

Arup
155 Avenue of the Americas
New York, NY 10013

Applied Ecological Services, Inc. (AES)
17921 Smith Road
Brodhead, WI 53520

GeoSyntec
10015 Old Columbia Road, Suite A 200
Columbia, MD 21046

Tomato
13-14 Great Sutton Street
London, UK EC1VOBX

L'Observatoire International
414 West 14th Street, 5th Floor
New York, NY 10014

Curry & Kerlinger
1734 Susquehannock Drive
McLean, Virginia 22101

Mierle Laderman Ukeles
Department of Sanitation
44 Beaver Street, 2nd floor
New York, New York

Richard Lynch
17 Monroe Avenue
Staten Island, New York 10301

**FRESH KILLS PARK DGEIS
DRAFT SCOPE: ATTACHMENT A
REASONABLE WORST-CASE
DEVELOPMENT SCENARIO**

Reasonable Worst Case Development Scenario Technical Memo

FRESH KILLS PARK DRAFT MASTER PLAN

1.0 INTRODUCTION

This Technical Memorandum, the “Reasonable Worst Case Development Scenario (RWCDs),” has been prepared to identify the range of potential land uses and activities that could be developed as part of the Fresh Kills Park. This memorandum has been developed for the purpose of identifying a framework for the project’s environmental review. The scope of work for this task (3.5.1) calls for a memo to identify the RWCDs that will be analyzed in the Generic Environmental Impact Statement (GEIS) for the proposed Fresh Kills Park. This RWCDs will be used in evaluating potential impacts (including secondary or indirect effects, such as induced development). The RWCDs is to be based on the Draft Master Plan and the identification of actions necessary for plan implementation.

Implementation of Fresh Kills Park requires discretionary approvals by the City (e.g., capital funding, City zoning and mapping changes), the State (e.g., permits for activities on a landfill, activities in tidal wetlands), and Federal agencies (e.g., permits for structures in navigable waterways, activities in freshwater and tidal wetlands). As a result, plan implementation is subject to an environmental review that meets the requirements of the City Environmental Review Act (CEQR), the State Environmental Quality Review Act (SEQR), and the National Environmental Policy Act (NEPA). Given that there are a number of local actions and that implementation would be locally funded by the City of New York, the New York City Department of Parks and Recreation (DPR) will be the lead agency for the project’s environmental review. In addition, given the size of affected area, the number of program elements, and the potential for impacts (e.g., traffic, natural resources), a Positive Declaration will be issued and a GEIS will be prepared.

It is likely that implementation of Fresh Kills Park will evolve over the ensuing decades in response to changes in community recreation needs, innovations in landscaping, storm water management techniques, or habitat design, for example. Therefore, as part of the framework for analysis to be established for the GEIS, the RWCDs identifies maximum levels of recreational, cultural, revenue generating, parking, transportation, and habitat uses to be developed. The Draft Master Plan (DMP) will be utilized as an illustrative development scenario and the basis for the RWCDs, which will be used to determine impacts for all technical areas outlined in the City’s 2001 *CEQR Technical Manual*. The *CEQR Technical Manual* will serve as the guide for developing the GEIS impact methodologies as presented in the scope of work.

2.0 GOALS OF THE DRAFT MASTER PLAN

As described above, the DMP will be utilized in the framework for analysis as the illustrative development scenario. The major components are described below.

The total Fresh Kills Landfill Complex is approximately 2,200 acres, of which 1,785 acres fall within six planning areas: the Confluence (100 acres), North Park (233 acres), South Park (425 acres), East Park (482 acres), and West Park (545 acres). Acreage within Fresh Kills but outside the six planning areas includes the open water and creeks (estimated at 210 acres), the site of the proposed New York City Department of Sanitation (DSNY) transfer station (85 acres), areas of the site for which no programmatic changes are proposed (e.g., the Isle of Meadows 100 acres), and the Route 440 highway right of way (25 acres). The North Park, South Park, East Park, and West Park planning areas include lands within the boundary of a solid waste

management area as defined by the Fresh Kills Landfill closure plan. These landfill mounds (named North Mound, South Mound, East Mound, and West Mound) are either already closed or currently undergoing closure. The Point and Creek Landing planning areas do not include landfill mounds.

The individual planning objectives of the DMP's five planning areas are described below:

- **The Confluence** is comprised of the Point, Creek Landing, the Terrace, and the Marsh. The Point is a core zone of activity and transportation, adaptively reusing some of the basic infrastructure that was in place when the site was operated as a landfill. The area is intended for active recreation, as well as cultural, event-related, and revenue-generating activities. It is also intended to have transportation facilities, including parking, a new interchange with the West Shore Expressway, a new bridge across Fresh Kills Creek, bus service, and docks to provide ferry service. There would be lowland plantings and wetland restoration along the Fresh Kills waterway, where an expansive public esplanade is envisioned. Creek Landing is also a core zone of activities and transportation. This area is planned as a concentration of waterfront and cultural activity. The area also accommodates car parking sheltered under an expansive tree bosque, as it is intended to be a central point of arrival and departure for park users, as well as a great lawn and access directly to the water to allow for waterborne recreation. Additionally, as the area can support larger crowds, a flexible waterfront market deck with shading, retail amenities and park service facilities could provide a central gathering location for major events. The Terrace and the Marsh are intended to be primarily areas with improved wetlands and open space.
- **The East Park** planning area is intended to be primarily a habitat restoration area with created and improved wetlands as well as lowland forest. The man-made berm and ponds on the east side of the east mound represent an opportunity for new habitat as well as hiking and walking trails, with an area for parking off of Richmond Avenue to expand access opportunities into the park. Along the sides and on top of the former landfill mound, new habitat and forest areas would be created, with large meadows and open areas on top, and, potentially, a golf course.
- **The North Park** planning area also would be primarily a habitat restoration project, about half of which would be on top of former North Mound 3/4, and a local neighborhood-scaled recreational park amenity to the north that connects with the Travis neighborhood. The habitat restoration would include base tidal and freshwater wetland improvement and created lowland forest. The recreational neighborhood amenities include hiking trails, picnic areas and performance field/ parade ground and docks and platforms for kayak and canoe launching and bird watching. The top of the mound would be reserved for meadows and new habitat as this mound affords unparalleled views of the William T. Davis wildlife refuge.
- **The South Park** planning area would be oriented toward a mix of programmed/recreational activities and habitat restoration. Programmed activities would include active recreational uses in a long ribbon of open space nestled between the West Shore Expressway and Arthur Kill Road. A pedestrian bridge would cross the West Shore Expressway to connect this area with the parking to be provided in the West Park planning area. Extensive bike and hiking trails on the mound and in the lowlands would mix with equestrian trails and an equestrian center.
- **The West Park** planning area is primarily intended as a habitat restoration area, including woodland on top of the West Mound 1/9 and created and improved wetlands off the landfill mound. On top of the former mound there would also be a 9/11 monument. The area could

potentially include an interpretive center. This planning area also includes DSNY landfill support facilities (gas and leachate collection buildings).

Fresh Kills Park will continue to be subject to a variety of environmental regulations throughout the landfill closure process and post-closure, which require that the site be continually monitored and maintained. In addition, the huge scale and complexity of the site's transformation to parkland means that the process will inevitably take time. The DMP recognizes these challenges and projects the development of the park to occur in a minimum of three phases over a 30-year period.

3.0 REASONABLE WORST-CASE DEVELOPMENT SCENARIO

For the purposes of developing the RWCDs, the proposed uses described in the DMP are considered illustrative. To allow flexibility over the 30-year life of the plan, the RWCDs for the GEIS must account more generally for the types of uses that could be developed on the Fresh Kills site. These uses could be different than those currently anticipated in the DMP, given the potential for changes in community programmatic and recreation needs, or innovations in landscaping, storm water management techniques, or habitat design. Therefore, the uses proposed for Fresh Kills were organized into element categories to assist in identifying similar impacts from like uses, and to allow for alternate activities of similar impact not anticipated for development at the Fresh Kills site at this time to be analyzed in the GEIS. Table A-1 presents the element categories with a description of the category and representative features or Park activities that would fit in that category. A more detailed description of the element categories follow the table. Table A-2 places each feature of the DMP within these element categories. Additional uses that are not presently proposed in the DMP, but are similar in nature, are noted as representative features. It is assumed that over the life of the plan, equal or less intensive uses can be substituted for these uses without triggering the need for additional or supplemental environmental review studies.

Table A-1
Park Use/Element Categories

Element Category	Description	Representative Features
Active Recreational-Paved Surface	Active recreational uses that occur outdoors on constructed surfaces. No structured seating for visitors assumed. Some accessory buildings may be required.	Skate park*, basketball courts, racquetball courts, handball courts, roller-hockey rink
Active Recreational-Field Non-paved—Outdoor	Active recreational uses that occur outdoors and require the construction of playing fields/surfaces. Playing surfaces are assumed to be permeable. Structured seating for visitors varies.	Tennis center, softball or baseball fields, multi-use sports fields, soccer fields, volleyball courts, bicycle velodrome*, BMX race course, golf course, snowboard park*, snow making*, sledding*
Active Recreational-Indoor	Active recreational uses that occur indoors and would require the construction of buildings.	Equestrian center, stable, indoor gym, indoor track and field center, pool
Ancillary Facilities	Structures ancillary to park operations.	Greenhouses, light towers/media field posts, comfort stations, maintenance and operations facilities
Art Feature	Constructed elements that are not related to a defined use but are aesthetically interesting. Not assumed to generate auto, transit, or pedestrian trips.	Flare station screen, landfill machine row, light crystals, sculptures
Commercial/Retail	Park-related commercial or retail uses requiring the construction of buildings.	Café, restaurant, banquet hall, outdoor market, park-related retail, concessions, kite store, sporting goods sales, hiking gear, kayak sales/rentals
Cultural	Uses with a cultural or educational component. This category includes uses that could occur on permeable surfaces (e.g., open fields), as well as uses that could require the construction of buildings.	Education center, outdoor classroom, art studios, discovery center, exhibition hall, 9/11 interpretive center, 9/11 materials area, art exhibits, community centers
Energy/Infrastructure	Uses that could be created on the site to produce energy to offset envisioned energy needs for the park site or to provide a source of energy for sale for revenue generation.	Wind farm, solar farm, methane, bio-energy production from algae
Event Space	Entertainment uses that could occur on permeable or semi-permeable surfaces. No accessory buildings required.	Event lawn, amphitheater, bleacher seating

Table A-1 (cont'd)
Park Use/Element Categories

Element Category	Description	Representative Features
Habitat with People	New habitat to be created, or existing habitat to be enhanced, which includes the potential for use by the public. Related structures include boardwalks, decks, and [paved or unpaved] trails. No accessory buildings.	Marsh boardwalk, restored marsh exhibit, berm overlooks, hilltop field / meadow, meadow and successional grassland, overlook deck, woodland and berm trail, wetlands with boardwalk, pond and educational wetland exhibit, restored stream and trail, swamp forest exhibit basin, earthwork, woodland and trails, sunken forest performance space and exhibit, earthwork ring
Habitat without People	New habitat to be created, or existing habitat to be enhanced, which would not have the potential for public use. In some cases these areas would be fenced off or otherwise made inaccessible. Habitat would be protected and left undisturbed. No accessory buildings.	Mixed woodland, tidal marsh area, meadow, mixed woodland, swamp forest exhibit / stone basin exhibit, restored wetland, restored wetland inlet, swamp forest basin, swamp forests, woodland highway buffer
Linear Recreation	Active recreational uses that occur outdoors and would be limited in area to linear, paved paths.	Bicycle path, esplanade, multi-use recreational path loop, pedestrian crossings, main creek promenade, mountain bike trails
Municipal Services	Services related to ongoing municipal operations at the Fresh Kills site. Assumed as part of the baseline condition and not to generate new traffic or impacts.	DSNY district garages, DSNY methane recovery plant, DSNY Muldoon service entrance, NYPD facility
Parking	Public parking, assumed to be constructed using semi-porous surfaces.	Bosque parking, entrance parking lots
Passive Recreation	Passive recreational uses that occur outdoors on permeable surfaces. Related structures include decks and piers.	Overlook, picnic area / fields, lawn, bird observation deck, hilltop field, overlook decks, Isle of Meadows bird watching overlook
Public	Visitors centers/informational kiosks for way finding and educational uses.	Visitors center, kiosks
Transportation	New roadways and bridges, and existing roadways and bridges to be improved.	East Park Drive (Alternatives A and B), East Park Drive South, Forest Hill entrance, pile bridge over wetland, Richmond Hill entrance, Yukon entrance, signature bridge
Water Recreation and Access	Water-related active recreational uses. Assumed to require the construction of new in-water structures such as piers, docks, and overlooks.	Boat house, canoe rental, boat launch, boating lawn, beach terrace, fishing pier, boat tie-up, canoe dock, fishing dock, barge gardens, picnic pier, ferry landing, marina for small boats, dock
Note: *Element not included in Draft Master Plan, but possible representative feature that may be in the park and therefore analyzed as part of the RWCDs.		

