

An architectural rendering of a park on Staten Island. In the foreground, a woman with blonde hair, wearing a light blue and grey long-sleeved shirt, is seen from the back, looking through binoculars. She is standing on a paved walkway with a metal railing. The park features lush green grass, a paved path, and several people walking. In the background, there are trees, a building, and a sky with many birds flying. The overall scene is bright and sunny.

Shoreline Parks Plan Staten Island

Shoreline Parks Conceptual Plan
August 31, 2022

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Parks

Table of Contents

Executive Summary	p.3
Project Background	p.18
• Schedule + Phase 1 Scope	
• Phase 2 Scope	
• Existing Conditions	
• Summary of Community Engagement	
Shoreline Parks Plan	p.32
• Urban Design Framework	
• Site Design Principles	
• Sustainability, Inclusion, Resilience	
• Architecture	
• Staten Island Waterfront Greenway + Earthen Levee Plans	
• Neighborhood Connection Plans	
• Oakwood Beach	p.57
• Cedar Grove	p.60
• Midland and Timoshenko Field Area	p.63
• Seaview	p.66
• Sand Lane	p.69
Capital Plan + Next Steps	p.72

EXECUTIVE SUMMARY



PROJECT CONTEXT + STUDY OVERVIEW



- Project Area – East Shore Waterfront
- Staten Island Waterfront Greenway
- Existing Bike Paths
- Existing Trails
- NYC Parks
- National Parks



PROJECT CONTEXT + STUDY OVERVIEW



The Shoreline Parks Plan focuses on the Staten Island Waterfront Greenway and six natural and recreational areas within NYC Parks properties on the Staten Island East Shore. NYC Parks developed this study to create approaches for integrating NYC Parks shoreline assets with the construction of the USACE flood protection system. This proposed "Line of Protection" (LOP) creates the basis for reconceptualizing many waterfront open spaces into a comprehensive shoreline plan with diverse ecologies, mobility options, and recreational opportunities accessible to all. This project builds on Phase 1 of the Shoreline Parks Plan and incorporates changes to the USACE LOP design since 2017.



NYC Parks



Staten Island Shoreline Parks Master Plan

COMMUNITY ENGAGEMENT PROCESS



- The two public meetings during the Phase 2 Shoreline Parks Plan planning process focused on access and programming along the Shoreline Parks.
- Over 100 people provided feedback at the two public meetings.
- In public meeting # 1, the project team presented options to public, polled public for preferred programming, gathered data.
- In public meeting # 2, the project team presented the updated conceptual designs for each project area; these concepts incorporated programming feedback from meeting # 1 attendees.
- Feedback on draft final designs from public meeting #2 will inform later stages of design as the USACE LOP is implemented.

SHORELINE PARKS PLAN | OVERALL CONCEPT DESIGN



- | Circulation | Program | Landscape |
|------------------------|-----------------|------------------|
| Line of Protection | Open Space | Other Open Space |
| Shoreline Bicycle Path | Fields / Courts | Ponds |
| Stairs + ADA Ramps | Buildings | Beach |
| Parking Lots | Playgrounds | Dunescape |

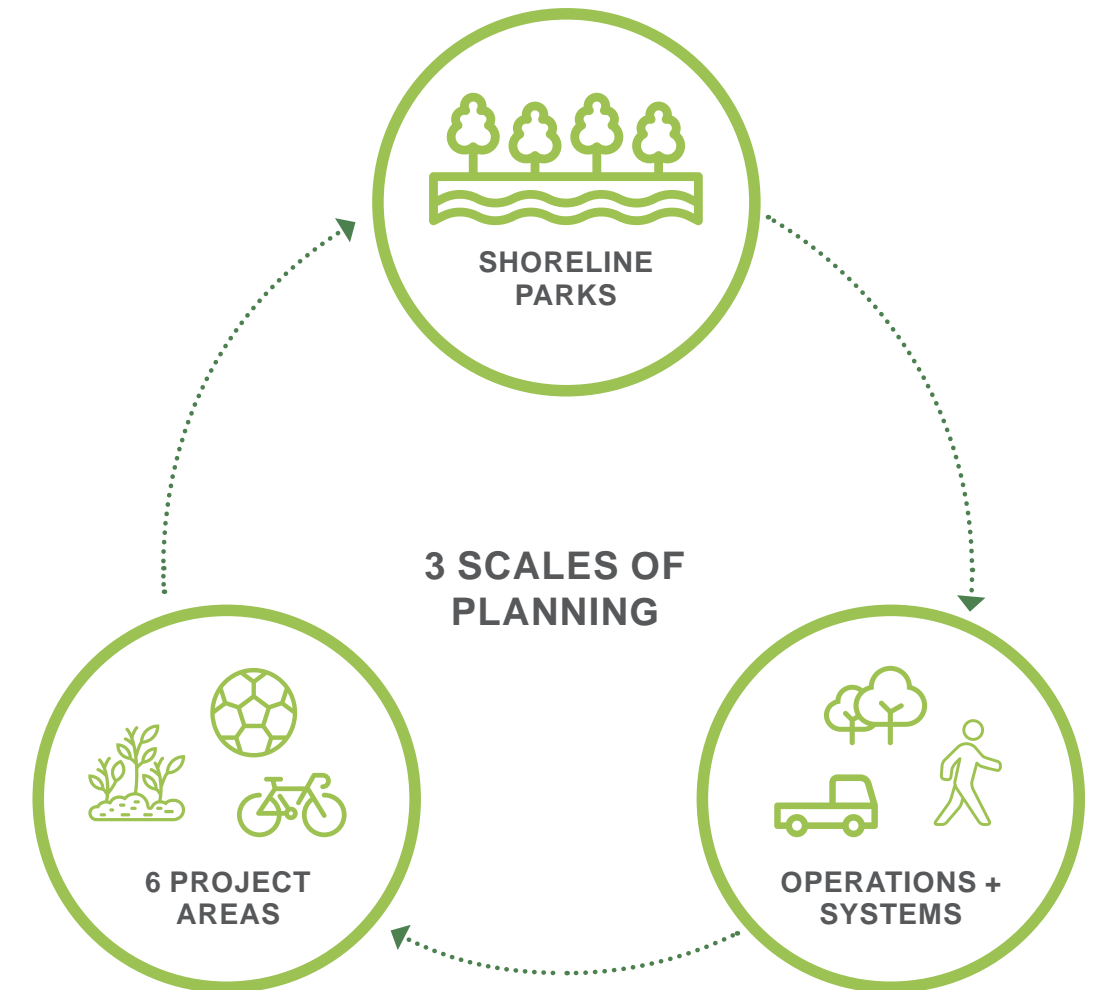


SHORELINE PARKS PLAN | PLANNING FRAMEWORK

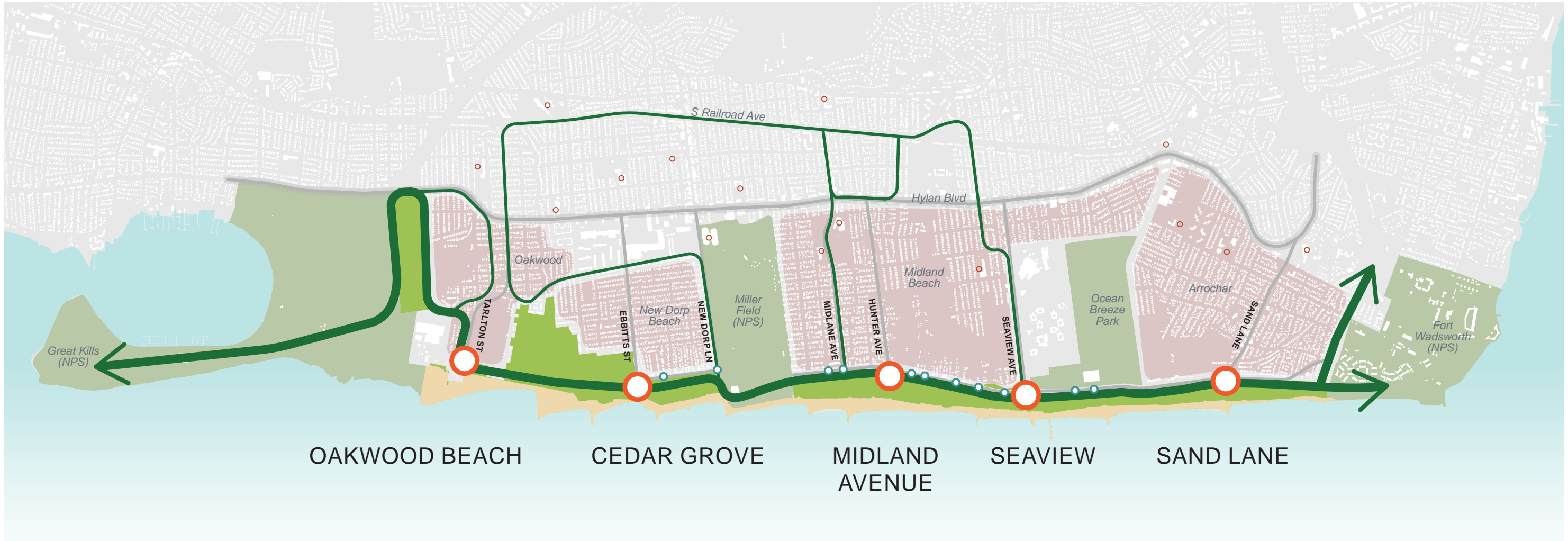
The need to address circulation and reconnect NYC Parks properties to the beaches following the construction of the USACE Line of Protection creates an opportunity to address the physical and visual cohesion of the shoreline system as a whole.

Strategies for enhancing the shoreline parks include:

- Diversify parks programming through amenities and activities
- Enhance inclusion through physical access and facilities design
- Strengthen the user experience through circulation and landscape design
- Apply current sustainability and resilience guidelines to NYC Parks assets
- Improve the functionality of park maintenance including Maintenance and Operations (M&O), lifeguards, and Parks Enforcement Patrol (PEP)



SHORELINE PARKS PLAN | URBAN DESIGN FRAMEWORK



OAKWOOD BEACH

CEDAR GROVE

MIDLAND AVENUE

SEAVIEW

SAND LANE

- Neighborhood Connections
- On-street Bicycle Paths
- Inland Neighborhoods in Study Area
- National Parks
- Staten Island Waterfront Greenway
- Pedestrian Crossing
- Public Schools
- NYC Parks



Staten Island Shoreline Parks Master Plan

SHORELINE PARKS PLAN | THEMES

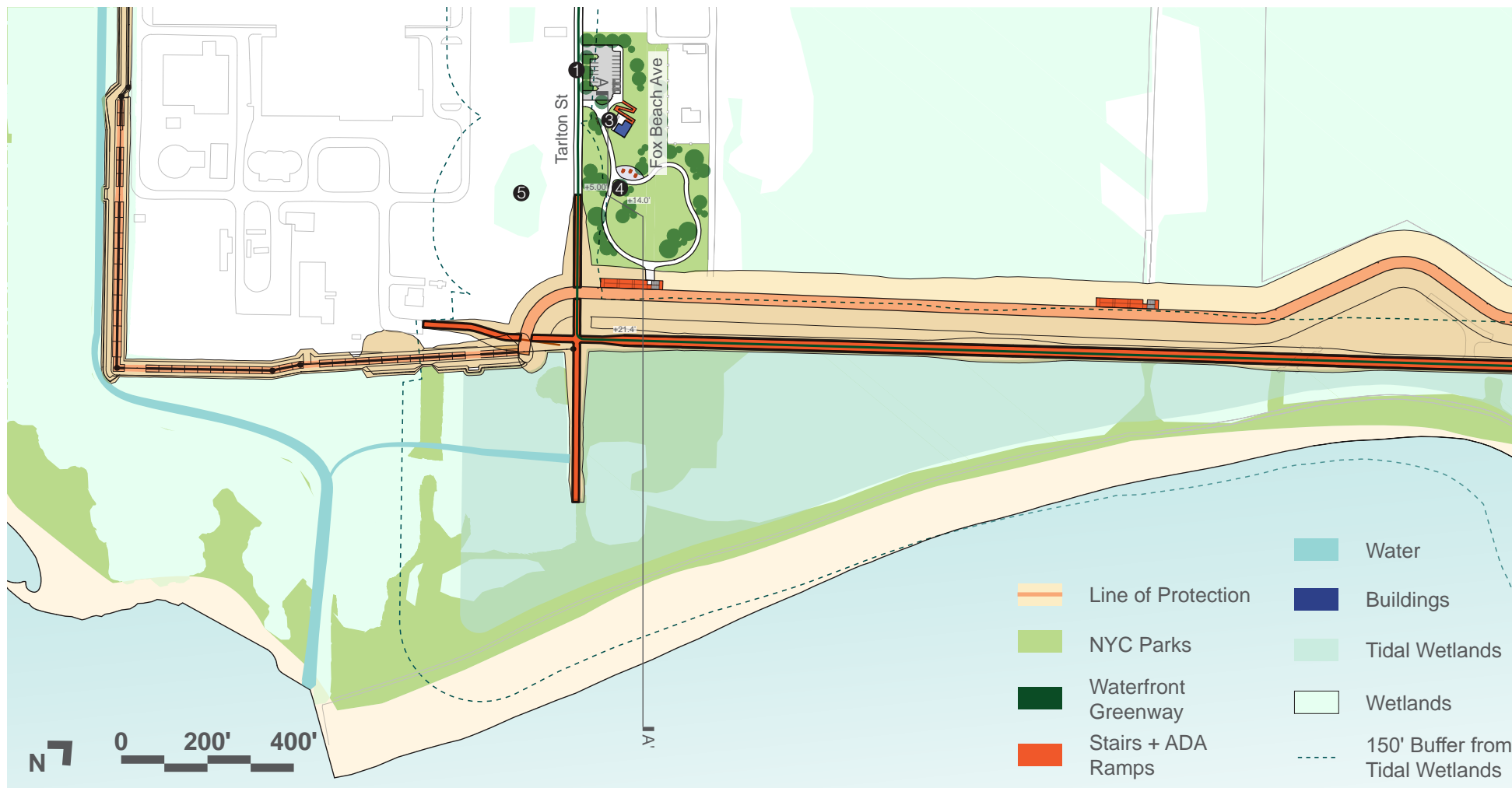
Gradient of Neighborhood Connection Themes



The framework features five “Neighborhood Connections” and a continuous Waterfront Greenway throughout the Shoreline Parks.