Active Recreational-Paved Surface

This element category is for active uses, such as a tennis center and a skate park. Overall, for the RWCDs this element category is assumed to occupy up to 12 acres of constructed surface in the North Park, West Park and South Park.

Active Recreational – Non-Paved - Outdoor

Representative features currently proposed in the DMP include softball/baseball fields, soccer fields, and other multi-use sports fields. Overall, for the RWCDs this element category is assumed to occupy 5 acres of permeable area in the North Park, 14 acres of permeable area in the Point, 150 acres on East Mound [golf course], and 33 acres of permeable area in the South Park.

Active Recreational-Indoor

This element category is for enclosed recreational activities. For example, the DMP includes the creation of an enclosed equestrian center, stable, gym, pool, and indoor track and field center. For the RWCDs this element category is assumed to occupy approximately 5 acres of structures in the South Park.

Ancillary Facilities

Ancillary facilities are facilities that are ancillary to park operations that do not fit into any other element category. Representative uses include greenhouses for park plantings, and light/media towers, comfort stations and storage facilities. For the RWCDs, this element category is assumed to occupy approximately 50,000 sf in the North Park, 25,000 sf in the South Park, 25,000 sf in the East Park, and 35,000 sf in the West Park.

Art Feature

Art features typically occupy a small footprint and are intended to be aesthetically pleasing. They are ancillary to the major park elements. For example, at the existing flare stations, screens could be constructed to aesthetically conceal DSNY facilities and structures. Art features are not counted toward the acreage totals in the DMP, but are anticipated to be present in Creek Landing, East Park, North Park, and the South Park. However, some larger art features could potentially be installed, including; Landfill Machine Row—an approximately 9,000 sf art feature that could be developed from decommissioned DSNY equipment in the Point, and “light crystals” which could potentially be constructed above the East Mound. Therefore, for the RWCDs, it is assumed that this element category (no acreage associated) could be present in Creek Landing, East Park, North Park, and South Park, and 9,000 sf of this element category could be created in the Point. Some art features may be permanent, while others may be temporary.

Commercial/Retail

Commercial/retail uses are the revenue-generating components of the plan that will serve park users. Within this element category, the DMP includes cafes, restaurants, outdoor markets, and banquet hall facilities. For the RWCDs, this element category is assumed to occupy a maximum of approximately 65,400 sf of structures in Creek Landing and a maximum of 130,800 sf of structures in the Point.

Cultural

Cultural uses anticipated in the DMP include nature education centers, art studios, discovery centers, exhibition halls, and the 9/11 earthwork monument and interpretive center. For the RWCDs, this element category is assumed to occupy 21 acres of permeable area and 4,000 sf of structures in the East Park; 600 to 1800 sf of structures in the North Park; 3,000 to 6000 sf of structures in the Point; and 62 acres of permeable area and 3,000 sf of structures in the West Park.

Energy/Infrastructure

Certain energy/infrastructure uses mentioned in the DMP, such as methane recovery, already exist on the site. Additional energy/infrastructure uses anticipated in the DMP are structures that could be installed as alternative energy sources. Representative features include wind and solar energy farms. For the RWCDs, this element category is assumed to occupy 5 acres of permeable area and 5,000 sf of structures in North Park.

Event Space

Representative features within this element category include event lawns, an amphitheater, and bleacher seating. For the RWCDs, this element category is assumed to occupy 4 acres in Creek Landing and approximately 12 acres in the Point, 5 acres in North Park, and 2 acres in South Park, 5 acres in East Park and 7 acres in West Park. All acreage is assumed to be permeable.

Habitat with People

The DMP includes the creation of approximately 850 acres of habitat that would be accessible to the public via unpaved paths and trails for hiking, walking, or mountain biking, as well as an open-air, permeable performance space. For the RWCDs, this element category is assumed to occupy approximately 3 acres in Creek Landing, 250 acres in East Park, 80 acres in North Park, 10 acres in the Point, 135 acres in South Park, and 383 acres in West Park. All acreage is assumed to be permeable.

Habitat without People

The DMP includes the creation and enhancement of habitat that would not be accessible to the public on approximately 438 acres of the Fresh Kills site. For the RWCDs, this element category is assumed to occupy approximately 158 acres in East Park, 127 acres in North Park, 3 acres in the Point, 30 acres in South Park, and 20 acres in West Park (excluding the Isle of Meadows—100 acres—which would continue to serve as a wildlife sanctuary). All acreage is assumed to be permeable.

Linear Recreation

The DMP anticipates the creation of 250,000 to 275,000 linear feet of paved paths in the park, including bicycle paths, pedestrian paths/crossings, promenades, and mountain bike trails. For the RWCDs, this element category is assumed to occupy approximately 3,500 to 5,000 linear feet in Creek Landing, 63,360 linear feet in East Park, 10,560 linear feet in North Park, 37,000 to 40,000 linear feet in the Point, and 128,040 linear feet in South Park, and 15,000 to 17,500 linear feet in West Park. All area is assumed to be non-permeable.

Parking

The DMP includes the creation of approximately 18 acres of public parking on the site, which would be screened by bosques of trees. For the RWCDs, this element category is assumed to occupy approximately 4 acres in Creek Landing, 2 acres in North Park, 6 acres in East Park, 5 acres in the Point, 5 acres in West Park, and 3 acres in South Park. Although the DMP proposes that the parking areas would be permeable or semi-porous, for the purposes of the RWCDs it is assumed that all of the area in this element category would be non-permeable.

Passive Recreation

Passive recreational uses anticipated within the DMP include picnic fields, park lawns, overlook decks, and bird observation decks. For the RWCDs, this element category is assumed to occupy approximately 1,000 to 3,000 sf in Creek Landing, 10 to 12 acres in East Park, 9 to 10

acres in North Park, 3,500 to 5000 sf in the Point, 28 to 30 acres in South Park, and 500 to 2500 sf in West Park. All area is assumed to be permeable or semi-permeable.

Park Centers

The DMP proposes that the DSNY “blue barns”—existing structures used to house DSNY operations machinery—would be reutilized for a park visitors’ center, should the retrofitting of these structures not be possible, new Park Centers could potentially be constructed. In addition, although not proposed in the DMP, it is possible that other existing structures could be reused or that new buildings, such as kiosks, could be constructed for this use. For the RWCDs, this element category is assumed to occupy approximately 5,200 sf in Creek Landing and 6,500 sf in other areas of the park.

Transportation

This element category includes all transportation elements of the project that are accessible to vehicles. This includes the roadway and bridges, as well as the connections to Richmond Avenue and the West Shore Expressway (Route 440). Under the DMP, there would be an East Park Drive, a signature pile bridge over wetlands (the Loop Road Bridge) providing connections to the West Shore Expressway, new entrances to the Fresh Kills site at Forest Hill Road, Richmond Hill Avenue, and Yukon Avenue, and paved service roads. The Loop Road Bridge would be located in the Point; the other transportation elements would occur in the East Park. There are two alternative alignments under consideration for the main access road within the East Park. Alternative A would run along the west side of the mound, while Alternative B would travel along the east side of the mound. For the RWCDs, this element category assumes that the transportation elements proposed in the DMP would be developed.

Water Recreation and Access

Water recreation and access uses proposed in the DMP include a ferry landing, boat house and canoe rental, boat launches, boating lawn, fishing piers, boat tie-ups, canoe and fishing docks, barge gardens, overlooks, and a marina for small boats. For the RWCDs, this element category is assumed to occupy approximately 2.19 acres in Creek Landing, 1,800 sf in North Park, 5 acres in the Point, 1,200 to 1,500 sf in South Park, 1,200 to 1,500 sf in East Park, and 400 to 1000 sf in West Park. For the RWCDs, all these facilities are assumed to be the development of new in-water structures.

Table A-2
DMP Representative Features, by Element Category

Element Category	DMP Representative Feature	Park Area	DMP Characteristics
Active Recreation-Constructed Surface	Tennis Center	South Park	4 Acres
	Skate Park*	All areas	2 acre
Active Recreation-Field Sports	Baseball Field, Picnic Area, & Playground	North Park	5 Acres
	Multi-Use Sports Fields	Point	14 Acres
	Soccer Fields	South Park	33 Acres
Active Recreation-Indoor	Equestrian Center & Stable	South Park	3 Acres
	Sports Barn (Indoor Gym)	South Park	29,500 SF
	Pool*	South Park	7,500 SF
	Indoor Track & Field Center*	South Park	7,500 SF
Ancillary Features	Greenhouses	Creek Landing	25,500 SF
	Light Towers/Media Field Posts	Point	
Art Feature	Flare Station & Screen	Creek Landing	
	Flare Station & Screen	East Park	
	Light Crystals	East Park	n/a
	Flare Station & Screen	North Park	
	Landfill Machine Row	Point	9,000 SF
	Flare Station & Screen	South Park	
Commercial/Retail	Café	Creek Landing	32,700 SF
	Market Shade Roof	Creek Landing	32,700 SF
	Restaurant	Creek Landing	32,700 SF
	Banquet Hall Facilities	Point	32,700 SF
	Market Roof	Point	32,700 SF
	Restaurant Row	Point	98,100 SF
Cultural	Nature Education Area	East Park	21 Acres
	Nature Education Center	East Park	4,000 SF
	Outdoor Classroom	East Park	600 SF
	Eco-Educational Center	North Park	600 SF
	Art Studios, Exhibits & Community Facilities	Point	2 Acres
	Discovery Center	Point	32,700 SF
	Exhibition Hall	Point	8,590 SF
	Outdoor Classroom	South Park	600 SF
	9/11 Earthwork Monument	West Park	12 Acres
	9/11 Interpretive Center	West Park	3,000 SF
9/11 Materials Area	West Park	50 Acres	

Table A-2 (cont'd)
DMP Representative Features, by Element Category

Element Category	DMP Illustrative Park Element	Park Area	DMP Characteristics
Event Space	Event Lawn	Creek Landing	4 Acres
	Amphitheater	Point	2,000 Seats/50,000 SF
	Bleacher Seating	Point	35,950 SF
	Event Lawn	Point	10 Acres
Habitat with People	Marsh Boardwalk	Creek Landing	7,900 SF
	Restored Marsh Exhibit	Creek Landing	1 Acre
	Berm Overlooks	East Park	900 SF
	Hilltop Field	East Park	23 Acres
	Meadow & Successional Grassland	East Park	187 Acres
	Overlook Deck	East Park	550 SF
	Wetlands with Boardwalk	East Park	13 Acres
	Woodland & Berm Trail	East Park	30 Acres
	Pond & Educational Wetland Exhibit	North Park	4 Acres
	Restored Stream & Trail	North Park	6 Acres
	Successional Grassland & Trails	North Park	70 Acres
	Swamp Forest Exhibit Basin	Point	2 Acres
	Sunken Forest Exhibit & Performance Space / Boardwalk / Earthwork Ring	South Park	4 Acres
	Berm Overlooks	South Park	900 SF
	Hilltop Meadow	South Park	2 Acres
	Hilltop Meadow & Overlook Deck	South Park	7 Acres
	Mixed Woodland & Trails	South Park	74 Acres
	Woodland & Berm Trail	South Park	50 Acres
	Hilltop Field	West Park	3 Acres
	Meadow	West Park	5 Acres
	Meadow & Successional Grassland	West Park	173 Acres
	Overlook Deck & Earthwork	West Park	450 SF, 2 Acres
Woodland & Trails	West Park	200 Acres	
Habitat without People	Mixed Woodland	East Park	130 Acres
	Tidal Marsh Area	East Park	28 Acres
	Meadow	North Park	45 Acres
	Mixed Woodland	North Park	80 Acres
	Swamp Forest Exhibit/Stone Basin Exhibit	North Park	1 or 2 Acres
	Restored Wetland	Point	3 Acres
	Restored Wetland Inlet	South Park	4 Acres
	Swamp Forest Basin	South Park	2 Acres
	Swamp Forests	South Park	12 Acres
	Woodland Highway Buffer	South Park	12 Acres
	Woodland Highway Buffer	West Park	20 Acres
	Isle of Meadows	West Park	100 Acres

Table A-2 (cont'd)
DMP Representative Features, by Element Category

Element Category	DMP Illustrative Park Element	Park Area	DMP Characteristics
Linear Recreation	Bicycle Path	Creek Landing	
	Esplanade	Creek Landing	22,850 SF
	Multi-Use Recreational Path Loop	Creek Landing	
	Pedestrian Crossings	Creek Landing	
	Recreational Path Loop	East Park	12 Miles
	North Mound Recreational Path Loop	North Park	2 Miles
	Main Creek Promenade	Point	37,300 SF
	Mountain Bike Trails	South Park	16 Miles, 98 Acres
	Multi-Use Recreational Path Loop & Crossing	South Park	8.25 Miles
Parking	Recreational Path Loop	West Park	3 Miles
	Bosque Parking	Creek Landing	4 Acres
	Bosque Parking	East Park	6 Acres
	Bosque Parking	Point	5 Acres
Passive Recreation	Bosque Parking	South Park	3 Acres
	Overlook	Creek Landing	1,000 SF
	Picnic Area & Lawn	East Park	2 Acres
	Picnic Fields	East Park	9 Acres
	Bird Observation Deck	North Park	900 SF
	Expanded Park Lawn & Picnic Area	North Park	7 Acres
	Hilltop Field & Overlook Deck	North Park	1 Acre
	Overlook Deck	North Park	900 SF
	Rock Basin Picnic Area	North Park	1 Acre
	Scenic Overlook Deck	North Park	1,000 SF
	Pier Overlook	Point	3,500 SF
	Open Lawn	South Park	24 Acres
	Picnic Area & Playground	South Park	4 Acres
Isle of Meadows Bird Watching Overlook	West Park	450 SF	
Park Centers	Visitor Center (Reused Blue Buildings)	CL & P	10,400 SF
	Visitor Center (New Buildings)	Point	7,500 SF
Transportation	East Park Drive (Alternative A)	East Park	
	East Park Drive (Alternative B)	East Park	
	East Park Drive, South	East Park	
	Forest Hill Entrance	East Park	
	Pile Bridge Over Wetland	East Park	
	Richmond Hill Entrance	East Park	
	Yukon Entrance	East Park	
Signature Bridge	Point		
	Boat House & Canoe Rental	Creek Landing	900 SF
	Boat Launch	Creek Landing	4,750 SF
	Boating Lawn & Beach Terrace	Creek Landing	2 Acres
	Fishing Pier & Boat Tie-up	Creek Landing	1,650 SF
	Fishing Pier & Overlook	Creek Landing	1,350 SF

Table A-2 (cont'd)
DMP Representative Features, by Element Category

Element Category	DMP Illustrative Park Element	Park Area	DMP Characteristics
Water Recreation and Access	Canoe Dock	North Park	900 SF
	Fishing Dock	North Park	900 SF
	Barge Gardens	Point	43,500 SF
	Ferry Landing	Point	6,000 SF
	Boat Launch	Point	6,750 SF
	Fishing & Picnic Pier	Point	4,100 SF
	Fishing Pier	Point	4,900 SF
	Marina for Small Boats	Point	2 Acres
	Overlook & Dock	West Park	450 SF
Note: *Element not included in Draft Master Plan but proposed by community for possible inclusion in park and therefore analyzed as part of the RWCDs.			

Based on user data for other City parks, it is assumed that Fresh Kills Park could attract up to 2.5 million people annually. For example, the 1,122-acre Van Cortlandt Park attracts an estimated 2.5 million persons per year. Although Staten Island has less population than the Bronx, given the potential regional attraction of the proposed park, it is reasonable to assume a similar level of potential attendance at Fresh Kills.

4.0 DRAFT GEIS IMPACT ANALYSIS

The location, size, and nature of the activities in the illustrative development scenario/Draft Master Plan will be examined in the Draft GEIS, in the context of the RWCDs.

For the Draft GEIS, a draft Scope of Work will be prepared and circulated by the lead agency to involved and interested agencies and a public meeting will be held on the scope. That scope of work will describe the methodologies to be used in the Draft GEIS and will be based on the *2001 CEQR Technical Manual*. The Draft GEIS project description and impact analyses, will include, but not be limited to:

- Presenting the mapping actions for the site, including proposed roadway alignments and park boundaries;
- Describing in detail the landfill closure plan, its phasing, the facilities that need to be in-place, and coordination with park implementation through the park build year;
- Identifying the regulated areas (e.g., on mound, tidal wetlands and adjacent areas, etc.) and calculating the projected areas of disturbance and intensity of use in these areas, based on the RWCDs;
- Describing the impacts of roadway and bridge construction both on-mound and along or over wetlands;
- Quantifying through movements and traffic diversions utilizing the proposed roadways;
- Describing the types of anticipated athletic activities, revenue-generating activities, and special events and their associated vehicle trip generation;
- Calculating areas over the water (i.e., water coverage by structures) and improvements to shoreline protection measures (e.g., bulkhead repair) in order to determine impacts on water quality and aquatic resources (approximately 2,500 linear feet of bulkhead would be

repaired; approximately 35,000 linear feet of shoreline [including 175 acres] of shoreline habitat would be improved and naturalized);

- Delineating areas of impervious surfaces (e.g., roadway and parking), mapping the proposed storm collection systems, and describing the runoff volumes and water quality control techniques;
- Defining any areas of potential cultural sensitivity (e.g., archaeological or historical) that may be disturbed;
- Calculating solid waste generation based on the anticipated number of park users and employees;
- Examining demands on community facilities and services based on the anticipated numbers of park users and employees;
- Describing locations of public access and the potential for public health impacts;
- Researching areas between mounds that are suspected to have prior dumping; and
- Describing construction techniques and areas of soil disturbance, the duration of soil exposure, and the types of soil erosion and sediment control practices that are proposed.

It is anticipated that the environmental review of the Plan will examine the project in two phases, depending upon how final closure plans integrate with park implementation and the proposed park build-out. The environmental review will consider the project phasing and potential for the development of some park elements to occur before the final closure of the Fresh Kills Landfill, such as the construction of roads and the potential construction of a golf course on the East Mound and a 9/11 monument on the West Mound. This phasing will be developed in the DGEIS scope, which at this time considers two phases of analysis (2016 and 2036). Elements of the proposed project that are expected to be completed by the 2016 build year include the Schmul Park entrance, Owl Hollow soccer fields, the Travis Neighborhood Park, the North Park multi-use path and wetland restoration, the Arden Heights Neighborhood Park and wetland restoration, the Muldoon Avenue entrance, the South Mound loop trail and overlooks, habitat restoration on portions of the North and South Park mounds, the September 11 monument, segments one and two of the park drive and landscape ribbon, and improvements to the confluence area (including Creek Landing, the Point, and the Marsh).

Additional alternatives in the GEIS could also examine alternatives with respect to roadway access to Richmond Avenue and Route 440, which could be developed at different stages of project implementation.

A. INTRODUCTION

This attachment to the Final Scope of Work summarizes and responds to comments received during the public comment period on the Draft Scope of Work to prepare a Generic Environmental Impact Statement for the Fresh Kills Park project (dated April 21, 2006). Public review of the draft scope began on April 21, 2006, with the distribution of the Draft Scope of Work. A public scoping meeting was held on May 24, 2006 at P.S. 58, 77 Marsh Avenue, Staten Island to accept oral comments on the Draft Scope of Work. The period for submitting written comments on the Draft Scope remained open through June 19, 2006.

Section B, below, lists the agencies, organizations, and individuals who commented on the Draft Scope. Section C summarizes and responds to the comments. After each comment is a number reference to the agency, individual, or group that made the comment. The numeric references correspond to the list below. Where these comments resulted in changes to the scope of work, this is noted in the response and these changes are identified in the Final Scope by double-underlining.

B. AGENCIES, ORGANIZATIONS, AND INDIVIDUALS WHO COMMENTED ON THE SCOPE**MUNICIPAL AGENCIES**

1. New York City Department of Environmental Protection, written submission from Darryl H. Cabbagestalk dated June 6, 2006 and written submissions from Gary C. Heath dated June 27, 2006 and August 17, 2006
2. New York City Department of Sanitation, written submission from Steven Brautigam dated June 19, 2006
3. New York City Landmarks Preservation Commission, written submission from Gina Santucci dated May 10, 2006
4. New York City Landmarks Preservation Commission, written submission from Amanda Sutphin dated May 1, 2006
5. New York City Department of Transportation, written submission from Naim Rasheed dated July 18, 2006
6. New York State Department of Transportation, e-mail submission from Peter King dated August 16, 2006

ELECTED OFFICIALS AND COMMUNITY BOARDS

7. Staten Island Borough President James P. Molinaro, oral comments on May 24, 2006 presented by Robert E. Englert and written submission dated May 24, 2006
8. New York City Councilmember James S. Oddo, oral comments on May 24, 2006 presented by Steven Matteo and written submission dated May 24, 2006
9. New York City Councilmember Michael E. McMahan, oral comments on May 24, 2006 and written submission dated May 24, 2006
10. Community Board 3, oral comments on May 24, 2006 presented by John Antonietto
11. Community Board 1, oral comments on May 24, 2006 and written submission dated May 24, 2006 presented by Rajiv Gowda

ORGANIZATIONS AND INTERESTED PUBLIC

12. Robert DeBiase, oral comments on May 24, 2006 and written submission dated June 19, 2006
13. Greensward Foundation, oral comments on May 24, 2006 presented by Robert M. Makla
14. Thomas Marotta, written submission dated June 16, 2006
15. Thomas Mooney, Jr., oral comments on May 24, 2006
16. New York City Audubon, written submission from E.J. McAdams dated June 5, 2006
17. Protectors of Pine Oak Woods, Inc., written submission from Charles Perry dated June 3, 2006
18. Staten Island Chamber of Commerce, written submission from Linda Baran dated June 15, 2006
19. Staten Island Recreational Congress, oral comments on May 24, 2006 presented by Frank Marino
20. WTC Families for Proper Burial, oral comments on May 24, 2006 presented by Diane Horning
21. WTC Families for Proper Burial, oral comments on May 24, 2006 presented by Kurt Horning

C. RESPONSE TO COMMENTS

GENERAL/PUBLIC REVIEW PROCESS

Comment 1: The Scope states in several spaces that the proposed Generic Environmental Impact Statement analyzes a Reasonable Worst-Case Development Scenario, whereby the plan elements looked at in the EIS will cover other park elements that are not currently under consideration, but that may evolve as the plan emerges over the next many years. It's important that the document continue to grow and evolve as the proposals and the construction itself continues to grow. Under this reasoning, no additional analysis would be needed to cover these

potential new elements. While I concur that small changes to the plan should not require new analysis, I think it should be acknowledged that significant changes to the plan—such as, for example, an increase in commercial activities, new facilities, or new roads—should require supplemental environmental assessments. (9)

Response: As described in the Scope of Work, the Reasonable Worst-Case Development Scenario (RWCDS) identifies the range of potential land uses and activities that could be developed as part of the Fresh Kills Park, as well as maximum levels of recreational, cultural, revenue generating, parking, transportation, and habitat uses under consideration. If in the future there are minor changes to the proposed park uses and activities that are not contemplated within the RWCDS, these new elements could be analyzed within a technical memorandum. If changes are more substantial in scope, a supplemental environmental assessment may be required.

Comment 2: Where can we access the minutes from all of the [public outreach] meetings and see the chronology of how the plans changed based on public input. (20)

Response: Over the course of the nearly five-year-long planning process, the Department of City Planning held numerous meetings with the public. The current master plan is the result of the careful balance of public input, sound planning, and city policies. Summaries of the public meetings can be obtained through submitting a written Freedom of Information Law (FOIL) request to the Department of City Planning.

Comment 3: Look into New York Codes Rules and Regulations, Title 6, Subpart 316, Section 17. These regulations do not allow body parts in landfills like Fresh Kills. We know that there are hundreds of body parts in the landfill now destined to become part of West Park. The fine sifting equipment was not put into place until 30-40 days after the first loads were taken to Fresh Kills. In those early days, what remains were dumped without benefit of the screening process? You should study whether or not body parts are permitted as per Regulation 360 Section 17. And in addition, the Department of Health and Mental Hygiene should address the psychological impact of human remains having been dumped on top of garbage, which will then become a public park. You have to let us know what plans you have to mitigate the psychological effects of that, and what plans you have to remove all human remains before capping the landfill. (20)

Response: As with all projects, the City intends to comply with all applicable local, state, and federal codes and regulations. The GEIS will include an examination of the project's compliance with the applicable environmental regulations of the City and State of New York and federal government. Moreover, the allegations contained in this comment are disputed by the City, and are the subject of an

Fresh Kills Park

ongoing lawsuit. In light of pending litigation, it would be inappropriate to respond further at this time.

Comment 4: In your worst-case scenario, what happens if the money runs out? (21)

Response: The GEIS will consider the full build-out of the proposed park through the year 2036. The City of New York is committed to the development of Fresh Kills Park in that timeframe.

Comment 5: A championship golf course should be included with greens and open spaces that would afford a spectacular view of the Manhattan skyline and the metropolitan area in general. With a land mass of 2,200 acres, a golf course would occupy about 120 acres and would be economically feasible. There could be a way to lease this land out by the City to a developer. The City of Bayonne created a wonderful golf course on their landfill. There should also be a new sports complex. CB3, CB1, and CB2 have voiced their approval and have written numerous letters requesting a sports complex consisting of tennis courts, a running/jogging track, motor cross, and sports fields. All these above-mentioned items could and should be incorporated within the park to meet the recreational needs of people here on Staten Island. (10)

Response: A golf course is one of the potential park uses within the East Park area. It is included in the RWCDS under the “Active Recreational–Non-Paved–Outdoor” element category. The “Active Recreational–Indoor” element category of the RWCDS includes such sports complex uses as an equestrian center, stable, gym, pool, and indoor track and field center. The RWCDS includes such uses in the South Park and Confluence planning areas.