The design of the Neighborhood Connections takes an approach of reusing and enhancing existing assets while making strategic additions to programs and circulation. These improvements will highlight unique thematic programming at each Neighborhood Connection, creating a gradient from natural to civic experiences from the south to the north of the Shoreline Parks.

NEIGHBORHOOD CONNECTIONS | OAKWOOD BEACH | CONCEPT PLAN



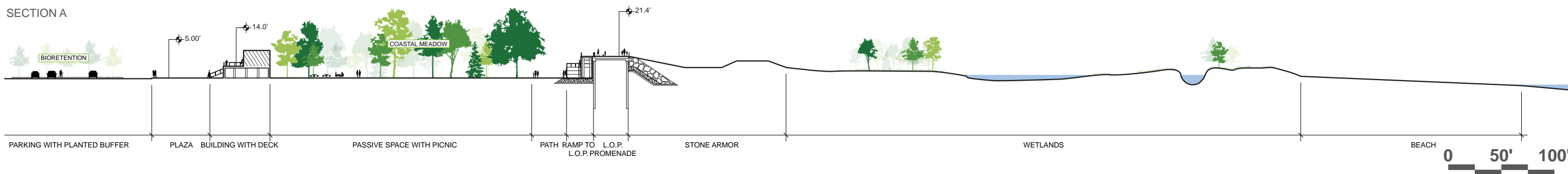
Connection Theme: Birdwatching + Hiking

Oakwood Beach offers a naturalistic entrance to the Shoreline Parks amenities and the greenway with connections to Great Kills Park to the south. Light touch facilities and amenities are provided to support birdwatching and wildlife viewing as well as hiking and picnicking in a rustic setting. While the beach at Oakwood Beach is not a public recreational beach, access is provided to experience the beach, natural areas, and views of the New York Harbor.

Proposed capital projects

1. Bicycle greenway
2. Parking lot
3. Comfort station + plaza
4. Picnic area
5. Restored wetlands

SECTION A



NEIGHBORHOOD CONNECTIONS | CEDAR GROVE | CONCEPT PLAN



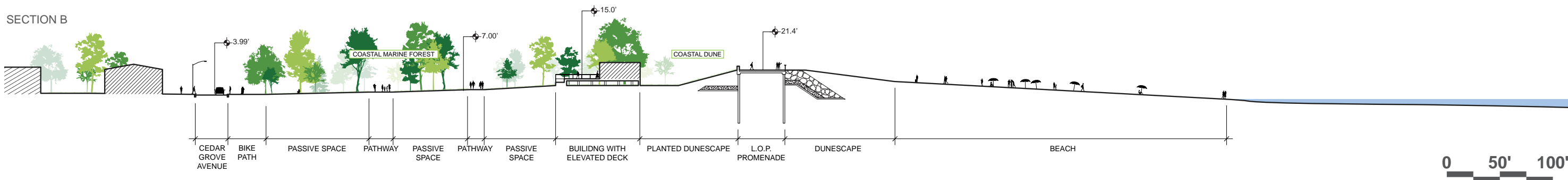
Connection Theme: Natural Areas Recreation

Cedar Grove offers natural recreation amenities connected to the adjacent New Dorp Beach neighborhood. A new drop-off area and service hub provide connections to Cedar Grove and New Dorp Beach. Picnic areas, playgrounds, and paths through the natural areas will complement the restored coastal woodlands and wetlands.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Services building (comfort station, lifeguard, PEP)
4. Picnic area
5. Maintenance building and compound
6. Playground
7. Nature walk
8. Woodland paths
9. Expanded playground
10. Kayak storage

SECTION B



NEIGHBORHOOD CONNECTIONS | MIDLAND AVE + TIMOSHENKO FIELD | CONCEPT PLAN



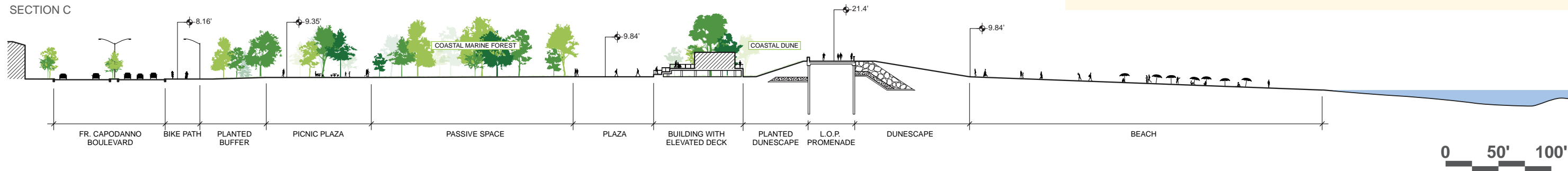
Connection Theme: Sports

Midland Avenue is a regional destination for sports and active recreation as well as major parking and access point for Midland Beach. A new pedestrian circulation network connects a diversity of programmatic areas including picnicking, existing basketball and handball courts, a relocated skatepark, renovated and new playgrounds, and a splash pad. The Timoshenko Field area will feature a new turf soccer field and pickleball courts.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Maintenance building and compound
4. Services building (comfort station, lifeguard, PEP)
5. Pickleball courts
6. Picnic area + lawn
7. Splashpad
8. Hardcourts renovation
9. New skatepark
10. Playground reconstruction + expansion
11. Toddler playground
12. Soccer field

SECTION C



NYC Parks



Staten Island Shoreline Parks Master Plan

NEIGHBORHOOD CONNECTIONS | SEAVIEW | CONCEPT PLAN



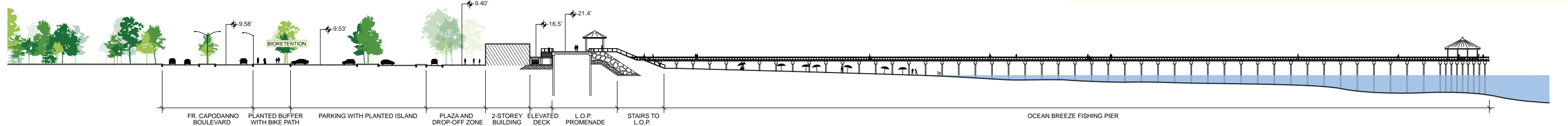
Connection Theme: Civic Gathering

Seaview is the civic hub of the Shoreline with spaces for community gathering and celebration. The neighborhood connection's performance lawn will be expanded, the existing memorial will be integrated with the flood protection barrier, and Freedom Plaza will be renovated to make it more pedestrian friendly. A renovated comfort station will anchor the drop-off area with new connections to the Ocean Breeze pier. To the north of the comfort station, a playground and fitness trail will offer amenities to complement the Ocean Breeze Athletic Complex across Father Capodanno Boulevard.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Services building (comfort station, lifeguard, PEP)
4. Performance lawn
5. Freedom Plaza renovation
6. Playground
7. Woodland paths
8. Fitness trail
9. Dog run

SECTION D

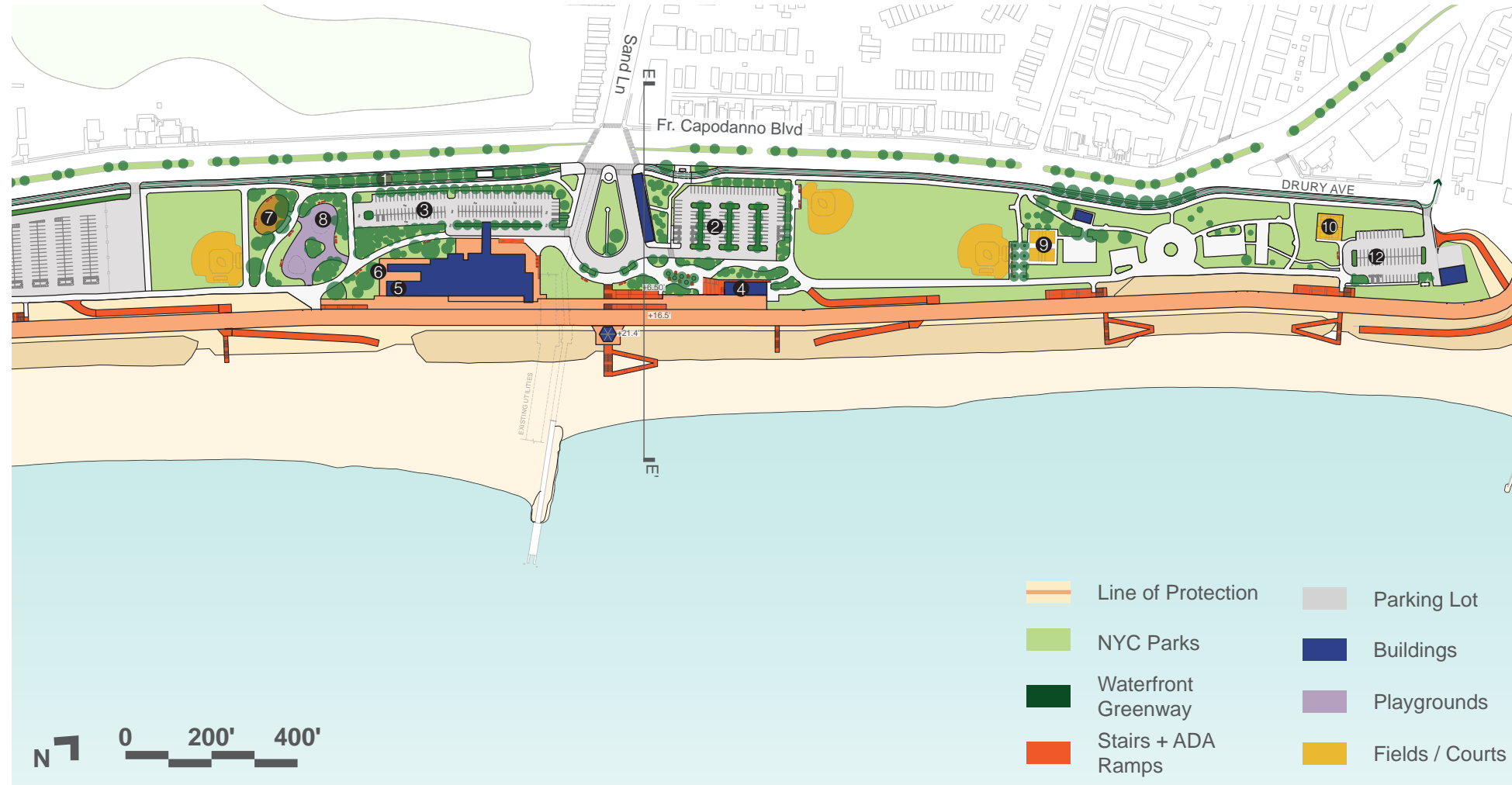


NYC Parks



Staten Island Shoreline Parks Master Plan

NEIGHBORHOOD CONNECTIONS | SAND LANE | CONCEPT PLAN



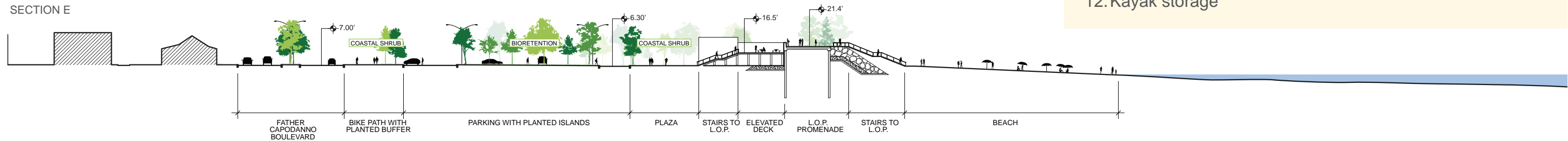
Connection Theme: Food and Amenities

Sand Lane provides access to the Shoreline's northernmost beaches and is where the Shoreline greenway transitions to Fort Wadsworth Park. With the historic Vanderbilt restaurant and event space, Sand Lane is a center for food along the Shoreline. A concessions building is complemented by space for food trucks and picnicking in the arrival plaza. The existing playground will be reconstructed in coordination with site circulation realignments to provide safer connections with clear sight lines.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Vanderbilt parking lot reconstruction
4. Services building (concessions, PEP)
5. Renovated comfort station
6. Deck modifications
7. Dog run
8. Reconstructed playground
9. Reconstructed volleyball courts
10. Pickleball courts
11. Maintenance area and compound
12. Kayak storage

SECTION E



SHORELINE PARKS PLAN NEXT STEPS

- Share the Shoreline Parks Plan in Fall 2022.
- NYC Parks will continue to collaborate with USACE, National Park Service (NPS), NYC Department of Environmental Protection (DEP), and NYC Department of Transportation (DOT) throughout the design and construction of the LOP.
- NYC Parks will use the Shoreline Parks Plan to coordinate with the US Army Corps of Engineers and New York State government and seek funding for future capital projects.