Comment 6: The plan is to use the back of the West Mound to house major Department of Sanitation facilities and operations both related to Fresh Kills closure and Sanitation needs. This area will have a leachate treatment plant, a landfill gas recovery facility, and a DSNY Staten Island garage borough repair shop, and is incompatible with an area for quiet reflection. (20)

Response: The GEIS will examine the compatibility of the proposed park uses and activities adjacent to the DSNY facilities and operations. It is noted that many of these facilities are necessary for the closure of the landfill and are therefore necessary to the development and operation of the park.

Comment 7: Staten Island has grown more than any other borough in New York City as per every U.S. Census since 1790. It was the fastest growing county in the State of New York from 1990 to 2000. The current population is 450,000 and expected to grow and reach 630,000 by the year 2030. The year 2035 has been chosen as the year for implementation of the park elements. I would like the lead agency,

the New York City Department of Parks and Recreation, to establish a borough population of 630,000—not the current population of 450,000—as the base number for all design calculations. (11)

Response: The analysis of the future No Build and Build conditions will include population growth in the borough through the two analysis years, 2016 and 2036.

Comment 8: We have been told repeatedly of having the largest dump in the world and the people of Staten Island have been forced to live with an environmental injustice of historic proportion in New York City for over 50 years. Now we hope that every effort will be made to give this “Borough of Parks” the world’s largest, most beautiful, 21st century state-of-the art park in the world. (11)

Response: Comment noted. Upon completion, Fresh Kills will be one of the City’s largest parks.

Comment 9: It is important to give nature in the city to everybody who’s here. The Parks Department can employ everybody, educated or not. (13)

Response: Comment noted. It is expected that the proposed park would provide a range of job opportunities and would employ people with a variety of skills.

Comment 10: The park mapping action should include language on the map which makes clear that the following are compatible with park use: 1) the use for park construction of uncontaminated, inert fill such as soil, brick, rock, concrete, asphalt, and glass, and 2) the operation of a leaf and yard waste composting facility to make a soil amendment for park construction. (2)

Response: A Memorandum of Understanding (MOU) will be instituted between DSNY and DPR regarding the uses and activities to be allowed within the proposed park. Issues regarding fill materials and cover soils will be examined in the EIS as well as the compatibility of the proposed park with DSNY operations.

Comment 11: The GEIS should include a discussion of any proposed changes to DSNY permits and how the project will conform to 6 NYCRR Part 360 regulations for solid waste facilities. The draft scope states on page 8 that the GEIS “will demonstrate how the proposed park will be designed to minimize impacts on any of these [landfill infrastructure] systems. The need for any modifications to this infrastructure or these monitoring systems to implement the proposed park will be demonstrated in the DGEIS. Protection of these systems is critical to the implementation of the proposed park.” The GEIS should discuss the impacts of any such proposed modifications for park use upon the ability of the facility to remain in compliance with Part 360 regulations (which include protection of human health and the environment, see Part 360-2.15 (k)(9)). (2)

Fresh Kills Park

Response: The scope of work has been amended to reflect the need to discuss the project's potential effects and compliance with active permits and the protection of landfill infrastructure systems.

Comment 12: In addition to Part 360 compliance issues, the GEIS should also consider the implications of the proposed park on existing permits held by DSNY. A change in land use may also have implications on air and State Pollutant Discharge Elimination System (SPDES) permits, etc. The GEIS should also clarify what approvals are anticipated from DEP and/or DEC for stormwater management for the proposed park project. The Solid Waste Management Units at Fresh Kills collectively have their own facility SPDES stormwater permit. The GEIS should discuss whether this permit should be altered to incorporate discharges from the Park, and should discuss whether and how the park use would affect DSNY's status as permit holder. Furthermore, any modification to stormwater management will need to be in compliance with the approved Final Closure Design Report and demonstrated to DEC as part of Part 360 regulatory compliance. The GEIS should discuss how this is to be achieved in view of the park use. Another related regulatory issue will be that a change in land use could alter baseline monitoring data that is required for landfill closure compliance purposes. The potential for this should be analyzed and disclosed. In order to assess potential impacts on DSNY infrastructure and post-closure care in the future no build scenario, baseline standards will be needed. In general, existing baseline data should be presented according to methodologies currently used at Fresh Kills. An example of this can be found on page 23 of the Scope, "Stormwater." In addition to any requirements that DEP may have for calculating stormwater volumes, e.g. DEP's standard rainfall events, the document should also apply the methodology used for the Final Closure Design of the landfill units so that a comparison can be made with the existing conditions. Data collection such as on air, water, etc. that occurs in other sections of the GEIS should be supportive of the Public Health section's analysis. (2)

Response: The scope of work has been amended to reflect the need to discuss the project's potential effects on existing permits, stormwater management, and landfill closure compliance. Specifically, the DEIS will examine proposed changes in uses and the implications for current permits and DSNY operations. This would include examining the changes in hydrology relative to differences between final closure design and the impacts on runoff, hydrology, and water quality under the proposed project.

Comment 13: Related issues that should be discussed include the lines of responsibility for how the joint jurisdiction will occur on the site with DPR and DSNY; the point at which DSNY responsibility would end; the extent of DSNY's responsibilities while the landfill is still under closure construction; whether future permitting is

to be done on a site-wide basis or separately for Park facilities, and identifying the entity to hold permits related to the site. (2)

Response: It is expected that the above-described issues relative to the transfer of land management from DSNY to DPR, as well as on-going management, and stewardship will be addressed in an MOU between DPR and DSNY and summarized in the “Project Description” chapter of the GEIS.

Comment 14: The proposed parkland and roadways should be coordinated with the Port Authority of New York and New Jersey (PANYNJ) regarding the Goethals Bridge Replacement, in addition to NYSDOT. Include the proposed Goethals Bridge Replacement, Motorsports Entertainment Complex on Staten Island (NASCAR), Bricktown Centre at Charleston, West Shore Lowes, and the widening of the Victory Boulevard and Travis Avenue intersection in the No Build conditions. (5)

Response: These No Build projects will be identified in the Final Scope of Work and described in greater detail in the “Transportation Planning Factors” memo.

Comment 15: The proposed new bridges and any listed bridge culvert impacted by the project should be designed and detailed by an experienced designer. Any design and construction of bridges and culverts should meet all applicable federal, state, and local requirements. In addition, the design for all roadways, bridges, street lighting, signals, bicycle/pedestrian path, and all other elements that would be under DOT’s review should meet AASHTO and City/DOT standards. The proposed signature bridge and pedestrian bridges are required to be designed in accordance to the latest ADA requirements. When available, please provide preliminary design and final design plans for the signature bridge and both pedestrian bridges for DOT’s Division of Bridges review and approval. (5)

Response: These design requirements will be described in the “Project Description” chapter of the GEIS. The final scope has been modified to reflect these requirements.

Comment 16: Please identify whether the planned parkland will be mapped as parkland. If parkland is eliminated to accommodate mapped streets, DOT must not be held responsible for providing replacement park acreage for the alienated parkland. (5)

Response: The planned parkland will be mapped as parkland. It has not yet been determined if the roadways will be mapped city streets or unmapped park drives. This decision will be presented in the GEIS. Should it be determined that these will be mapped streets, this street mapping action would be prepared along with the park mapping application.

REASONABLE WORST-CASE DEVELOPMENT SCENARIO

Comment 17: The document does not state clearly what parameters were used for categorizing the RWCDS. The RWCDS should take into account the timing of the park construction and its impacts on existing landfill infrastructure. Unanticipated delays in park construction could increase the possibility of potential impacts on landfill infrastructure. (2)

Response: The RWCDS is based on the range of land uses and activities that are being considered for the proposed park at this time. It is assumed in the GEIS that park build-out will be examined for an interim build year, 2016, with the full build-out of the park by 2036. Any impacts on DSNY infrastructure will be addressed as part of that analysis.

Comment 18: Page A-12: The summary of what the project description and impact analysis will include, although not intended to be all inclusive, should reference potential impacts to the landfill infrastructure due to park improvements. (2)

Response: The GEIS will examine potential impacts to the landfill infrastructure under Task 14: Solid Waste and Sanitation Services.

Comment 19: Clarify the classification for Astroturf—active paved, unpaved, or its own category? (2)

Response: Synthetic turf falls under the “Active Recreational–Non-Paved–Outdoor” element category of the RWCDS. DPR has installed numerous synthetic turf fields around the City as of this date. These fields have proven extremely popular as a durable, high-quality playing surface and are much sought after as a replacement for asphalt or dirt playing fields. DPR is also considering the use of a new synthetic turf product, “Astroturf-the new generation” that has a biocel polyurethane backing, which is an improvement over typical secondary backings. The fiber is tufted nylon without infill. This, along with the light colored, environmental backing, is expected to be considerably cooler than the typical black rubber infill products. In addition, unlike previous turf, today’s artificial turf feels and plays like real grass, but has an advanced drainage system and requires far less maintenance. Fields using artificial turf can be used in any weather, require less maintenance, do not result in dust as is common on grass-covered playing fields, and last much longer than playing fields with grass. Synthetic turf fields also have air quality benefits because they do not require regular mowing with gasoline-powered machinery.

Comment 20: Please clarify what is meant by “structured seating.” What are the characteristics of structured seating that may have an impact? Do bleachers qualify as

structured or unstructured? If they are structured it would be conceivable that they would be included as part of both types of active recreation facilities. (2)

Response: Park elements with structured seating (e.g., bleachers) are assumed to have facilities that allow for higher levels of attendance and therefore would have the potential to have greater impacts in one or more areas of analysis (e.g., traffic, transportation). These potential impacts will be analyzed in the GEIS.

Comment 21: The maximum area that will be permitted to be paved in any given area should be discussed, together with the process that will be used to determine potential impacts. The potential impacts of a paved area of ½ acre may be different than an area of 10 acres. (2)

Response: The GEIS will present the maximum areas to be paved, and will examine the impacts of that cover type, particularly with respect to the analysis of stormwater runoff.

Comment 22: If the energy/infrastructure RWCDS is assumed to be 5 acres of permeable surface in the North Park, what if the decision is made to put it in the West Park instead? Would a better RWCDS approach be to assess if the facility would be in or outside of the Solid Waste Management Unit? (2)

Response: A change in the plan such as this, if proposed after the GEIS, would likely require a supplemental environmental review. The location of facilities with respect to Solid Waste Management Unit Areas will be a focus of analysis in the GEIS.

Comment 23: Please describe the proposed project in detail as well as identify all of the proposed actions. As indicated, the RWCDS is based on the Draft Master Plan and the identification of items necessary for plan implementation. Therefore, more information related to the proposed actions is necessary to review the RWCDS. Please provide details, including specifications, for the proposed lighting plan for DOT review. (5)

Response: Additional details on the proposed project will be provided in the “Project Description” chapter of the GEIS, including lighting details.

Comment 24: Please provide the number of parking spaces that will be required for the RWCDS, as well as an hourly parking accumulation table for the weekday and weekend conditions. (5)

Response: Details on the proposed parking, including the size and location of parking facilities and an hourly parking accumulation table, will be provided in the “Project Description” chapter of the GEIS.

Fresh Kills Park

Comment 25: Please indicate the locations of the main, pedestrian and bike entrances by name/intersection and show any proposed pedestrian crosswalks. Figure 6 does not clearly indicate the locations of these entrances. We recommend that bike/pedestrian crossings be provided at signalized intersections. Please indicate the area (i.e. acres) that will be allocated to the proposed roadways and bicycle/pedestrian paths. We recommend a minimum width of 10 feet for the proposed mixed-use (bike and pedestrian) paths. We recommend providing parking facilities for bicycles along the mixed-use paths and at each recreational, commercial and scenic location. For security reasons, it is important that these paths not be secluded from other roadways by either landscaping, or distance between the roadways and the mixed-use paths. (5)

Response: As described in the “Final Scope of Work,” details on pedestrian and bicycle paths and vehicular intersections will be provided in the GEIS.

Comment 26: Please justify the visitor projections provided in Table 3 in the RWCDs. Please provide the travel demand assumptions for each of the uses identified in Table 2, as well as the year each of these uses will be completed by. In addition, these uses may require additional environmental reviews. (5)

Response: All uses proposed for the park will be evaluated for their travel-demand characteristics’ impacts. Additional details on the travel demand characteristics of the proposed project will be provided to DOT for review in a “Transportation Planning Factors” memo. The table provided in the RWCDs is based on representative data provided by DPR.

PROJECT DESCRIPTION

Comment 27: Page 1, paragraph 1: the site of the proposed park is actually less than 2,200 acres when the DSNY facilities in the area are excluded. The acreage and the percentage of the project site represented by the four landfill mounds should therefore be adjusted. Line three: it should be noted that the landfill is a “sanitary” landfill. Suggest revision to say “by the closing of the Fresh Kills Landfill in 2001, two mounds (3/4 and 2/8) had closure construction completed, while closure operations for the two remaining mounds are currently ongoing.” (2)

Response: The recommended edit to line three has been made to the scope of work. Though the Fresh Kills Landfill Complex is approximately 2,200 acres, the precise size of the area proposed for park mapping will be described in the GEIS and ULURP application.

Comment 28: Paragraph 2: as the project site excludes certain DSNY facilities, say the “site and immediate vicinity have an extensive infrastructure system.” Line 6: insert “*certain of these* areas would not be included.” Many of the facilities mentioned

(or portions thereof) are in fact proposed to be mapped as park (for example, ‘piping to collect landfill gas and leachate, .. bridges, roads’ etc.) and the GEIS should discuss how the proposed stewardship (and park management) will protect their safety and security. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 29: Figure 2: the “Solid Waste Management Unit Boundary” that encompasses Old Muldoon at Section 1/9 and the Landfill Gas Recovery Facility should be deleted. Both the LFG recovery facility and the “Old Muldoon” portion of Section 1/9 as well as District 3 garage are within the “Solid Waste Management Unit Area.” (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 30: Figure 3: Confirm boundary of the tax parcel; is it the northern edge on the shoreline of Fresh Kills Creek? The park is not proposed to include this shoreline. (2)

Response: Figure 3 has been amended to be consistent with the park mapping noted on Figure 7.

Comment 31: Page 3: Background. Second sentence, insert at end: “as part of a network of City landfills and related land reclamation projects.” (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 32: Page 3, revise the fourth sentence as follows: “Fresh Kills received as much as 29,000 tons of trash per day.” Insert new sentence after “receiving residential garbage”; despite containment provided by natural clay beneath the site, the landfill lacked a liner. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 33: Page 3, second paragraph, please change to reflect the following: “The Fresh Kills Landfill, which lacked a State permit and operated under a Consent Order, was required by a 1996 State law to close by December 31, 2001, and ...” (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 34: Figure 4: We note that certain DSNY maintenance and operation areas are indicated within the proposed park boundaries. The Plan/GEIS should also recognize in the text and accommodate DSNY’s need for facilities to manage the post closure care operations and maintenance within park limits beyond what has been identified in Figure 4. (2)

Fresh Kills Park

Response: The Final Master Plan and the GEIS will recognize DSNY's need for facilities to manage landfill post closure care operations and management within park limits, beyond the facilities that have been identified as outside the proposed park on Figure 4. The GEIS will also examine the development and operation of the proposed park and its compatibility with these DSNY facilities.

Comment 35: Page 4, Plan Overview: The document states elsewhere that there are six planning areas, however only five are discussed. (2)

Response: The scope of work has been revised to reflect that there are five planning areas, one of which has two programmatic areas.

Comment 36: Page 4, second paragraph: after "DSNY transfer station" please insert: "rock crushing plan and composting operation (85 acres), other DSNY facilities, such as two district garages, the leachate treatment plant, and the landfill gas recovery plant." (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 37: Page 5, it would be useful to show the "Point" on a map within the Scope. (2)

Response: The scope of work has been amended to reflect the above comment. Additional design details on this area will be presented in the GEIS.

Comment 38: Page 6, "USTA" should be spelled out. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 39: Page 7, fourth paragraph: Revise to insert the indicated text "*At the northeast edge of the West Mound are major DSNY facilities ... sanitation needs that will remain outside the Park map.*" (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 40: Page 8, plan to protect public health, fourth sentence. Please note that the NYSDEC has issued draft revisions to Part 360, the implications of which for the mapping action should be made part of the Scope, keeping in mind that such regulatory requirements for closure should be considered as part of the baseline for the project. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 41: Page 8, third paragraph, fourth sentence: note that the post-closure period is a minimum of 30 years and may be extended as necessary. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 42: Page 9, footnote 1: We appreciate the language of this footnote and urge that it appear in the body of the Scope and GEIS text. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 43: Page 9, revise to say: “There are a number of City, state, and federal land use and environmental approvals that are necessary.”

Response: The scope of work has been amended to reflect the above comment.

Comment 44: Page 10, first full paragraph, revise to say: “At the state level, approvals that apply ... closure *approvals*, *approvals* for activities in tidal wetlands ... *permits* for protection of waters, *modifications to the NYSDEC consent order on landfill closure* ... Federal *approvals relate* to ... The principal objectives of these environmental *regulatory requirements* are to ...” (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 45: Page 10, and Table 1 (list of involved agencies), DSNY review area: insert “and consent order.” Also, NYCDEP should confirm that its approvals are considered a discretionary approval under SEQRA rather than ministerial. (2)

Response: The scope of work has been amended to reflect the above comment. DEP has a discretionary role in the review of any drainage plan proposals for the site with respect to sanitary and stormwater management.

Comment 46: Page 13: Consideration should be given to the interim entrance from Arthur Kill Road. Any other interim uses should be discussed as appropriate. (2)

Response: As noted on Pages 13 and 14, the project description of the GEIS will include a description of interim uses and early implementation projects, as appropriate.

Comment 47: Page 14: It should be noted that differing regulations apply to projects within the Regulated Solid Waste Landfill Units as compared to projects proposed within the landfill’s Compliance Monitoring Boundary. Also, areas outside Regulated Solid Waste Landfill Units may have native soil, clean fill, or they may have historic sanitary fill that predates the regulated boundaries, and which will have regulatory implications that will affect proposed development. There should be some discussion of how these different areas will be identified and differentiated from each other. (2)

Response: The above-described regulatory areas will be identified in the GEIS, and will be discussed with respect to regulatory jurisdiction as it pertains to soil types and historic sanitary fill.

Fresh Kills Park

Comment 48: Please justify the Build years (2016 and 2035) chosen for analysis. As previously committed with the Borough President's Office, portions of the road (the southern loop road and connecting service roads) are to be completed by 2009. In addition, the Preliminary Draft Master Plan indicates three phases (10, 20, and 30 years) of development, not two, as indicated in the draft scope of work. (5)

Response: Completion of the southern loop road is assumed in the 2016 build year. While the draft Master Plan has three design phases, only two analysis years are proposed for the GEIS. The interim build year, 2016, will address the first 10 years of development in the park.

Comment 49: The phasing diagrams do not recognize that access will need to be restricted in the core of the site to accommodate truck traffic and staging areas needed for final closure. (5)

Response: The phasing of the proposed park will be described in the "Project Description" chapter of the GEIS and will address all access to the park as necessary in the interim year (2016) and at full build out (2036).

LAND USE, ZONING AND PUBLIC POLICY

Comment 50: Figure 8: The NYPD substation on Richmond Avenue does not appear to be reflected. (2)

Response: This change has been made to Figure 8 in the scope of work.

Comment 51: Task 2: It may be advisable to assess the impact of the proposed mapping on the public and private inventory of undeveloped, industrially zoned land in the City. (2)

Response: Much of the industrially zoned land in Fresh Kills is developed with DSNY facilities, including the four landfill mounds. In addition, much of the remaining area cannot be developed due to the presence of wetlands or other environmental considerations. The GEIS will include an analysis of the proposed park mapping and its consistency with City land use policy objectives under Task 2: Land Use, Zoning and Public Policy," with respect to industrial preservation.

COMMUNITY FACILITIES

Comment 52: At present, Staten Island's police and fire department personnel are stretched too thin. In order to keep the Fresh Kills Park facility and the rest of the island safe, personnel levels at these two departments should be strengthened in

numbers. Safety of islanders and all visitors to the park is key for the success of the largest park in the world. (11)

Response: As noted in Task 4 of the scope of work, the GEIS will describe the current NYPD and FDNY districts serving the area and assess the potential need for additional services in the future with the proposed park.

HISTORIC RESOURCES

Comment 53: The LPC is in receipt of the EAS and draft scope of work for the EIS of April 21, 2006. The text is acceptable for architectural resources with the following change. Page 18, task 7, "Historic Resources," item C: the last sentence should be amended to say "properties that appear eligible for LPC designation," not "properties pending LPC designation." (3)

Response: The scope of work has been amended to reflect the above comment.

Comment 54: LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 19th century residences, Native American occupation, and remains from the Morgan Family Burying Ground (1795-1865), which may have been located within the project area. 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*, 2001). (4)

Response: An archaeological documentary study will be prepared for the project site, and the conclusions of the study will be summarized in the GEIS.

Comment 55: Parts A and H of Task 7 refer to damage that might be done to archaeological resources. Capping the West Mound would keep archaeologists from being able to go back and explore what was left at that location from the World Trade Center, including human remains. Just as has happened at 130 Liberty Street in Manhattan, new evidence may come to light. You must consider how that evidence will be accessed after a final cap has been put on the West Mound. (20)

Response: As described above, an assessment of potential impacts, if any, to archaeological resources as part of the Fresh Kills Park will be examined in the GEIS.

NATURAL RESOURCES

Comment 56: The West Park seems to be earmarked for a large amount of woodlands. Is not there a danger of damage to a capping liner when exposed to a tree root system?

Fresh Kills Park

We were told it has to be trees with very shallow roots, so they don't project down and destroy the cap. Very shallow roots on top of the highest hill in Staten Island I don't believe would stand very many storms. (21)

Response: Any potential impacts from trees on the landfill protection systems will be evaluated in the DGEIS.

Comment 57: Wind turbines have been known to pose a hazard to wildlife. The EIS should assess the impacts of the proposed turbines on local wildlife, including, but not limited to, wading birds, song birds and bats. (16)

Response: The various project elements described in the RWCDs, including an "Energy/Infrastructure" element such as a wind farm, will be assessed for their natural resources impacts in that chapter of the DGEIS.

Comment 58: The scope should describe how the GEIS will assess the potential for the various roadway alternatives and activities within the park to impact the function and quality of the new habitat areas. (1)

Response: Alternative roadway designs will be analyzed in the alternatives chapter of the GEIS, and will be compared to the proposed roadway alignment in terms of potential impacts.

Comment 59: In Figure 4, the area identified as "Habitat without People" is difficult to discern. The GEIS should consider that for these locations to function as natural areas they need to be as large as possible, contiguous with other varied habitats, and as secluded from areas of activity as possible. (1)

Response: Areas proposed for "Habitat without People" are contiguous to other adjacent natural area parks, such as the William T. David Wildlife Refuge to the north and LaTourette Park to the east, and also include the Arthur Kill waterfront and the Isle of Meadows. These park elements would, as suggested in the comment, be as large as possible and contiguous with other adjacent and varied habitats functioning as large natural areas. In addition, it is the intention for these natural areas to be as secluded from more intense recreational facilities as possible within the design of the overall park.

Comment 60: The scope should describe how the GEIS will assess the potential for impacts on the Isle of Meadows from increased land and boat activity. (1)

Response: The scope of work has been amended to reflect the above comment.

Comment 61: Avian fatalities from glass collisions are the second greatest threat (after habitat loss) to bird populations; notable researcher, Dr. Daniel Klem, PhD, estimates that over 100 million victims are claimed annually in the United States alone.

Careful analysis of all structures to be built on the site should address measures and materials to avoid the problem of bird collisions with glass. The Material and design, including lighting and landscaping must be fully addressed in the EIS with respect to bird/glass collision. (16)

Response: There are relatively few new structures contemplated for the proposed park, and the majority of these would be low-scale (less than 50 feet in height). Any proposed structures of greater height, such as wind turbines, would be assessed for their potential effects on natural resources, in particular avian populations.

Comment 62: The wonderful vistas that much of Fresh Kills Park will afford visitors can be enhanced and retained by dedicating large areas to grasslands and meadows. This open country habitat will not only retain the magnificent views but provide habitat for grasslands birds. This type of habitat is becoming increasingly rare in the New York City metropolitan area. The EIS should pay special attention to incorporating this important habitat type in the Park's landscape. Wherever practical, depending on slope and soil retention requirements, the following plant species should be considered for planting in order to establish native warm season bunch grasses: Little Bluestem (*Schizachyrium scoparium*), Broom Sedge (*Andropogon virginicus*), Switch Grass (*Panicum virgatum*), Purple Love Grass (*Eragrostis spectabilis*). Various panic grasses, such as Deer Tongue (*Panicum clandestinum*), provide seeds that are particularly attractive to Bobolinks migrating in late summer. Plantings attractive to butterflies near roads and trails would provide an additional opportunity for wildlife viewing for visitors, e.g., Butterfly-Weed (*Asclepias tuberosa*) and Spreading Dogbane (*Apocynum androsaemifolium*). As with all plantings, adequate resources must be committed to controlling, if not eliminating invasive non-native species of grasses, forbs, shrubs and vines. (16)

Response: As described in the Draft Master Plan, a variety of cover types are proposed for the Park. These cover types will be refined as part of the park master planning process.