SHORELINE PARKS PLAN | VISION



The Shoreline Parks Plan and Staten Island Waterfront Greenway will improve connectivity between neighborhood and borough-wide recreational amenities, resiliency efforts, and bicycle paths.



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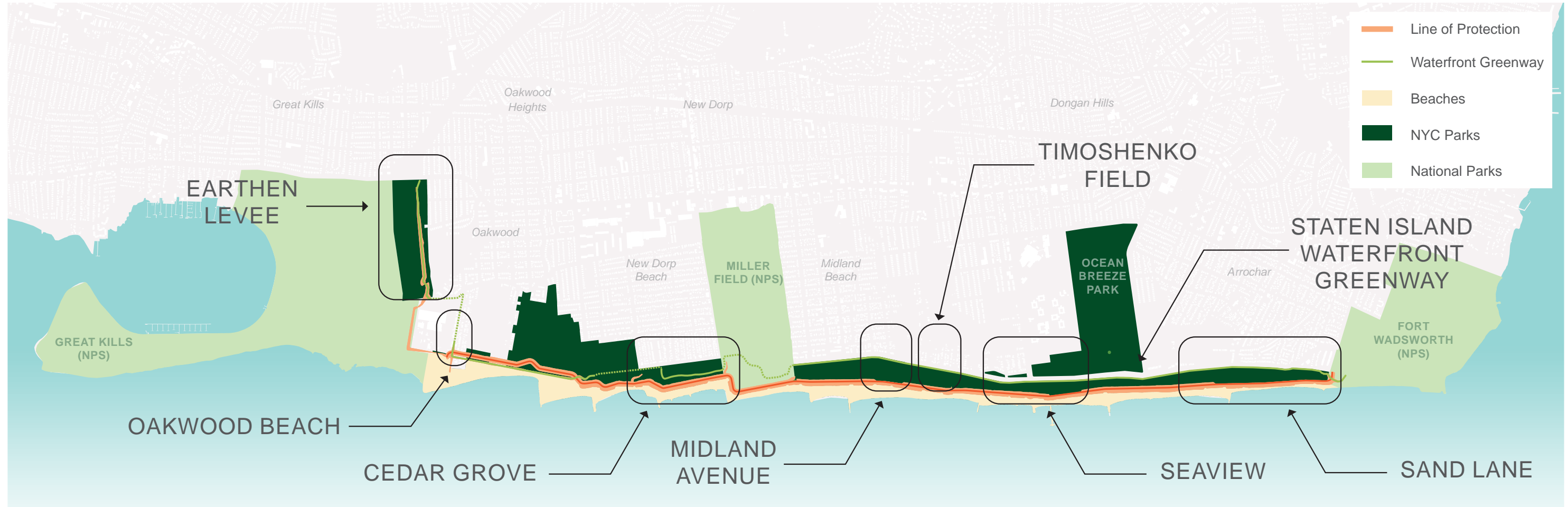


Staten Island Shoreline Parks Master Plan

PROJECT BACKGROUND



PROJECT SCOPE



The Phase 2 Shoreline Parks Plan addresses a large project area, focusing on five Neighborhood Connections and the Staten Island Waterfront Greenway, which runs the full length of the project area. The project areas include:



- The Staten Island Waterfront Greenway (including the Earthen Levee)
- Neighborhood Connections: Oakwood Beach, Cedar Grove, Midland Avenue (including Timoshenko Field), Seaview, and Sand Lane



NYC Parks



Staten Island Shoreline Parks Master Plan



Render of Sand Lane drop off area and LOP from Phase 1 Conceptual Plan by Quennell Rothschild & Partners.

Phase 1 Shoreline Parks Plan Scope

In 2017, NYC Parks completed Phase 1 of the Shoreline Parks Plan, which focused on the design of stairs and ramps to provide convenient and accessible crossings over the Line of Protection.

Phase 1 made conceptual design recommendations for Cedar Grove, Midland Avenue (including both Midland Avenue and Jefferson Avenue entrances) Seaview and Sand Lane. Phase 1 also included conceptual proposals for an Atlantic White Cedar Swamp wetlands restoration as part of USACE's detention pond at Oakwood Beach.

Phase 2 expands on the previous work and incorporates advances in the USACE LOP design since 2017.

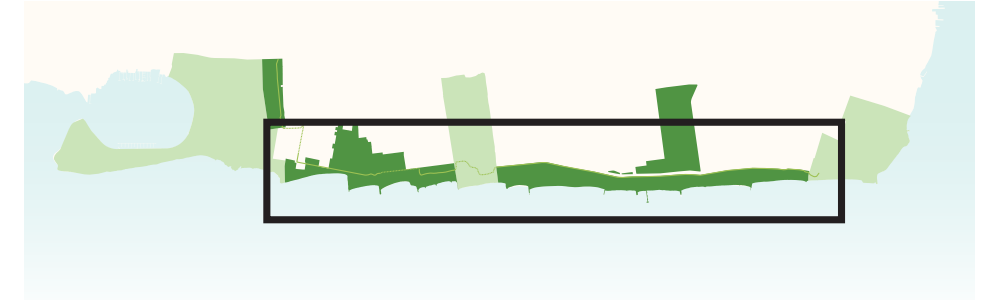
EXISTING CONDITIONS | STATEN ISLAND WATERFRONT GREENWAY

The existing waterfront greenway runs from Cedar Grove to Sand Lane and creates a variety of experiences from biking along the shoreline dunes and upland forest of Cedar Grove to cycling on the promenade and through park programming from Midland to Sand Lane.

Site Photos



Key Map



Existing Alignment

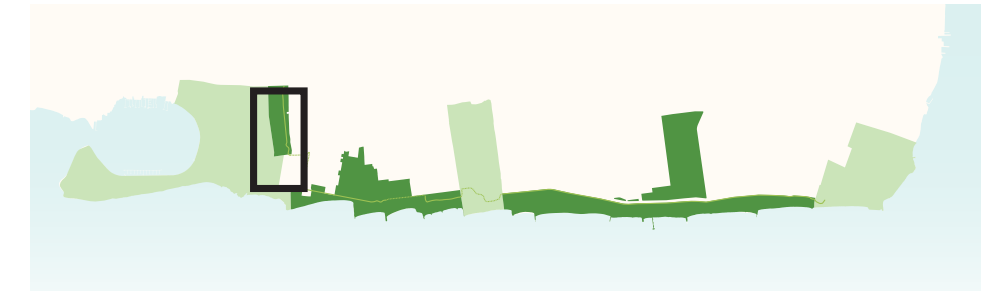


EXISTING CONDITIONS | EARTHEN LEVEE



- Earthen Levee Future Alignment
- NYC Parks
- Water

Key Map



Site Photos

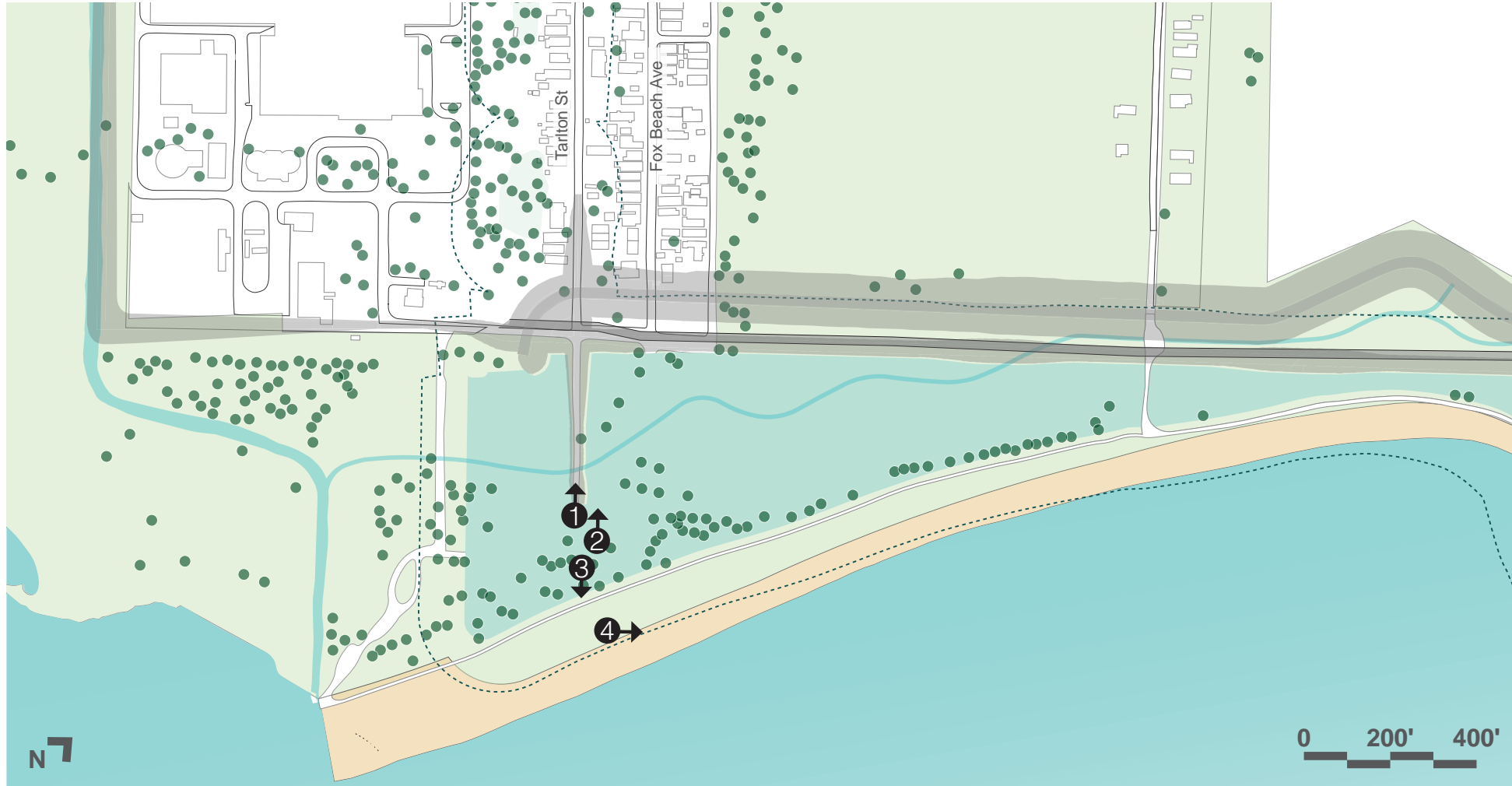


The area surrounding the future Earthen Levee is a wetland with a creek running from Hylan Boulevard to the Oakwood Beach Wastewater Treatment Plant.



Staten Island Shoreline Parks Master Plan

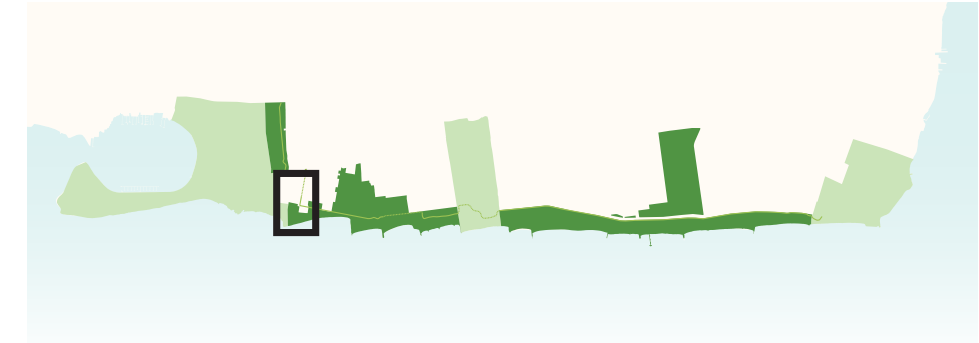
EXISTING CONDITIONS | OAKWOOD BEACH



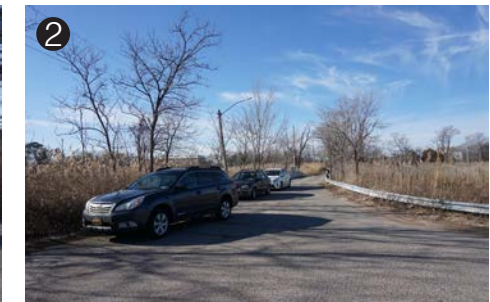
Oakwood Beach is currently used for fishing, bird watching, and walking along the beach. Visitors use informal trails (shown in images) to walk up the embankment to the beach. Visitors park their cars or bicycles at the end of Tarlton Street.