Comment 63: There is probably no better way to explore a wetland than slowly paddling a canoe or kayak along its winding creeks. As we share this rich habitat with wading birds and shorebirds, great care must be exercised to minimize the disturbance to feeding, nesting and resting birds. Guides accompanying small groups of kayakers are recommended for younger children while self-guided marked routes might work for adults. The number of kayaks or canoes plying the creeks at any one time should be limited. In order to familiarize visitors who are about to explore the creeks about the wildlife and their needs, a brief oral orientation with literature describing the ecosystem and a simple map would be useful. (16)

Fresh Kills Park

Response: Comment noted. A variety of non-motorized access to and on the waters of the park is proposed. To that end, orientation and mapping such as that proposed in the comment would support such activities.

Comment 64: The EIS should assess the impacts of motorized watercraft on the wetlands and the wildlife they contain. If necessary, access to the Fresh Kills, Richmond and Main Creeks should be restricted using a floating boom and signs. (16)

Response: As stated in the scope of work, the DGEIS will consider the potential for the proposed water recreation and access elements of the park to impact natural resources, including water quality, wetlands, and aquatic wildlife.

Comment 65: Consider street crossings for wildlife. You don't want to generate lots of roadkill. (12)

Response: Comment noted. To the extent that such crossings are necessary and may be useful as mitigation of potential significant impacts on wildlife, they will be presented in the DGEIS.

Comment 66: There is a discrepancy as to how the City addresses Wetlands Impacts in their CEQR process and how we address those impacts in our NYSDEC SEQRA process (which meets federal NEPA guidelines). We would need the Fresh Kills consultant to meet the State SEQRA "Wetlands Impact" section requirements, as a minimum, before we can consider any recommendations that would impact proposed ramp access actions to the West Shore Expressway. (6)

Response: The scope of work has been amended to reflect this comments and the use of DEC methodology.

HAZARDOUS MATERIALS

Comment 67: Reuse of facilities or demolition of buildings and facilities should be analyzed for potential impacts related to such items as asbestos and lead paint as well as underground and above-ground storage tanks. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 68: The discussion on hazardous materials should note the difference between CEQR hazardous materials and RCRA Inactive Hazardous Waste Sites in order to avoid the erroneous impression that Fresh Kills is an Inactive Hazardous Waste Site. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 69: Add to end of Subtask A: “including the analytes found in existing cover material, and any relevant risk assessment undertaken, and proposed standards and specifications for site cover soils under the plan, in relation to background levels in the area.” (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 70: It is our understanding [NYCDEP] that DSNY has been managing the remediation activities associated with the closure of Fresh Kills and will be responsible for the review and approval of the hazardous materials section of the GEIS. (1)

Response: The New York City Departments of Environmental Protection, Sanitation, and Health and Mental Hygiene and the New York State Department of Environmental Conservation will be responsible for the review of the hazardous materials section of the GEIS.

Comment 71: The overview of site history and Phase I Environmental Site Assessment (for the portions of the project site not filled with solid waste) described under Task 21: Public Health (section A) should also be included under Task 11: Hazardous Materials. (1)

Response: The hazardous materials section includes a description of the work to be undertaken with respect to site history and environmental site assessment research and will be cross-referenced to Task 21: Public Health.

Comment 72: The GEIS should contain a description of the components of the Landfill Closure Plan in detail. (1)

Response: As stated under Task 1: “Project Description,” the GEIS will include a description of the landfill closure components in detail.

Comment 73: Hazardous Materials should describe how the need for further surface and subsurface investigation would be identified. This description should account for the various usage intensity zones and the varied existing conditions within the project area. (1)

Response: Both the “Hazardous Materials” chapter and “Mitigation” chapter of the EIS will describe how the need for further surface or subsurface investigations (e.g., testing) will be identified.

This determination will take into account the area to be disturbed both horizontally (along the water surface) and vertically (surface, surface soils, and groundwater).

Fresh Kills Park

Comment 74: Hazardous Materials should state that prior to any surface or subsurface investigation a Workplan would be submitted to DEP for review and approval. (1)

Response: The Scope of Work has been amended to reflect the request that DEP review and approve work plans for hazardous materials prior to the implementation of such work.

Comment 75: Hazardous Materials and Task 21: Public Health should describe what guidelines and regulations would be used to assess any investigation findings. (1)

Response: Guidelines and regulations that are in place at the Federal, State, and City level relative to landfill closure, water, and air quality will be described in the GEIS, as will the compliance of the proposed project with these regulations. Any conflicts with these regulations will also be identified.

Comment 76: Hazardous Materials should explain how the need for additional remedial measures beyond the Closure Plan to protect the Park user's safety and health would be identified. (1)

Response: The need for any remedial measures beyond the closure plan to protect park user health and safety will be described in the GEIS chapter on hazardous materials, public health, and mitigation.

Comment 77: Hazardous Materials should describe how the potential for hazardous materials impacts from future project-specified components, which are not established at the time of the GEIS, would be identified, including any necessary mechanisms to compel further CEQR-level investigations in the event that a change or substitution from the illustrative park plan would not trigger a new environmental review. (1)

Response: Any project amendments not examined in this GEIS that have the potential to result in any additional impacts will be subject to additional environmental review in a technical memo, an environmental assessment statement, or a supplemental environmental impact statement. The level of review will depend on the project-specific change and the potential for new or additional significant impacts that could occur as a result of that change.

INFRASTRUCTURE

Comment 78: Linear recreation – the GEIS should discuss how erosion or alteration to stormwater management systems would be prevented. (2)

Response: The DGEIS will assess the project's potential effects on infrastructure, including stormwater management systems.

Comment 79: The existing infrastructure such as water, storm and sanitary sewers are overburdened due to the recent overdevelopment. Additional demand by 2035 due to the increased population compounded by this facility has serious impact and needs improvements to the existing sewer system and the wastewater pollution control plants. (11)

Response: As stated in the scope of work, the DGEIS will consider the project's potential effects on water, storm and sanitary sewers and facilities as well as the additional demands on infrastructure that would occur in the future, considering growth that is expected both with and without the proposed project.

SOLID WASTE AND SANITATION SERVICES

Comment 80: Page 23, Task 14, Subtask A: "Describe the existing DSNY facilities on the site and in the surrounding area. This would include any DSNY garages, offices, operations centers, and the waste transfer station." Please add after "operations centers:" "The yard waste composting facility, rock crushing operation and related fill material transfer station, and the putrescible waste transfer station." This description should also include circulation routes to and from the Waste Transfer Station and the District Garages. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 81: Page 23, Task 14, Subtask E: Please add to end: "in particular with respect to landfill closure, maintaining the geotextile and clay landfill caps, the landfill gas collection and control system, and the leachate treatment plant. Assess the potential for yard waste composting to take place within the park to provide the soil amendment for park construction, and for such soil construction to occur on site. Assess the potential role for DSNY's rock crushing and screening operation for interagency material to supply material for park construction, and the potential for inert fill material such as glass to be used for this purpose. (2)

Response: The scope of work has been amended to reflect the above comment.

ENERGY

Comment 82: Page 24, Task 15: Energy. Existing DSNY contractual obligations concerning the operation of the landfill gas collection and recovery system should be discussed. Revenue from the sale of purified landfill gas currently goes into the City's general fund. In accordance with the Mayor's November 2004 directive concerning incorporating sustainability into City programs and policies, it may be appropriate for DPR to add a sustainability discussion to this section. (2)

Response: The scope of work has been amended to reflect the above comment.

Fresh Kills Park

Comment 83: Within the next 16 months, upon completion of a wind power feasibility study, we should know if a wind power farm can be planted throughout Fresh Kills to provide a major portion for the park's proposed power needs. This is true environmental sensitivity – harnessing the wind for clean, renewable energy. More study to see how much windmills would impact the parks environment is needed. Noise levels, shadow effects, air space restrictions, safety concerns and roads to service such complex structures all have to be considered. I support the part of the plan to put windmills at this site and to have a sustainable, renewable source of energy. (7, 9, 17)

Response: The potential for a wind farm to be constructed as part of the park is included in the RWCDS and will be examined in the GEIS with respect to environmental impacts.

TRAFFIC AND PARKING

Comment 84: Please identify any new roadways to be mapped, and any demapping of paper streets within the park. Any streets that will be established, especially any that DOT will be responsible for maintaining, will have to be mapped under ULURP. (5)

Response: The “Project Description” chapter of the GEIS will describe any proposed roadway mapping, as well as any demapping that may be proposed as well. The project description will also identify the City agency with the responsibility for the proposed roads and any mapping actions that are subject to ULURP.

Comment 85: Please indicate the jurisdiction of the proposed roadways, as well as who will be responsible for the design, construction and maintenance of the roadways. Please indicate the hours of operation for the proposed park and roadways. (5)

Response: As stated above, the roadway jurisdiction will be identified in the GEIS. The description of the proposed roads will also include the hours of operation.

Comment 86: Please indicate who will be responsible for the proposed ferry service. Additionally, please provide the sources of funding. (5)

Response: It is assumed that any ferry/water taxi service would be a private operator. The proposed park would provide the location for a landing facility.

Comment 87: Page 24: Include a discussion of the potential need to acquire additional land outside the current landfill property to accommodate the proposed Richmond Hill Road connector in the northeast portion of the site. (2)

Response: The need to potentially acquire private lands for the construction of the connection to Richmond Hill Road has been added to the list of actions in the DGEIS.

Comment 88: Consider the development looming in Charleston, where upwards of 4 million square feet of commercial space could one day exist. Staten Islanders who wish to travel to and from the mid-island will find the roads through Fresh Kills to be the most direct route to Charleston. (7)

Response: The analysis of the future No Build and Build traffic conditions will consider No Build development in the Charleston area and projections of future traffic through the two GEIS analysis years, 2016 and 2036.

Comment 89: According to the Draft Master Plan, the primary purpose of the project roads is to provide access to the new Fresh Kills Park. I believe that the former landfill roads should be developed to move Staten Islanders efficiently through Fresh Kills, between Richmond Avenue and the West Shore Expressway. To achieve this goal, the roads must be developed as two lanes in each direction. My office has determined that a minimum of 80 feet of map width is necessary to allow for two lanes in each direction with appropriate shoulders, buffer zones and bike lanes. A one lane road for Fresh Kills does not even meet the present needs of Staten Islanders, let alone future needs. We are busting at the seams with a population of approximately 450,000 and growing and 260,000 registered vehicles and growing. By the time such a road is open to the public, it would already be outdated and insufficient. There must be an adequate connector from the West Shore Expressway to Richmond Avenue in at least two locations. Staten Island has been poorly planned in the past. Roads such as Arthur Kill Road and Amboy Road were inadequately designed for the future and we are suffering now because of it. We should learn from our mistakes and design these roads with an eye towards the future (7, 8, 9, 10, 11, 18)

Response: Comment noted. The GEIS will analyze the potential impacts of traffic destined to the proposed park, as well as traffic traveling through the park, and related traffic movements between the West Shore Expressway and Richmond Avenue.

Comment 90: While I think road expansion should be studied, there may be a compromise possible that would simplify traffic flow into the park while keeping the two-lane road design. The compromise is to make the park drives one way in each direction. The park drive beginning at the Richmond Hill Road intersection could be one way towards the West Shore Expressway and the road exiting the park at Forest Hill Road could be one way in the opposite direction (or vice versa). While this arrangement would not increase the capacity of the roads, it may make traffic flow into and out of the park on Richmond Avenue much simpler and more efficient. Also, if the signature bridge linking North Park and West Park was moved to the east side of the West Shore Expressway and expanded to four traffic lanes, it would be possible to have the one-way lanes link together in such a way that one would never have to merge into another lane. With the current design, travelers coming from several different areas will

Fresh Kills Park

all require the signature bridge to reach their destination, thus making the bridge a potential bottleneck. By expanding the bridge to four lanes and making the roads one way in each direction in the park, these roads may better serve the Staten Island community. (14)

Response: The GEIS will analyze the potential impacts of traffic destined to the proposed park, as well as traffic traveling through the park. As described in the scope of work, alternative roadway designs will be analyzed and compared to the proposed roadway configuration.

Comment 91: The existing road corridors in the former Fresh Kills Landfill should be transferred to the New York City Department of Transportation and mapped for street purposes under the jurisdiction of the New York City DOT. This authority is granted by the New York City Charter, section 2903(b), which states that DOT is the agency responsible for designing, constructing and repairing public roads, streets, highways and parkways. There appears to be a movement in other City parks to periodically close the roads that pass through them, whether for event-specific or seasonal reasons. I am concerned that if the roads in the former Fresh Kills Landfill remain under the Parks Department's jurisdiction, Staten Island motorists may one day be denied complete access to these critical roads. Transferring ownership and authority of the roads in the former Fresh Kills Landfill to DOT is the most efficient and proper means to ensure that these roads are built and maintained with the best possible benefit to traffic flow and the quality of life of Staten Island residents. (7, 8, 18)

Response: Both options for roadway jurisdiction (NYCDOT and DPR) are being considered. A proposed roadway design and jurisdiction will be presented in the DGEIS.

Comment 92: I'm not convinced that the planned traffic analysis is sufficient for our needs. At the end of the day I want to be certain beyond any doubt that we take a proper look at traffic impacts from this project. I want to be convinced by all appropriate scientific argument and engineering principals that the analysis area is big enough and contains all relevant intersections and is not arbitrarily drawn. This is a big project that will pull people in from all parts of Staten Island, other boroughs and nearby New Jersey, more people than any park on Staten Island has ever drawn. The plan proposes to add new roads that will lead to new traffic patterns, so I want us to get the traffic analysis right. I also want guaranteed follow-up post park construction that confirms the predictions of the traffic models. Therefore I am requesting that the traffic areas and intersections to be analyzed be expanded beyond what is being proposed. (9, 18)

Response: As stated above, the GEIS will analyze the potential impacts of traffic destined to the proposed park, as well as traffic traveling through the park. In addition, alternative roadway designs will be analyzed and compared to the proposed

roadway configuration. Currently, the scope of work includes a total of 30 intersections as well as 8 ramp connections with the West Shore Expressway (see Figure 11), with weekday and weekend analyses. If, during the preparation of the “Transportation Planning Factors” memo, it is determined by NYCDOT and/or NYSDOT that additional intersections are necessary for this analysis, those intersections will be analyzed in the DGEIS.

Comment 93: The recent setting up of the “Transportation Task Force” by the Mayor explains the status of traffic in Staten Island. This is due to increased growth, lack of intelligent planning and less than required investment in the transportation infrastructure. I urge the lead agency to pay special attention this issue and come up with a comprehensive intelligent traffic and parking plan, not just a plan but an intelligent 21st century plan keeping in mind the expected traffic volume in the year 2035. This park will draw people from the rest of New York City in addition to the neighboring New Jersey. We want you to be mindful of the new traffic patterns this will create at the existing bridges to our borough. We’re requesting that these park streets can be designed to go throughout the site leading to the different sections of the Fresh Kills Park. It should be our top priority to provide easy access into and out of the park from West Shore Expressway and Richmond Avenue. Anything less is a recipe for a traffic nightmare. Staten Island is the fastest growing part of New York City, and Community Board 3 is the fastest growing part of the entire state of New York. Now is the time to plan ahead for our future needs. We at the board want all the roads built ahead of the other elements in the park. (10, 11)

Response: As stated above, the GEIS will analyze the potential impacts of traffic destined to the proposed park, as well as traffic traveling through the park, and related traffic movements between the West Shore Expressway and Richmond Avenue. This analysis will be performed for two years, 2016 and 2036, and will take into account growth factors and other development projects in the area. The GEIS will also consider the phasing of the proposed roadway and circulation plans for the 2016 and 2036 analysis years.

Comment 94: If Fresh Kills is to be a world class park, the roadways traversing it should be under the control of New York City Parks and Recreation, to facilitate closing of such roads for special use or events that warrant such closings. I disagree with giving these [Fresh Kills] roadways over to the DOT. All this is going to do is congest the roadways within the park, congest Richmond Avenue even further. Let Parks regulate the traffic, let them regulate when it’s open and closed according to the park activities. This park is for our children, our families, not for the commuters. Put another lane on the West Shore Expressway. Put a ramp on Richmond Avenue by Drumgoole Road and let that traffic go on to the Korean Veterans Parkway. (17, 19)

Fresh Kills Park

Response: As stated above, possible jurisdictions include NYCDOT and DPR. Roadway jurisdiction will be presented in the DGEIS.

Comment 95: Protectors does not see the need to have four lane roads (two lanes in each direction) transversing the new Fresh Kills Park. The data shown in the study prepared by URS, “Fresh Kills Landfill Traffic Planning Study” does not indicate much benefit from the proposed roads through the park. Additions to the West Shore Expressway and the connection of the Korean War Memorial Highway to Richmond Avenue would improve traffic flow and keep it away from the park. (17)

Response: Comment noted. The GEIS will analyze the potential impacts of park traffic, and alternative roadway designs will be compared to the proposed roadway configuration.

Comment 96: The challenge for Fresh Kills is to design a set of roadways and pathways that will be relevant 150 years from now, that will first and foremost function as an integrated park that is in turn integrated into a surrounding set of parks, greenbelts, local neighborhoods, and region, while allowing automobiles to pass through without interfering with the working of the park. Central Park may actually be a good model for what is needed in Fresh Kills. Since the shape of Central Park is long in the north/south directions and narrow in the east/west directions, closing the internal circulation roads has little effect upon the overall flow of traffic in the surrounding city. Contrasting the Central Park vehicular flow with the proposed Fresh Kills vehicular flow, it is to be noted that many of the roads included as part of the internal park circulation are also transverse roads handling through traffic. For example, even without consideration of the proposed four-lane Richmond Avenue to West Shore Expressway transverse roads, the West Shore service roads are a part of the internal park circulation system. These are and will continue to be, with the expansion of the service roads, heavily trafficked roads. Certainly it would be desirable to make the Fresh Kills transverse roads like the Central Park transverse roads and be separate from the internal park drives, with separation of grades when transverse road and internal park drive cross and of course, separation of grades with any pedestrian crossings. In Fresh Kills, if some of the internal roads also function as transverse through roads, it is imperative that there be separate of grades between these roads and pedestrian/bicycle paths in order to maintain the continuity and integrity of the park. (12)

Response: The GEIS will analyze the potential impacts of traffic on both the primary and secondary roads as well as the need for accommodating alternative modes of travel, such as bicycling, walking, and jogging.

Comment 97: When the Richmond Avenue to West Shore Expressway transverse roads are included, there are essentially no internal circulation roads that are not also transverse roads, except the road around the west side of the West Park and a spur that leads to the 9/11 memorial. There is a real danger that Fresh Kills Park will become fractures like Flushing Meadows Park, which has never reached its full potential. The current vehicular circulation plan (assuming four lane Richmond Avenue to West Shore Expressway transverse roads) will lead to conflicting traffic patterns between internal park and through circulation, which neither park user nor through traveler will like. Serious efforts should be made to keep transverse and internal circulation roads separate, although constraints imposed by the landfill may limit how much separation is possible. (12)

Response: The GEIS will analyze the proposed roadway, alternative designs, and the impacts of each with respect to their environmental and social impacts.

Comment 98: I am hopeful that the roads of Fresh Kills will be an agenda item at our next Transportation Task Force later this month (Monday, June 26). It is the appropriate setting to announce that the requests of Task Force members have been heard, and every effort is being made to see that they are executed. (18)

Response: Comment noted.

Comment 99: Please remove the language in Task 16.C related to the count program to be performed during representative Saturday peak periods. The adjacent street traffic as well as the trip generation for the Saturday and Sunday peak hours should be provided in order to determine the appropriate weekend day to include in the analysis. This will be used to determine which weekend day the data collection program should be performed. (5)

Response: This text has been removed from the Scope of Work. Selection of the proposed weekend peak hour will be presented in the "Transportation Planning Factors" memo to be reviewed by NYCDOT and NYSDOT prior to performing the traffic analyses.

Comment 100: Please provide information on how the proposed intersections (i.e., expressway service roads, proposed secondary roads, loop drives), will be controlled (stop sign, signalization) as well as how speeding will be controlled. (5)

Response: Data on intersection and ramp operations, roadway controls, signalization, and operation (e.g., speeds) will be presented in the GEIS.

Comment 101: Please provide the proposed intersections, highway ramps, and the corridors where travel speed and delay data will be collected for NYCDOT review and approval. The number of intersections to be included in the primary and

Fresh Kills Park

secondary study areas will be determined upon our review of the Transportation Planning Factors memo. (5)

Response: These data will be presented in the “Transportation Planning Factors” memo for final review and approval before undertaking the traffic analysis.

Comment 102: The most recent version of HCS acceptable to NYCDOT should be used in the analysis. NYSDOT should be consulted for the analysis of the critical highway segments (West Shore Expressway, Staten Island Expressway). (5)

Response: The current version of HCS acceptable to DOT will be used in the traffic analysis and presented in the “Transportation Planning Factors” memo, along with the critical highway segments for analysis.

Comment 103: Although CEQRA allows/recommends use of HCS 2000 for traffic analysis and the report indicates they would follow the guidance for parks/recreational facilities, this would not be adequate for us to base an approval/sign off on proposed ramps because several of the alternatives would include access through the park to other City arterials. More extensive modeling would be required to give us a sufficient sense of the impact on the West Shore. We suggest using the NYMTC BPM model for a regional context/impact and use of a more detailed traffic model like CORSIM or SYNCHRO for a detailed representation of the local network flows/impacts. (6)

Response: It is anticipated that the BPM regional model (developed by NYMTC) would result in lower future projections in comparison to directly applying the traffic generated by discrete projects onto the traffic network. In addition, the BPM is a very complex model, and some of its procedures are not appropriate to the type of analysis necessary to examine the impacts of the proposed project.

The Draft Scope of Work has been amended to perform traffic modeling for highway elements—including the highway ramps merge/weave conditions—by using the CORSIM traffic simulation computer model. In total, up to eight highway ramp merge or weave conditions have been assumed for the analysis.

TRANSIT AND PEDESTRIANS

Comment 104: Please provide the number of pedestrian trips generated by the proposed actions during the peak hours. Depending on the number of pedestrian trips generated, pedestrian analyses (sidewalk, crosswalk, and corner) may need to be provided for intersections within the study area, and the proposed internal roadways. (5)

Response: These data will be provided as part of the “Transportation Planning Factors” memo.

Comment 105: Some consideration should be given to a light rail link, linking parts of the South and North Shores and possibly a Bayonne Bridge link to the light rail link there. That might alleviate some of the traffic problems. Perhaps a ferry facility within the landfill area could service many public transportation needs to the communities that service the island. (15)

Response: Providing a light rail link as part of the Fresh Kills Park project is beyond the scope of this proposal. However, to the extent that regional mobility proposals put forth alternatives that would include Fresh Kills as part of that transportation network, the project design will examine the feasibility of accommodating that transit connection.

Comment 106: I think the Parks Department should study the feasibility of building a tram from the Staten Island Mall parking lot vicinity to the Point in order to facilitate access to the park. There is no mass transit to the site. By building a tram, the Parks Department will be providing an alternative means to access Fresh Kills, and taking cars off the park drive, which is so desperately needed as a link between Richmond Avenue and the West Shore Expressway. The fewer cars there are in the park, the less dangerous and polluted it will become. Also, if the tram is properly designed it could be an excellent complement to the futuristic signature bridge and the proposed wind turbine farm. Perhaps something similar to the Calatrava tram proposed for Governors Island could be modified and lengthened for use at Fresh Kills. Or perhaps a simple ski lift system or the Aerobus system could be used at the site. A tram, gliding silently above the hills and waterways of Fresh Kills, would allow for a dramatic entrance to the park, slowly transitioning the rider away from the city and into nature. It could be quite stunning as well as being useful. (15)

Response: A tram is beyond the scope of the proposed project. However, to the extent that accommodations for transit and alternative modes of travel (e.g., walk, bike) can alleviate or mitigate any traffic impacts presented in the GEIS, these transportation options will be presented as mitigation.

Comment 107: I am happy to see pedestrian bridges in the preliminary plan going across Richmond Avenue, Forest Hill Road, and then also across the West Shore Expressway to Muldoon. However, I think we need more pedestrian access, more pedestrian bridges across the internal roadways, especially across the road that goes from Richmond Avenue to the West Shore Expressway. The pedestrian bridge across Richmond Avenue at Forest Hill Road will connect the internal pedestrian paths of Fresh Kills with the planned bicycle greenway parallel to Forest Hill Road, which will effectively connect Fresh Kills with the Staten Island Greenbelt and Historic Richmond Town. The pedestrian bridge shown going over the West Shore Expressway at Muldoon Avenue needs to go over the service roads as well. The pedestrian loop around East Park crosses the

Fresh Kills Park

path of the Richmond Avenue to West Shore connecting roads at numerous points. There should be separation of grades at all these crossings as well, especially if they take on the function of transverse through roads, as it seems most likely that they will. (12)

There also needs to be a pedestrian bridge across Richmond Avenue, Arthur Kill Road, and the Korean War Veterans Parkway at the confluence of these roads. These bridges would connect to a trail parallel to Arthur Kill Road, running along the perimeter of the future Brookfield Park. This trail should be a part of the City Greenway system and along with the pedestrian bridges would make Brookfield Park essentially an integral extension of Fresh Kills Park. These bridges would provide near traffic-free access to both parks from a number of neighborhoods along Arthur Kill Road and would provide additional connection to the Staten Island Greenbelt and Historic Richmond Town. Yet another rationale for this set of bridges is the bus depot at Richmond Avenue and the Korean War Veterans Parkway. Providing a traffic-free connection between this bus depot and the parks would open up Fresh Kills, Brookfield, the Greenbelt and Historic Richmond Town to hikers and bicyclists from all over the city. In conjunction with this bridge, there needs to be an on-grade of the perimeter trail from Forest Hill Road and Richmond Avenue to Muldoon and Arthur Kill Road, from the secondary to the primary trail. This connection would provide primary access to a lot of neighborhoods along Arthur Kill Road, neighborhoods that are not necessarily close to the Forest Hill Road access. (12)

Response: The proposed project will provide a number of pedestrian connections throughout the park. To the extent that any additional pedestrian connections are necessary as a result of traffic or pedestrian impacts, they will be presented in the FEIS.