- Line of Protection Future Alignment
- NYC Parks
- Wetlands
- Tidal Wetlands
- 150' Buffer from Tidal Wetlands

Key Map



Site Photos



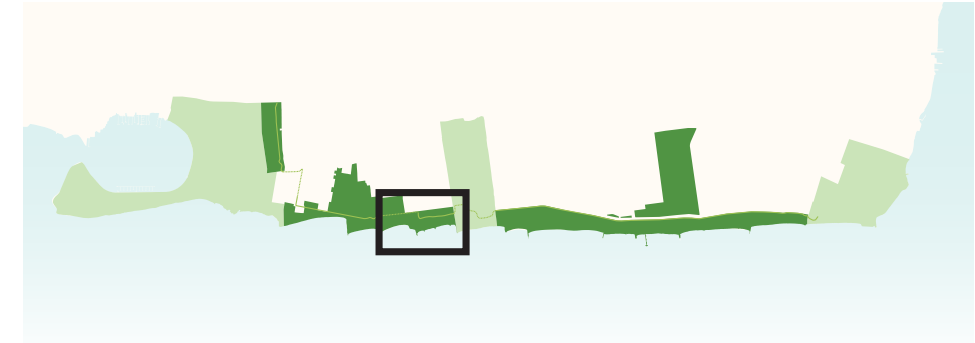
EXISTING CONDITIONS | CEDAR GROVE



Cedar Grove currently functions as a neighborhood park. Visitors arrive from the surrounding neighborhood to walk dogs, run, or bike. Paths transition from dunes to vegetated forests.

- Line of Protection Future Alignment
- NYC Parks
- Wetlands
- Dune Planting
- Parking

Key Map



Site Photos



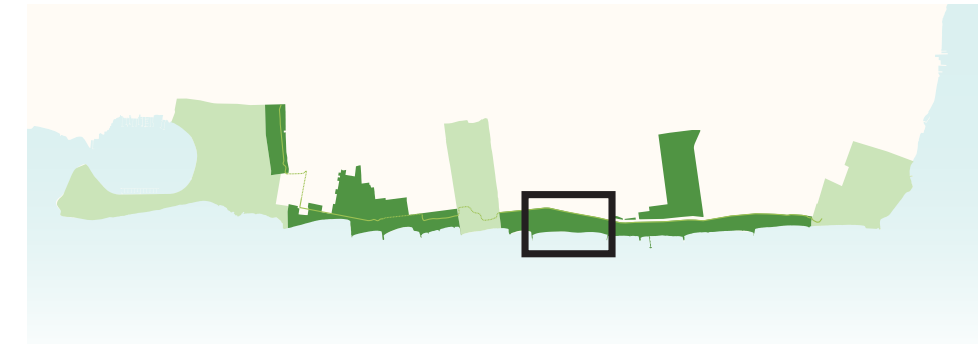
EXISTING CONDITIONS | MIDLAND AVENUE + TIMOSHENKO FIELD AREA



Midland and the Timoshenko Field area are highly programmed with baseball fields, soccer field, playground, skatepark, and basketball courts. There are two parking lots in this area for park visitors.

- Building
- Dune Planting
- Parking
- Line of Protection
- Future Alignment
- NYC Parks
- Fields / Courts

Key Map



Site Photos



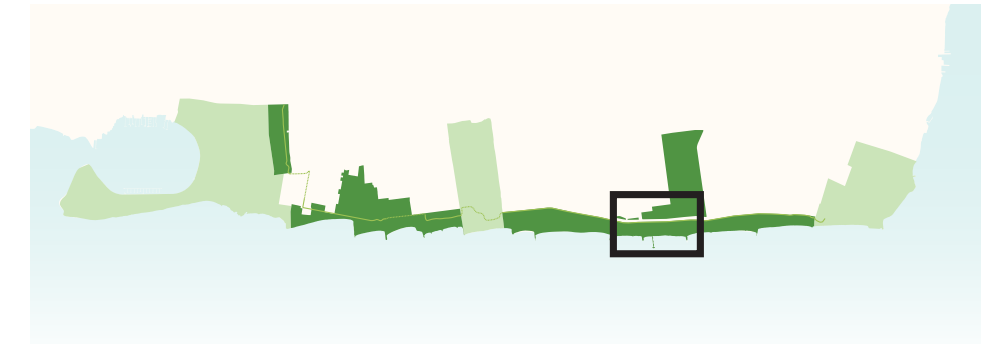
EXISTING CONDITIONS | SEAVIEW



At Seaview there is an active fishing pier, splash pad, commemorative space called Freedom Plaza, shade structures, performance stage for summer events, comfort station, and large parking lot.

- Building
- Dune Planting
- Parking
- Line of Protection
- NYC Parks
- Fields / Courts

Key Map



Site Photos



EXISTING CONDITIONS | SAND LANE



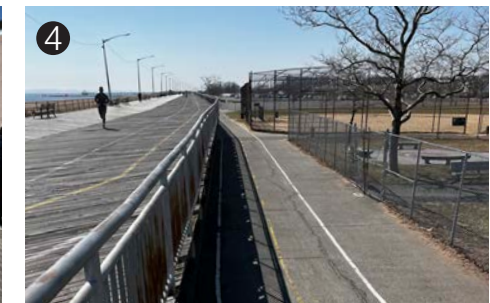
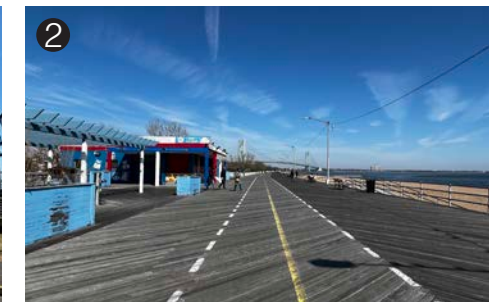
Sand Lane has a playground, baseball fields, a concessionaire restaurant called the Vanderbilt, and public concessions. North of the main drop-off area towards Drury Avenue and Fort Wadsworth there is a playground, volleyball courts, bocce, shuffleboard, and a parking lot.

- Building
- Dune Planting
- Parking
- Line of Protection
Future Alignment
- NYC Parks
- Fields / Courts

Key Map

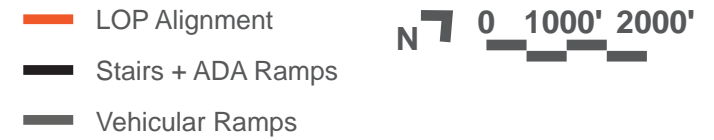


Site Photos



EXISTING CONDITIONS | ARMY CORP OF ENGINEERS (USACE) LINE OF PROTECTION (LOP)

USACE LOP Alignment (2022)



Considerations since 2017 Phase 1 Plan

- Since 2017, USACE line of protection (LOP) design has advanced, requiring an update of Phase 1 plans; changes to LOP design created new conditions that need to be addressed.
- Since Phase 1, concept plans need to be advanced with updated cost estimates to create clear pipeline for capital projects.

EXISTING CONDITIONS | CHALLENGES + OPPORTUNITIES

- Provide facilities and infrastructure for cost-effective maintenance of park spaces.
- Provide safe circulation and access hierarchy for vehicles, pedestrians, and bicyclists.
 - Enhance way-finding with clearly defined drop-off areas and clear ADA access to ramps over line of protection.
 - Separate cyclists from park program areas and promenade on top of line of protection.
 - Safer pedestrian entrances on Father Capodanno Boulevard.
- Highlight natural features of shoreline landscape.
- Integrate and connect new areas of the Shoreline to existing parks (i.e. Oakwood Beach + Earthen Levee).
- Evolve programs to meet interests of park users all ages, abilities, and social backgrounds.
- Apply principles of inclusive design to all aspects of Shoreline parks (eg. companion seating).
- Highlight sustainability and climate resilience by complying with stormwater regulations and managing stormwater runoff on site.

COMMUNITY ENGAGEMENT | TIMELINE

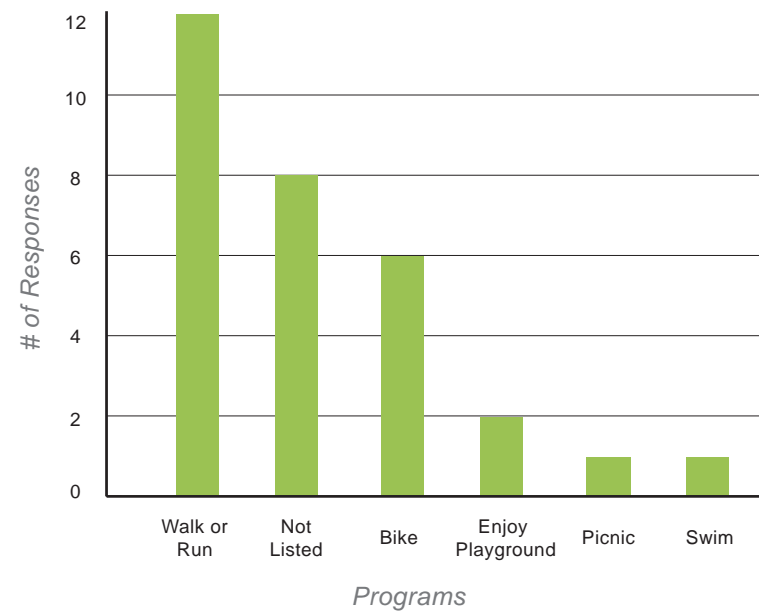


- The two public meetings during the Phase 2 Shoreline Parks Plan planning process focused on access and programming along the Shoreline Parks.
- Over 100 people provided feedback at the two public meetings.
- In public meeting # 1, the project team presented options to public, polled public for preferred programming, gathered data.
- In public meeting # 2, the project team presented the updated conceptual designs for each project area; these concepts incorporated programming feedback from meeting # 1 attendees.
- Feedback on draft final designs from public meeting #2 will inform later stages of design as the USACE LOP is implemented.

COMMUNITY ENGAGEMENT | PUBLIC MEETING # 1+2

- At the first public meeting attendees provided feedback using Miro boards and polls. After the public meeting, community members could provide feedback online by answering survey questions. At the second public meeting attendees provided comments in the chat feature.
- The Project team integrated programming preferences expressed by attendees in public meeting # 1 into the conceptual plans, including: pickleball, kayak storage, picnic areas, a new skate park, dog runs, and beach and bicycling amenities.

Poll Question: What do you do when you're at Shoreline Parks?



Wordcloud of Attendee Program Ideas



SHORELINE PARKS PLAN



SHORELINE PARK PLAN | OVERALL CONCEPT DESIGN



Circulation

- Line of Protection
- Shoreline Bicycle Path
- Stairs + ADA Ramps
- Parking Lots

Program

- Open Space
- Fields / Courts
- Buildings
- Playgrounds

Landscape

- Other Open Space
- Ponds
- Beach
- Dunescape



NYC Parks



Staten Island Shoreline Parks Master Plan

CONCEPTUAL DESIGN STRATEGIES | OVERVIEW



The framework features five “Neighborhood Connections” and a continuous Shoreline Path. The design of the Neighborhood Connections takes an approach of reusing and enhancing existing assets while making strategic additions to programs and circulation. These improvements will highlight unique thematic programming at each Neighborhood Connection, creating a gradient from natural to civic experiences from the south to the north of the Shoreline Parks.

Design Strategies

- Diversify parks programming through amenities and activities
- Enhance inclusion through physical access and facilities design
- Strengthen the user experience through circulation and landscape design
- Apply current sustainability and resilience guidelines to NYC Parks assets
- Improve the functionality of Parks maintenance including M&O, lifeguards, and PEP

Resilience Considerations

- The Shoreline Parks Plan considers climate resilience from several perspectives.
- The Line of Protection (LOP) is designed to provide flood protection from coastal storm surge, new structures and upland areas will be designed to be flood-resilient in accordance with Parks and City guidelines for shoreline areas.
- Recommended plantings and habitats follow "NYC Parks Design and Planning for Flood Resiliency Guidelines" in order to provide robust plantings in the marine environment.
- Urban heat island is taken into consideration at the conceptual level with recommendations to shade paved areas and integrate landscape with the Staten Island Waterfront Greenway.

Resilience Precedents



Clockwise from top-left: NYC Parks building elevated out of flood zone in Rockaways, Queens; shade trees next to courts in Luther Gulick Park, Manhattan; coastal plantings in Hunters Point South, Queens.

Green Infrastructure

- All capital improvements constructed as part of the Shoreline Parks Plan will reduce localized stormwater flooding, increase urban greening, attain cleaner waterways in a cost-effective manner, and meet the NYC DEP Unified Stormwater Management Rule (USWR).
- USWR requires 1.5" of rainfall (peak rate of runoff for a 10-year event) to be detained onsite.
- For the capital improvements proposed in the Shoreline Parks Plan, this rule can be met using a combination of green infrastructure approaches including:
 - Permeable pavers in parking lots and other paved areas
 - Sub-surface detention tanks
 - Rain gardens and bioswales integrated with park landscapes and the Staten Island Waterfront Greenway
- Layouts and sizing of green infrastructure system as well as detention volumes to be determined in the schematic and preliminary design phases.

Stormwater Management Precedents



Clockwise from top-left: Rain garden at McDonald Playground (Brooklyn, NY); permeable interlocking concrete pavers at McDonald Playground (Brooklyn, NY); sub-surface detention tanks being installed at Southwest Park (Hoboken, NJ); bioswale integrated with Hunter's Point South path (Queens, NY).