Comment 108: Another opportunity for pedestrian connectivity is the East Coast Greenway, which is a 950-mile off-road trail system connecting cities of the eastern seaboard from Maine to Florida. Among the long term plans is an alternate route for the greenway that takes it through Fresh Kills Park in the north/south direction. The alternate branch of the East Coast Greenway would continue along the route of the Staten Island Railroad, following also the route of a planned city greenway, through Fresh Kills Park. As the route for this trail becomes more defined, it should be incorporated into the Fresh Kills Park pedestrian circulation flow. These strategic connections make Fresh Kills Park not just a Staten Island park, not just a New York City park, but a park for the entire region and the world. (12)

Response: As noted in Task 17.C of the scope of work, under “Transit and Pedestrians,” the GEIS will assess future bikeway plans and potential access and linkage with adjacent systems, such as the Staten Island Greenbelt and Staten Island Greenway, as well as regional and interstate bikeway connections.

Comment 109: Heavily trafficked roads, such as Richmond Avenue and Arthur Kill Road, act as barriers and will encourage park goers to use their cars to access the park unless there are pedestrian bridges to facilitate pedestrian movement. We want a safe off-road, traffic-free pedestrian access to this park. You don't want to create a situation where parents have to drive their children, or people have to drive their bicycles to the park in order to go bike riding. In the morning and on weekends drivers will be speeding through the parks and the safety of children is a major concern. (12)

Response: As noted in the scope of work as Task 16.I under "Traffic and Parking" and Task 17.B under "Transit and Pedestrians," the analysis of traffic, transit, and pedestrians will address safety considerations and concerns.

Comment 110: Bike and pedestrian access to the park must be looked at from an island-wide and even a regional aspect. Parks has a great opportunity to connect Fresh Kills Park to the Gateway Recreational Area using an already funded and planned off-road route using Old Mill Road and the Amundsen Trail way to connect with the Great Kills Gateway area. A pathway from this area is mostly completed connecting along the waterfront down to Fort Wadsworth. Though not directly a Fresh Kills issue, the loss of connectivity and the subsequent diminishing of the potential of Fresh Kills forces one to ask whether the postponement of the Amundsen Trail is really necessary. Does the entire right of way of the proposed Willowbrook Parkway need to be transferred to the Parks Department in order for the Amundsen Trail to be built? Could it be all that is needed is a small right of way, for the trail itself, through one of the putative road's side medians? There is the possibility that servicing bicycle tourists could become a new Staten Island industry. Bike and pedestrian access from other areas should also be looked at as a way into the park without using cars. (12, 17)

Response: As noted in Task 17.C of the scope of work, under "Transit and Pedestrians," the GEIS will assess future bikeway plans and potential access and linkage with adjacent systems, including linkages with the Greenbelt and Staten Island Greenway and the Amundsen Trail.

Comment 111: Mention is made of possible bus and ferry connections to the park. We did not see any mention of a future train connection with links to Jersey Transit and Manhattan. A revitalized North Shore Rail line could be extended to service the park and the needs of area residents. (17)

Response: As stated above, regional transit planning is not proposed as part of the Fresh Kills Park project, such planning requires actions by multiple agencies, and would be subject to a separate environmental review process. However, if during the preparation of the GEIS there are opportunities to accommodate regional transit linkages, these connections will be examined as part of the GEIS and Final Master Plan.

AIR QUALITY

Comment 112: Task 18: The baseline conditions should note information about air emissions from the landfill and related operations and should reference studies done on the subject, including the 2000 Agency for Toxic Substances Disease Registry (ATSDR) report. The baseline conditions include the anticipated end of active landfill gas extraction for processing as gas production declines, and subsequent control of landfill gas by other means. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 113: The air quality analysis consideration of existing manufacturing uses within 400 feet of the project site may include, as appropriate, emissions from DSNY's rock crushing operation, transfer station, and compost facility adjacent to the proposed site. On-going closure operations should be considered as part of the baseline conditions. (2)

Response: The scope of work has been amended to reflect the above comment.

Comment 114: Potential particulate matter (PM₁₀ and PM_{2.5}) impacts caused by induced traffic on the proposed park and the surrounding area should be addressed and/or analyzed. (1)

Response: The scope of work has been amended to reflect the above comment.

Comment 115: Please mention the *de minimis* criteria for CO impacts and DEP interim criteria for PM_{2.5} in the air quality section. (1)

Response: The scope of work has been amended to reflect the above comment.

Comment 116: Traffic and children do not mix. In the evening, traffic will be at a standstill and the fumes are going to choke our children in those fields. (12, 19)

Response: As noted Task 18, "Air Quality," the GEIS will examine air quality conditions with the proposed project and the potential health impacts.

Comment 117: AERMOD dispersion model will replace ISCST3 as the US Environmental Protection Agency's preferred dispersion model after December 9, 2006. The selection of the dispersion model to estimate short-term annual concentrations of critical pollutants should take this into consideration. (1)

Response: At the time of the air modeling analysis, if the AERMOD dispersion model is accepted by EPA and the City as the preferred model, it will be used in the analysis. The scope of work has been modified to reflect the potential use of the AERMOD modeling in lieu of the ISCST3 model.

NOISE

Comment 118: Task 19: The existing and future noise levels should include, as appropriate, references to DSNY's ongoing sanitation operations, including the two district garages, the leachate treatment plant, the landfill gas recovery plant, the rail-based waste transfer station, the rock crushing and screening operation, and the composting facility, as well as ongoing landfill closure operations. (1, 2)

Response: The scope of work has been amended to reflect the above comment.

CONSTRUCTION IMPACTS

Comment 119: Depending on the length of the different construction phases, a detailed analysis for traffic and air quality may be required. The detailed analysis should follow the same methodology used in the air quality section, and predict potential impacts from criteria pollutants. (1)

Response: If it is determined that a significant impact could occur during construction based on a qualitative analysis, a quantified analysis for construction-period traffic and air quality would be prepared. The scope of work has been amended to reflect this comment.

Comment 120: How will construction of the roads, particularly at the West Mound, impact erosion in the 40 to 50 acres where the materials has been left? There's already evidence of substantial erosion on top of where the WTC materials area, despite two failed attempts to hydroseed. (21)

Response: The analysis of construction impacts will consider the potential for erosion and impacts on hydrology and local water quality.

PUBLIC HEALTH

Comment 121: The landfill must be cleanly capped and managed. It will never be reopened, and despite the protest of some, the costs must be borne by the City. Their fifty years of neglect must now be paid for. I want to be absolutely convinced that we are doing all appropriate analysis regarding hazardous materials and other pollutants that may be associated with a garbage dump, and that we take all necessary actions based on that analysis before people can use this park. It is important that we take all the necessary steps to make sure the park will be safe from the hazardous materials from the garbage dump. Therefore, I am requesting that the scope be expanded to include a full study of exactly what, if anything will be making its way up from the landfill, be it gas or fumes or particulate matter and the potential effect it will have on people using the park. We must spare no costs. (9, 11)

Fresh Kills Park

Response: As noted in the scope of work, the DGEIS must demonstrate that the various elements of the proposed Plan can move forward without compromising public health, safety, or welfare. All proposed park facilities and activities will also be examined for any potential impacts they may have on public health.

Comment 122: Can you be sure that settling will be complete in time for the capping to be finished in five years, which has already been announced? If it isn't settled, will the cap crack? What would happen to the safeguards against contaminants if the cap does crack? What safeguards will be in place, especially for the families visiting their loved ones and for the residents of Staten Island? (21)

Response: The Final Plan and GEIS will examine landfill settling issues as they relate to the proposed park, as well as any potential associated concerns regarding public access and safety.

Comment 123: Is there hazardous material in the West Mound? If there are, what are they? What measures are going to be taken to determine the presence of hazardous materials there? And when those measures are being taken, how will they mitigate the effects of materials in the park, especially for those who wish to visit the area as a quiet, reflective place? Have the characterization processes that need to be done for landfills been performed? I'm sure Staten Island residents want to know what has been put in that mound, especially since there was no liner. (21)

Response: The GEIS will include an analysis of the project's potential public health and hazardous materials issues on all areas of the proposed park, including the west mound (West Park).

Comment 124: What will be done about the presence of methane gas? Without a liner, how can spontaneous gas explosions be prevented? This needs to be examined. We've been told by the people who build the methane recovery facility that it's operating at five percent capacity now. How much longer is that going to last? Is it ever going to be up to speed, and what is it going to cost to have that corrected? (21)

Response: The GEIS will include a description of the existing DSNY facilities and monitoring systems that collect and manage methane gas, and will consider any potential public health and safety issues with respect to public access in the vicinity of these systems.

Comment 125: Are the current health control systems sufficient? Why won't problems occur with the fish when you're now planning to have fishing docks? Will these chemicals be a problem for people trying to visit the West Mound and any other

areas of the developed area? What choice will the people visiting the West Mound have if they wish to avoid breathing contaminants? (21)

Response: As discussed in the scope of work, the public health analysis will examine in detail the proposed locations of public access and the surface water, ground water, and air monitoring data for the purposes of determining if there is the potential for adverse public health impacts resulting from public access to the proposed park.

Comment 126: Review of potential impacts to public health under the proposed action should consider two separate but interrelated issues that overlap with the above comments on landfill regulatory compliance. The first includes the potential health-related impacts of the proposed park construction on existing infrastructure and monitoring protocols. This analysis would include potential impacts from the possible disruption of existing infrastructure (leachate control system, landfill gas recovery system, landfill cap and cover, etc.) and disruption of post-closure care activities that are designed to protect public health and the environment. The second relates to potential impacts to public health that may result from the introduction of public access to the site. This would include issues such as access to surface water and to site soils. The analysis should therefore consider the adequacy of existing DSNY infrastructure and the post-closure care plan to protect the public health and environment in relation to the proposed public access. Issues related to the above areas of analysis are proposed to be covered in several sections of the GEIS. (2)

Response: The public health chapter of the GEIS will discuss DSNY's existing environmental protection systems and associated monitoring protocols and infrastructure, and will examine the need to improve or modify these systems for the purpose of park implementation and the provision of public access.

Comment 127: Task 21, Subtask C: Insert "and leachate" after "air toxic compounds." This section should include a consideration of the conclusions of the May 2000 report by the ATSDR in light of the proposed park mapping and associated public access. (2)

Response: The scope of work has been amended to reflect the above comment.

MITIGATION

Comment 128: Within 500 feet of the boundaries of the proposed park, there are three culverts which are located at Travis Avenue and Victory Boulevard, Signs Road and Victory Boulevard, and Arthur Kill Road and Muldoon Avenue, and one City-owned bridge located at Richmond Avenue at Richmond Creek. These structures are not in our agency's Ten Year Capital Reconstruction Plan.

Fresh Kills Park

However, in order to alleviate possible traffic congestion, this should be further investigated during the proposed construction of Fresh Kills Park. (5)

Response: The need for any roadway or bridge improvements that are necessary to handle the traffic expected under the proposed project or are necessary for mitigation will be presented in the “Mitigation” chapter of the GEIS.

Comment 129: The GEIS should explore the possibility of relocating DSNY facilities if these facilities impact the proposed park. (1)

Response: Many of the DSNY facilities at the Fresh Kills site are essential to the closure of the Fresh Kills Landfill and are therefore essential to the park and the protection of the environment and public health. If the proposed park conflicts with DSNY facilities at specific locations, mitigation measures will be examined.

ALTERNATIVES

Comment 130: We favor new park drive Alternative B as shown in Figure 6-Draft Master Plan, “Proposed Circulation Plan.” This drive keeps the traffic close to Richmond Avenue and proposed parking lots. East Park and Davis Wildlife Refuge would benefit by keeping a large undisturbed area open for habitat restoration, improved wetlands and new forested areas. This area could be accessed by hiking and walking trails that would have minimal impact on the flora and fauna. (16)

Response: Comment noted. *