Habitat

- To promote habitat interconnectivity and biodiversity, support pollinator species and provide robust plantings in a marine environment that are cost-effective to maintain, the Shoreline Parks Plan recommends the following habitat zones:
 - Maritime beach / dune
 - Maritime grasslands
 - Maritime shrub areas
 - Marsh areas
 - Bioretention basins
 - Coastal maritime areas
 - Coastal forest
- Plant palettes for these habitat zones are provided in the appendix; habitat zones are indicated at a conceptual level on the neighborhood connection sections.
- Planting plans to be determined in the schematic and preliminary design phases.

Coastal Habitat Precedents



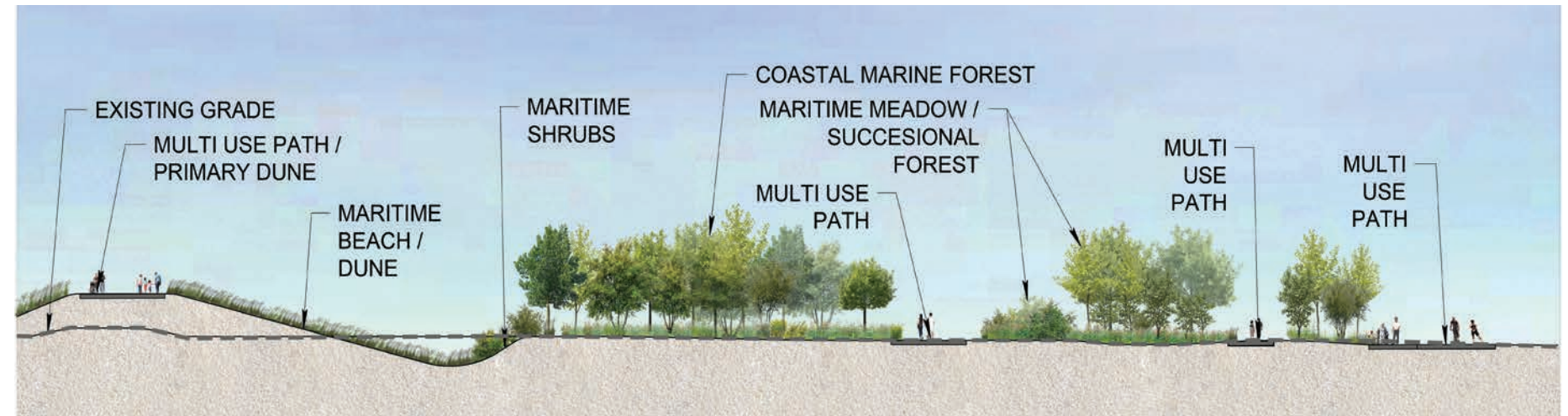
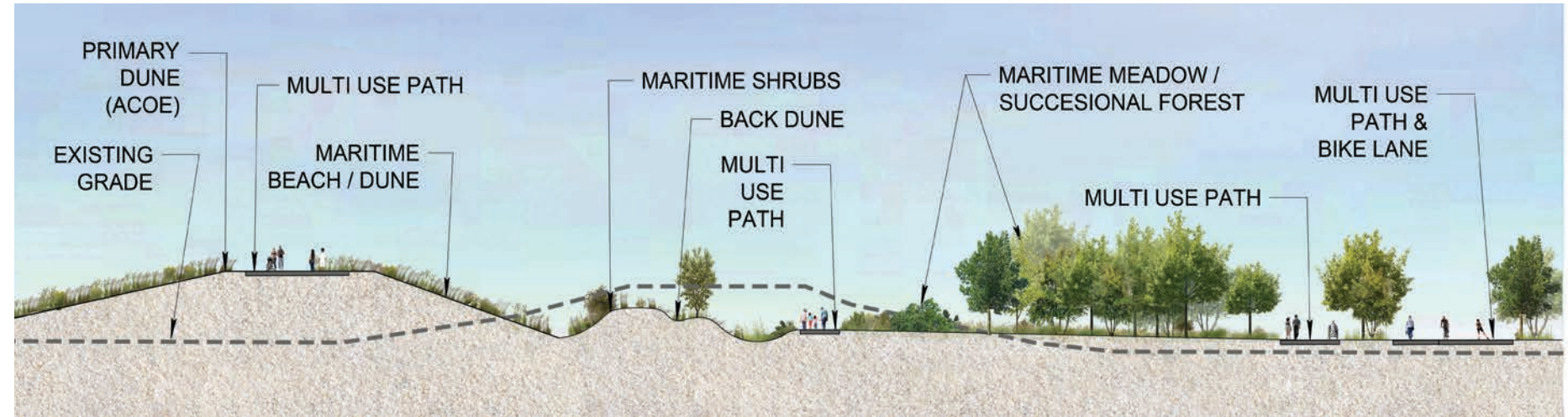
Examples of coastal dune and coastal meadow habitat; clockwise from top: Marine Park, Brooklyn, NY; Great Kills Park, Staten Island, NY; Sandy Hook, NJ.

CONCEPTUAL DESIGN STRATEGIES | SUSTAINABILITY, INCLUSION + RESILIENCE

Habitat

- The habitat zones transition from the sand of the beaches to the urban inland mature shade tree environment with successional stages of a natural coastline over the parkland space.
- Each proposed habitat zone created represents a step in this successional transition.
- By utilizing native species to create this gradient and overlapping select plant species across the habitat zones, the habitat approach will engage local ecology.

Typical Successional Coastal Habitats



Above: potential cross-section in Cedar Grove neighborhood connection; below: potential cross-section in Seaview neighborhood connection.

Accessibility

- The Shoreline Parks Plan features many approaches for making the parks, promenade, and beaches accessible to all.
- These approaches include:
 - ADA parking located close to ADA ramps that provide access to the promenade and beaches
 - Companion seating at all bench locations
 - Gender neutral bathrooms
 - Diversity of recreational programs for all ages and abilities

Inclusive Design Precedents



(Clockwise from top) NYC Parks new comfort station at Seaside; companion seating; ADA-accessible paths and ramps.

Boardwalk Material Reuse

- The wooden boardwalk that begins at Seaview and continues north to Sand Lane is constructed of over 180,000 SF of timber planks.
- These materials are a resource for salvage and reuse when the boardwalk is deconstructed as part of the USACE line of protection project.
- The Shoreline Parks Plan recommends the reuse of boardwalk timber for Parks salvage and reuse, when feasible.

Lumber Salvage Precedents

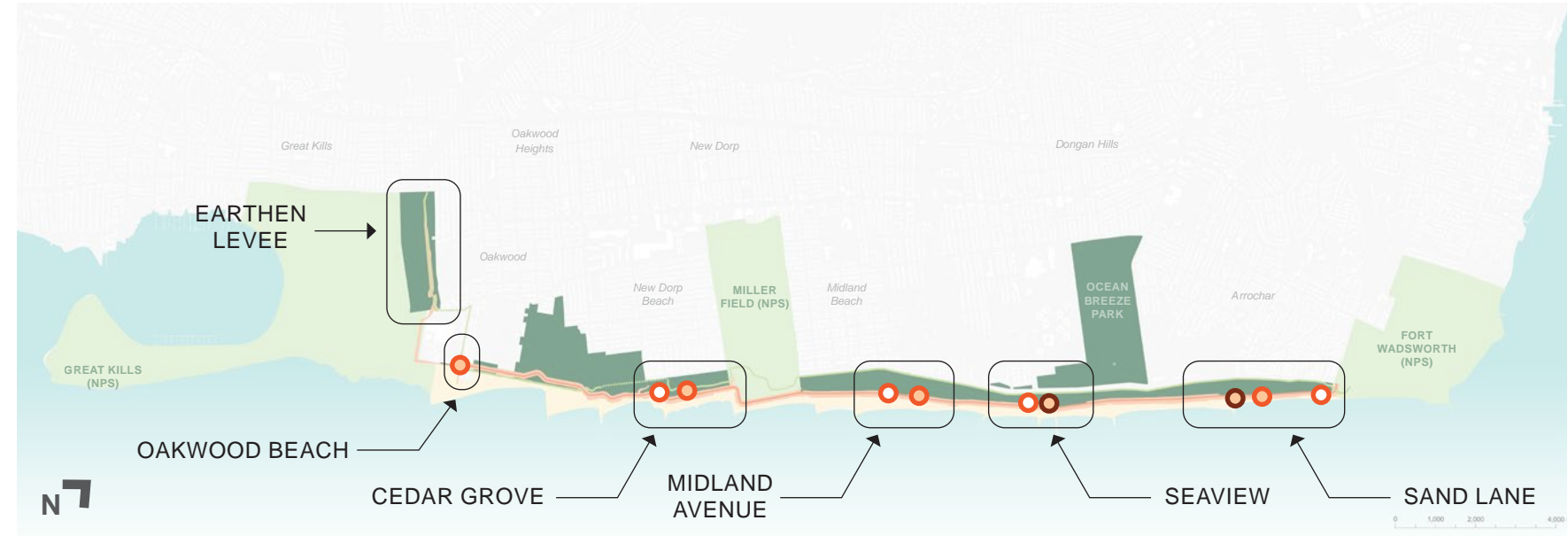


Salvaged Coney Island boardwalk lumber in the Barnes Foundation, Philadelphia, PA

New Buildings

- The Shoreline Parks Plan includes recommendations for locations and programs for new comfort stations, lifeguard, PEP, and M+O facilities, and concessions. These include:
 - **Oakwood Beach:** Comfort station
 - **Cedar Grove:** Comfort station with lifeguard and PEP facilities; M+O building
 - **Midland Avenue:** Comfort station with lifeguard and PEP facilities; M+O building
 - **Seaview:** Renovated comfort station; M+O building with PEP facilities
 - **Sand Lane:** Renovated comfort station; concessions building; M+O building
- Layouts and design of new buildings and building renovations to be determined in the schematic and preliminary design phases.

New Building Locations



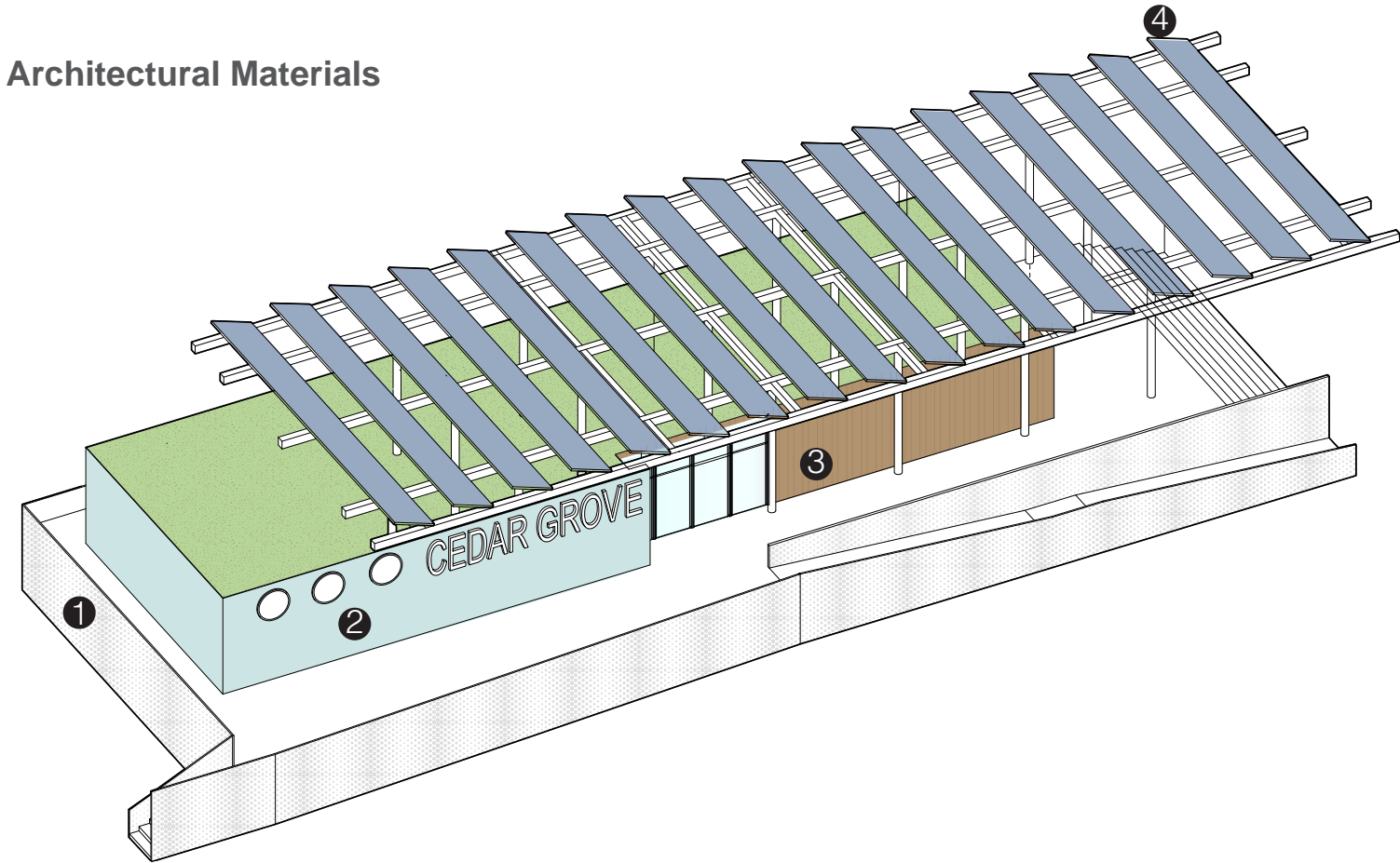
- CS, Lifeguard, PEP, or Concessions
- M+O Building + Service Area
- Renovated Comfort Station

CONCEPTUAL DESIGN STRATEGIES | ARCHITECTURE

Architectural / Programming Goals

- Materials and building form create consistent identity across five neighborhood connections and serve as way-finding landmarks. A variety of building facade materials and color options will be explored and developed at a future design stage.
- The new buildings provide accessible, inclusive and safe facilities for park visitors and staff. Ramp is a primary entrance to buildings, with ramps easy to find and up front of building. Circulation and access will continue to be explored in future phases.
- Solar installation design, funding and maintenance will be explored in coordination with NYC Department of Citywide Administrative Services (DCAS).
- Well-placed windows high above eye level (clerestory windows) promote as interior natural daylight.
- Shade will accompany buildings.
- The new buildings visually and programmatically enhance the neighborhood connections.

Architectural Materials



1

Perforated metal



2

Recycled plastic or glazed brick



3



4

PV panels

* Building is for illustrative purposes only; design details to be developed during future design stage.



NYC Parks



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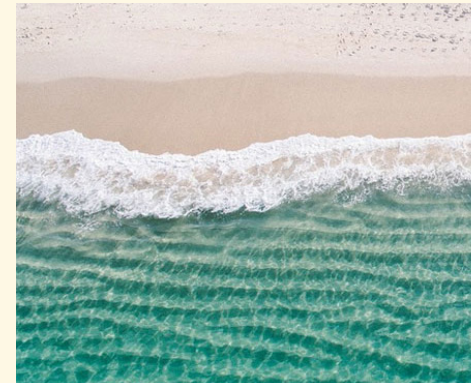


Staten Island Shoreline Parks Master Plan

Visual / Material Precedents

- The new buildings establish a cohesive design typology for public facilities across all five Neighborhood Connections.
- An oversized roof with prominent PV panels expresses a commitment to sustainability and serves as a beacon.
- Stairs and ramps needed to ascend to the elevation of the new facilities are celebrated and expanded to be welcoming and safe spaces for park visitors. The elevated level of entry to the facilities creates an opportunity for porches used to gather and support recreational amenities.
- The new buildings draw from the calm color palette of the beach in order to harmonize with the surrounding landscape and enhance the park experience.
- Solar installation design, funding and maintenance will be explored in coordination with NYC Department of Citywide Administrative Services (DCAS).

Architectural Inspiration



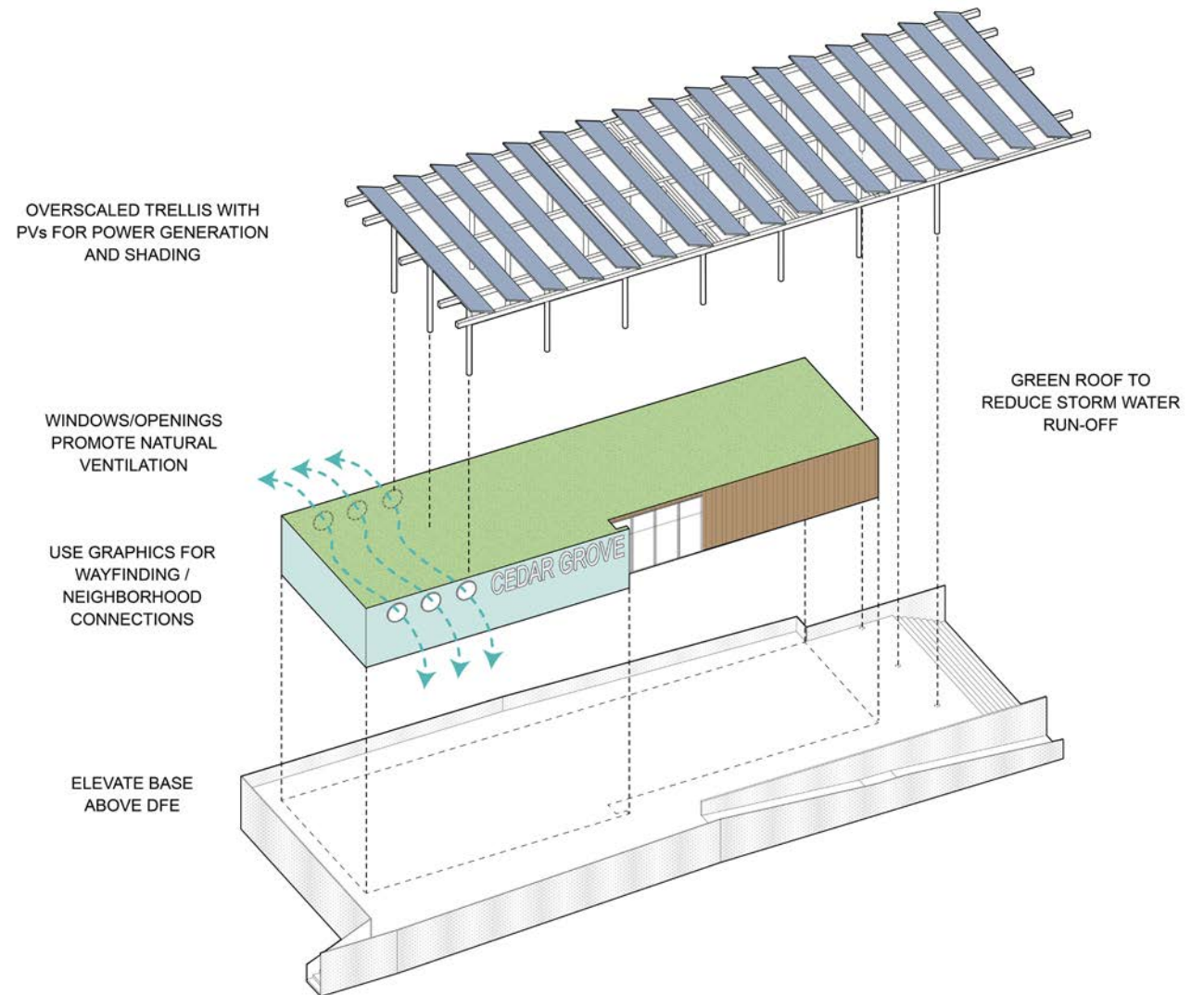
(Clockwise from top) Overhanging roof integrated with solar panels (Kandeda Building, Atlanta, GA); celebration of circulation (Olmsted Center, Queens, NY); Ferry Point comfort station (Bronx, New York); beach as color inspiration.



Sustainable Design Goals

- Facilities to be designed to current New York City Building Codes; currently NYC 2014 Building Code with Flood Elevations established by the FEMA 2015 pre-FIRM maps; elevate buildings above the Base Flood / Design Flood Elevations established by code.
- All utilities and equipment located above the flood elevation with porous enclosure below the design flood elevations to allow the ingress and egress of flood waters without significant damage.
- Use of flood resistant materials such as concrete, aluminum and recycled plastic lumber.
- Green roofs where appropriate to aid in the absorption of rainwater.
- Roofs that provide shade and ample surface for PV arrays that can help power NYC Parks vehicles and buildings. Solar installation design, funding and maintenance will be explored in coordination with NYC Department of Citywide Administrative Services (DCAS).
- Circulation and access of elevated buildings will continue to be explored in future phases.

Typical Building Components

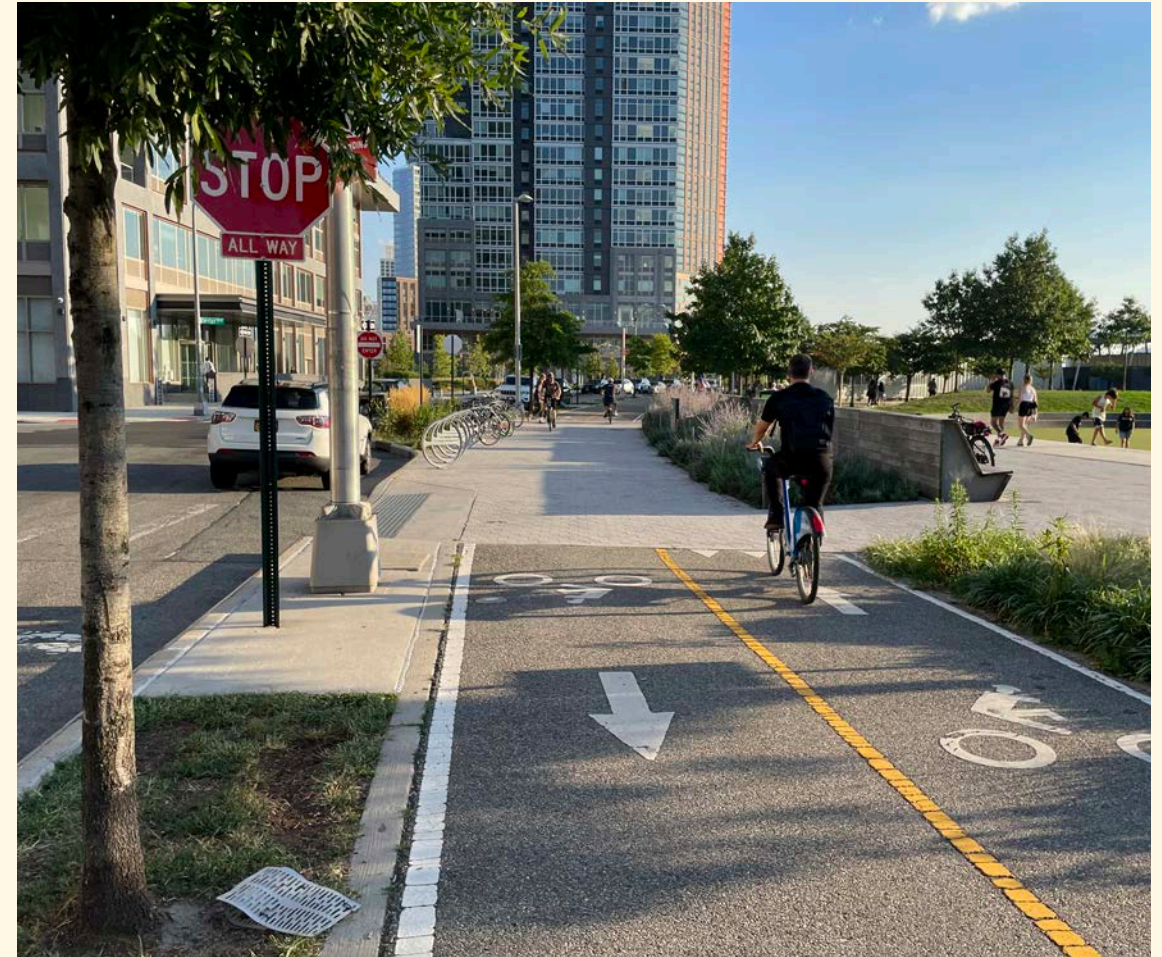


STATEN ISLAND WATERFRONT GREENWAY

Waterfront Greenway Goals

- Create continuous greenway along the Shoreline Parks from Fort Wadsworth to Great Kills Park.
- Separate path from park program areas.
- Integrate landscape and green infrastructure with greenway design to provide immersive natural experience.
- Provide consistent amenities and furnishings.

Greenway Precedents

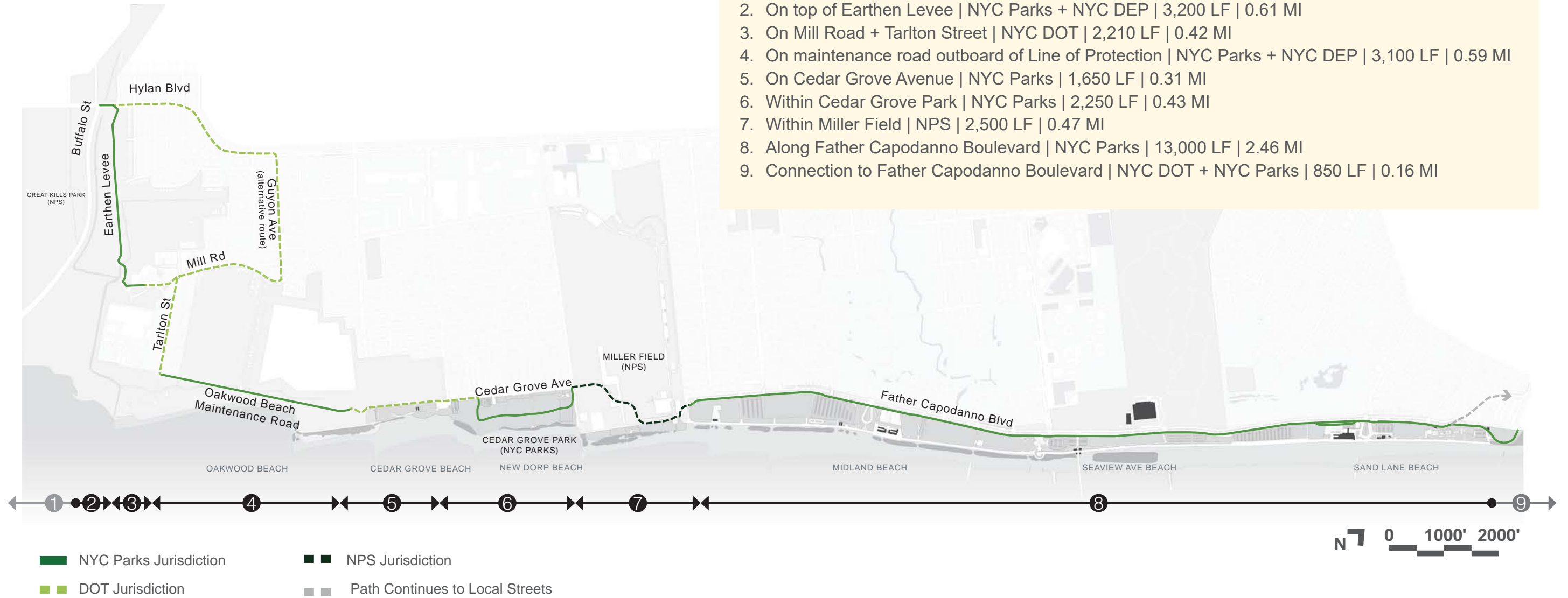


Clockwise from top-left: Jamaica Bay Greenway, Hunter's Point South Lane (pedestrian crossing materials change), Riverside Greenway

STATEN ISLAND WATERFRONT GREENWAY | CONCEPTUAL ALIGNMENT

Staten Island Waterfront Greenway Segments + Jurisdictions

1. Connection to Buffalo Street | NYC DOT + NYC Parks | 300 LF | 0.06 MI
2. On top of Earthen Levee | NYC Parks + NYC DEP | 3,200 LF | 0.61 MI
3. On Mill Road + Tarlton Street | NYC DOT | 2,210 LF | 0.42 MI
4. On maintenance road outboard of Line of Protection | NYC Parks + NYC DEP | 3,100 LF | 0.59 MI
5. On Cedar Grove Avenue | NYC Parks | 1,650 LF | 0.31 MI
6. Within Cedar Grove Park | NYC Parks | 2,250 LF | 0.43 MI
7. Within Miller Field | NPS | 2,500 LF | 0.47 MI
8. Along Father Capodanno Boulevard | NYC Parks | 13,000 LF | 2.46 MI
9. Connection to Father Capodanno Boulevard | NYC DOT + NYC Parks | 850 LF | 0.16 MI



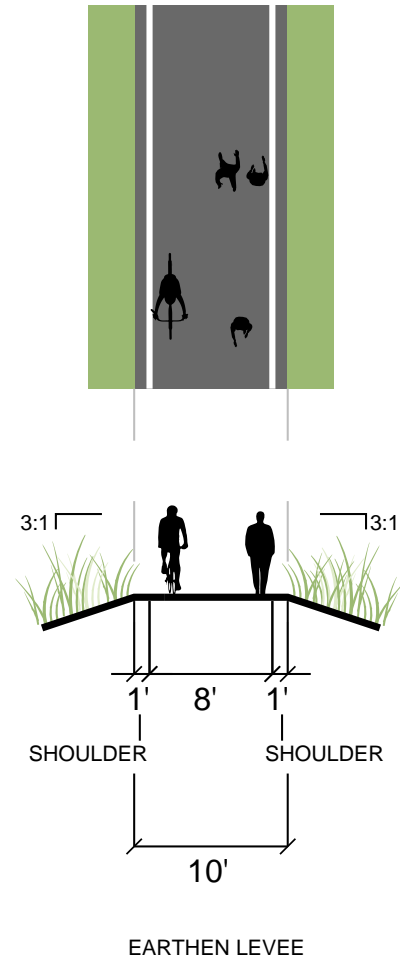
STATEN ISLAND WATERFRONT GREENWAY | TYPICAL SECTIONS

Three Typical Sections

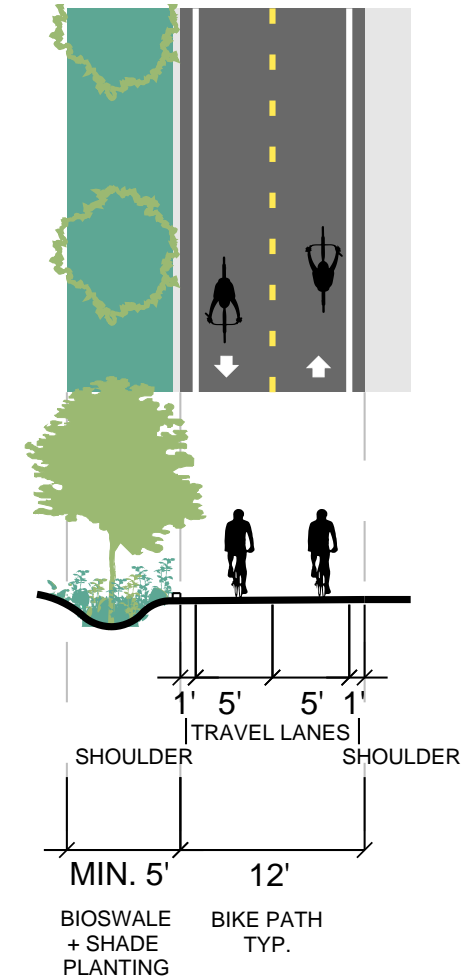
- **Earthen Levee:** USACE drawings show a 10' wide asphalt path on top of the earthen levee. Signage encouraging cyclists to defer to pedestrians should be displayed along the path.
- **Typical Path:** Continuous shade planting and green infrastructure integrated with 12' greenway path.
- **Minimum Path:** Limited 12" condition where space is constrained.

Note: Per AASHTO standards, minimum 2' clearance required from either edge of the path to lateral obstructions or signs / traffic control devices; further detail on typical sections and locations is provided in the Appendix.

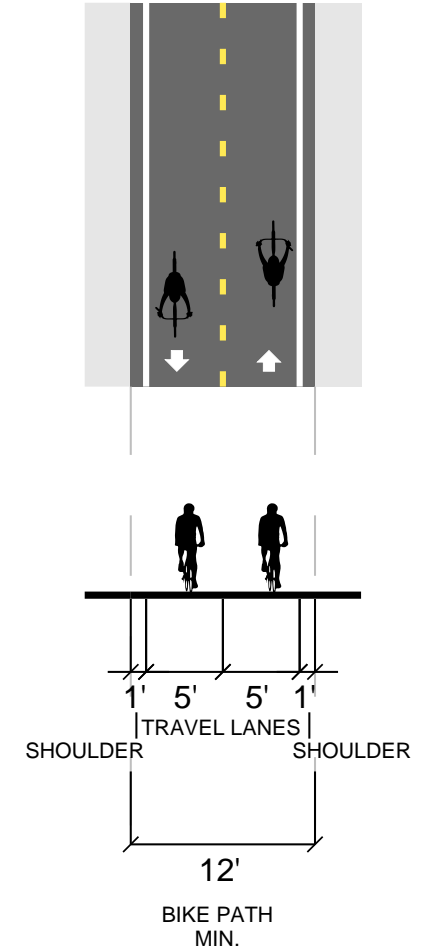
Earthen Levee Path (10')



Typical Proposed Path (12')



Minimum Recommended Path (12')



STATEN ISLAND WATERFRONT GREENWAY | FURNISHINGS TOOLKIT

Three Furnishing Groupings

The Staten Island Waterfront Greenway alignment includes recommendations for standard NYC Parks furnishings at three location types:

- **"Trailhead" | Major Neighborhood Connection (T):** Bike parking, repair station, water fountain / bottle filler, shaded seating, entrance signage, waste bins.
- **"Destination" | Beach Access Or Specific Park Program (D):** Bike parking, water fountain/bottle filler, and shaded seating.
- **"Along The Way" | Intermediate Amenities Along The Greenway (I):** Linear shade planting, wayfinding signage, lighting, and shaded seating.

Furnishing Groupings Locations



STATEN ISLAND WATERFRONT GREENWAY | FURNISHINGS TOOLKIT | NYC PARKS STANDARDS



NYC DOT CityRack "Hoop"



Bike Fixit Station



Haws Bottle Filler



Haws Bottle Filler and Wall-Mount Fountain



1964 World's Fair Bench



Waste Receptacles



Linear Shade Planting along Bike Path



Type B Pedestrian Light Pole

STATEN ISLAND WATERFRONT GREENWAY | TYPICAL SECTION | FATHER CAPODANNO BLVD | EXISTING



WIDTH VARIES
TURF GRASS BUFFER

~8'-10'
SIDEWALK

BUS LANE

NB TRAVEL LANE



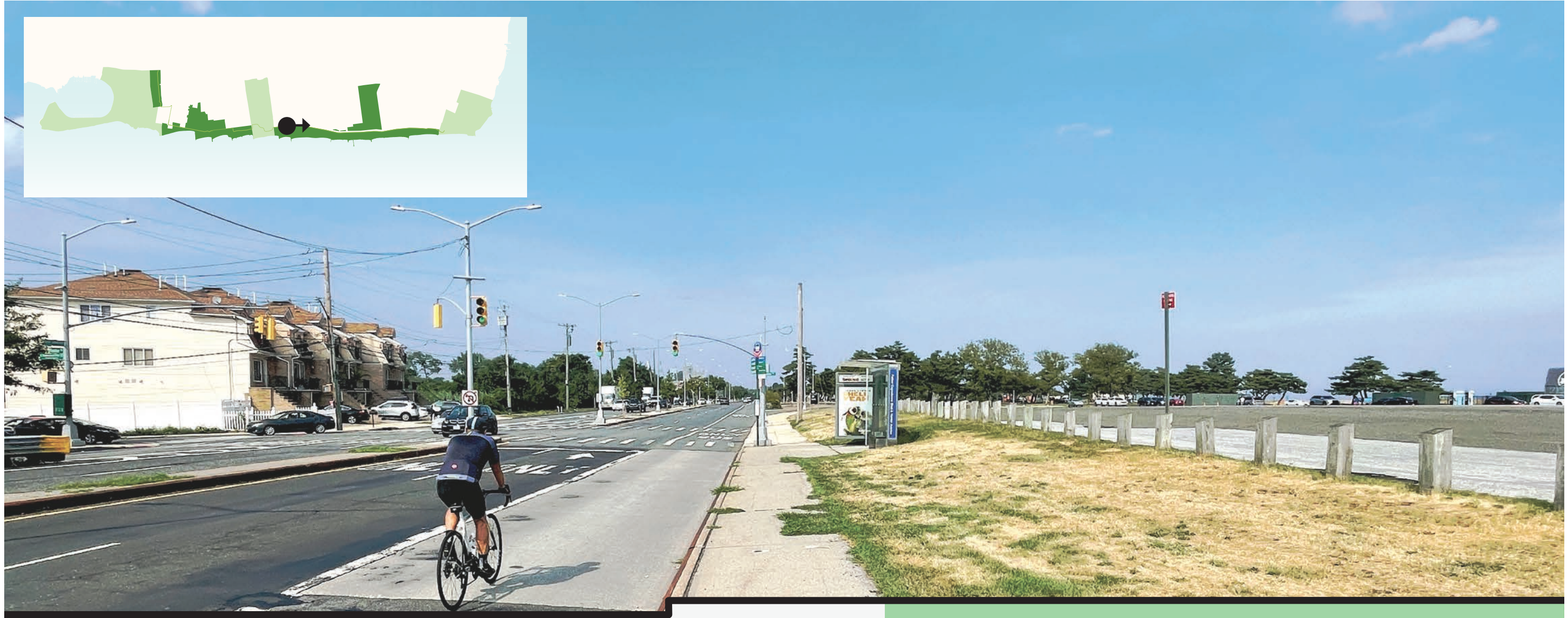
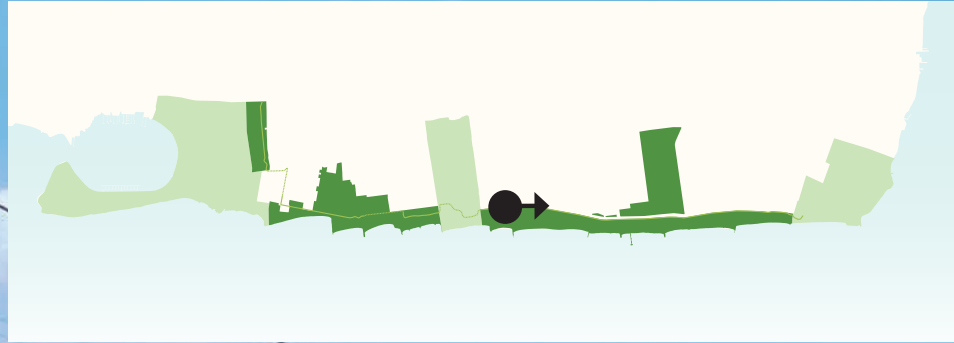
NYC Parks



STATEN ISLAND WATERFRONT GREENWAY | TYPICAL SECTION | FATHER CAPODANNO BLVD | PROPOSED



STATEN ISLAND WATERFRONT GREENWAY | TYPICAL SECTION | FATHER CAPODANNO BLVD | EXISTING



NB TRAVEL LANE

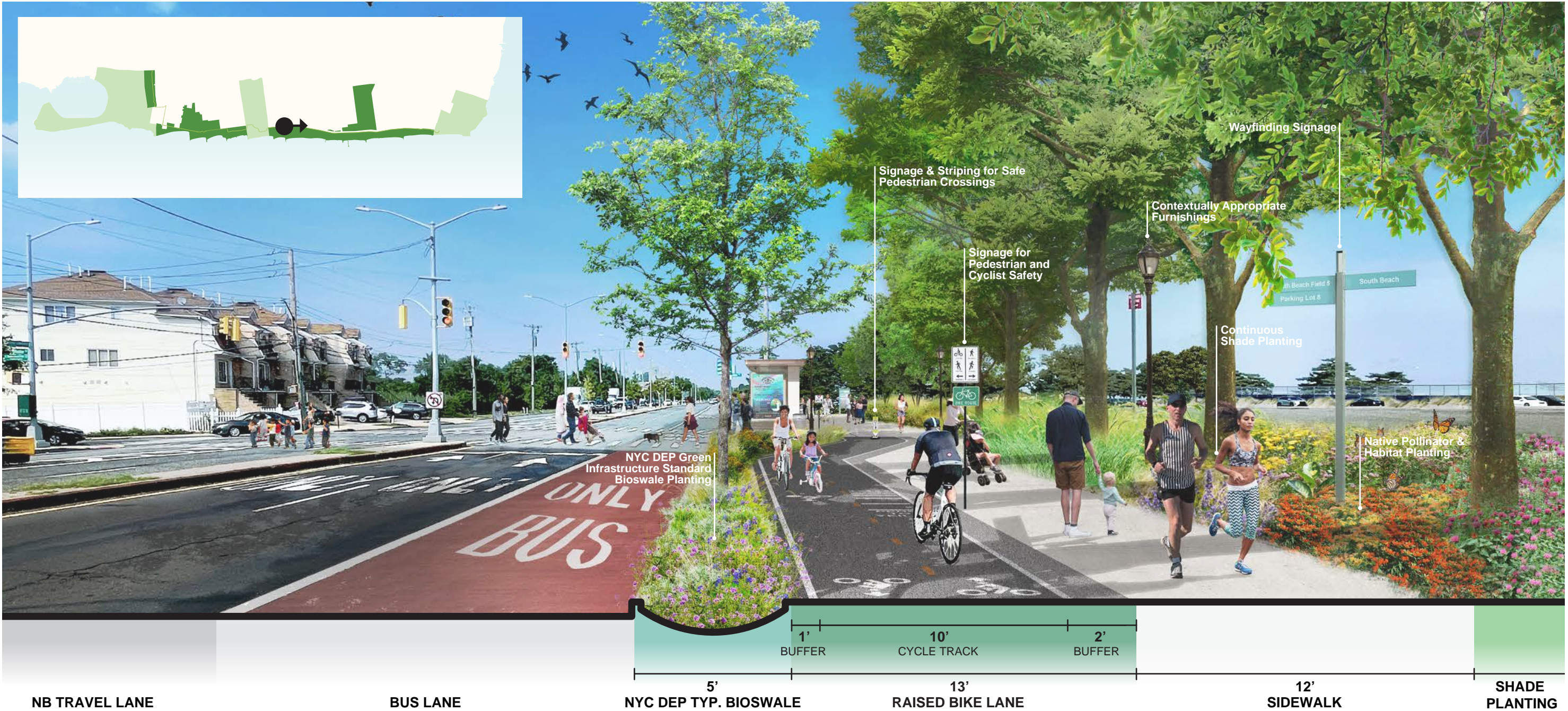
BUS LANE

~8'-10'
SIDEWALK

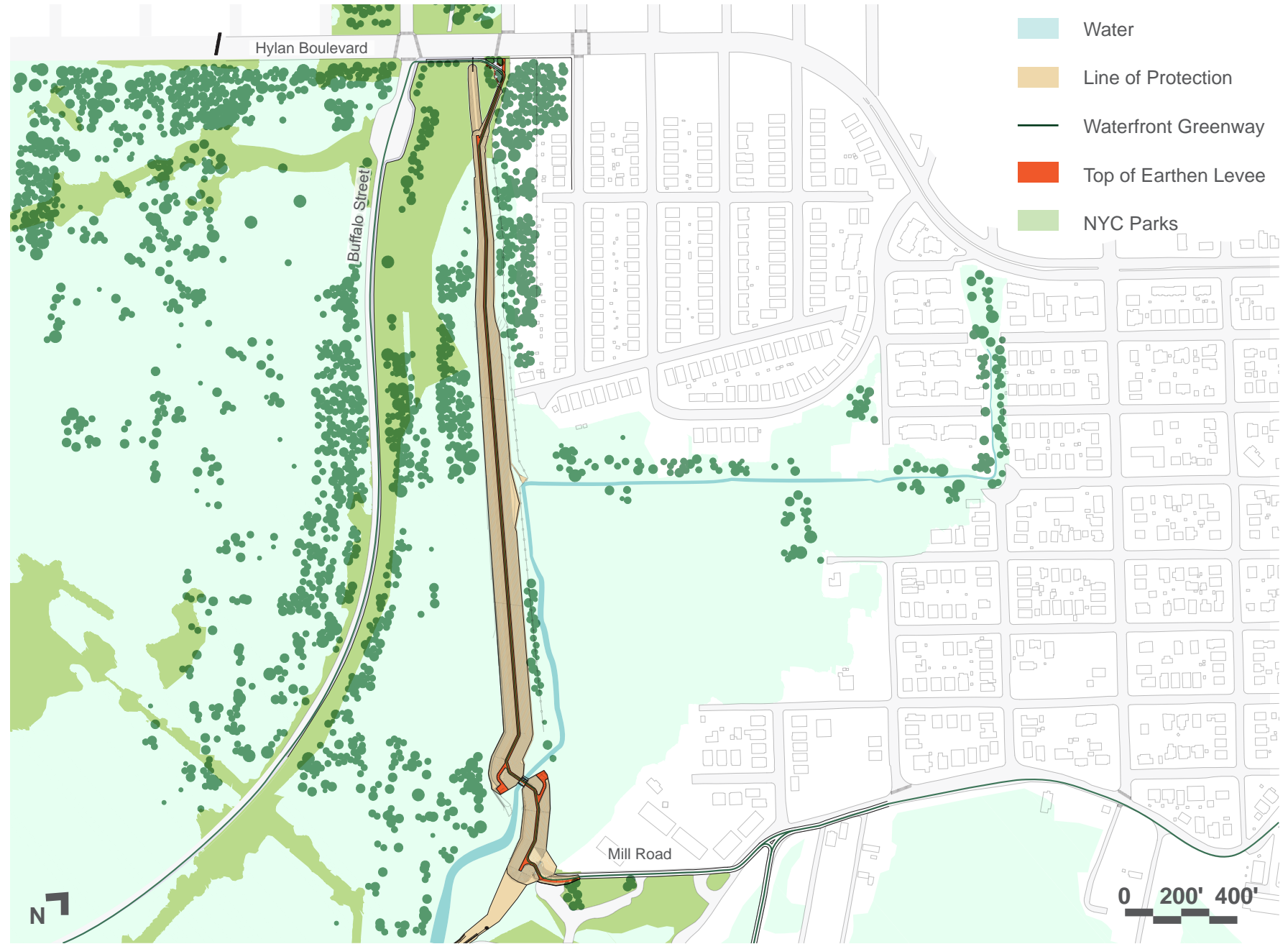
WIDTH VARIES
TURF GRASS BUFFER



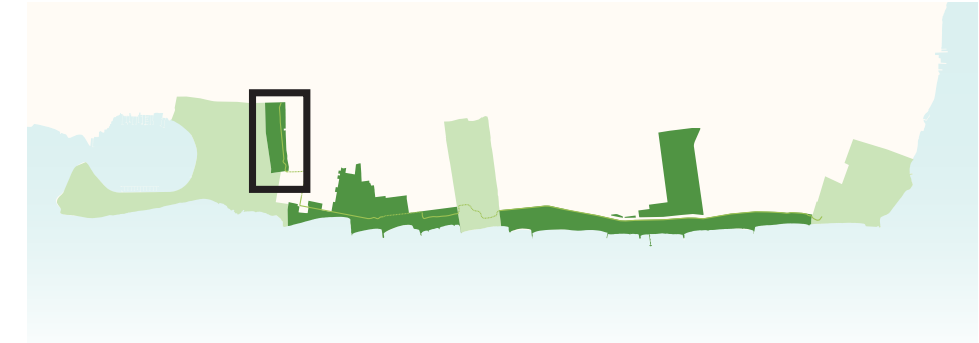
STATEN ISLAND WATERFRONT GREENWAY | TYPICAL SECTION | CEDAR GROVE AVE | PROPOSED



STATEN ISLAND WATERFRONT GREENWAY | EARTHEN LEVEL ACCESS | OVERALL ALIGNMENT | CONCEPT PLAN



Key Map



Considerations

- Staten Island Waterfront Greenway connects to earthen levee via access at Hylan Boulevard and Mill Road
- Earthen levee path shared use and 10'-wide
- Access ramps designed to be <5% slope meeting ADA requirements
- Feasibility of ramp at Mill Road currently under discussion with NYC DEP (see note on next slide)



NYC Parks



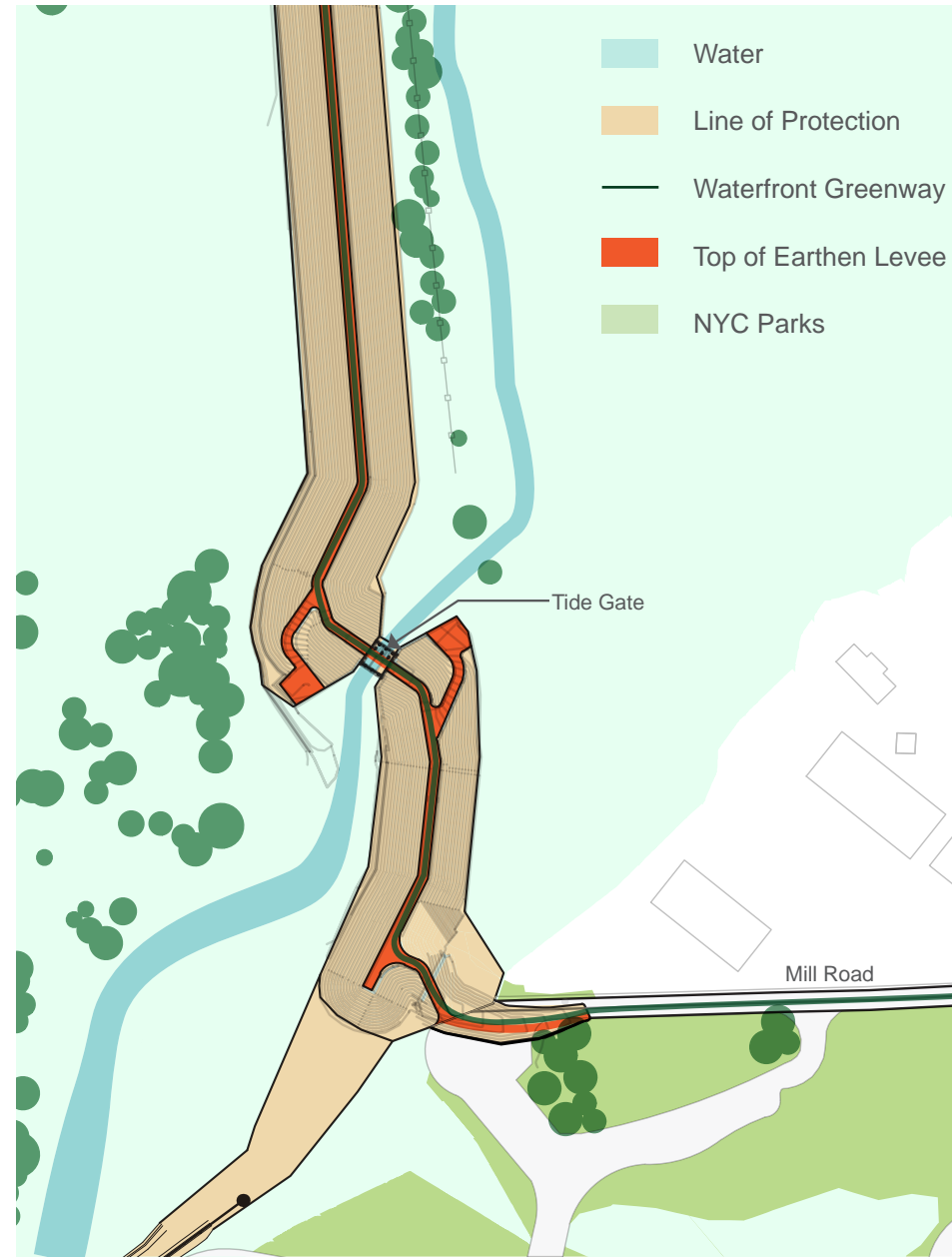
Staten Island Shoreline Parks Master Plan

STATEN ISLAND WATERFRONT GREENWAY | EARTHEN LEVEL ACCESS | HYLAN BLVD + MILL ROAD | CONCEPT PLAN

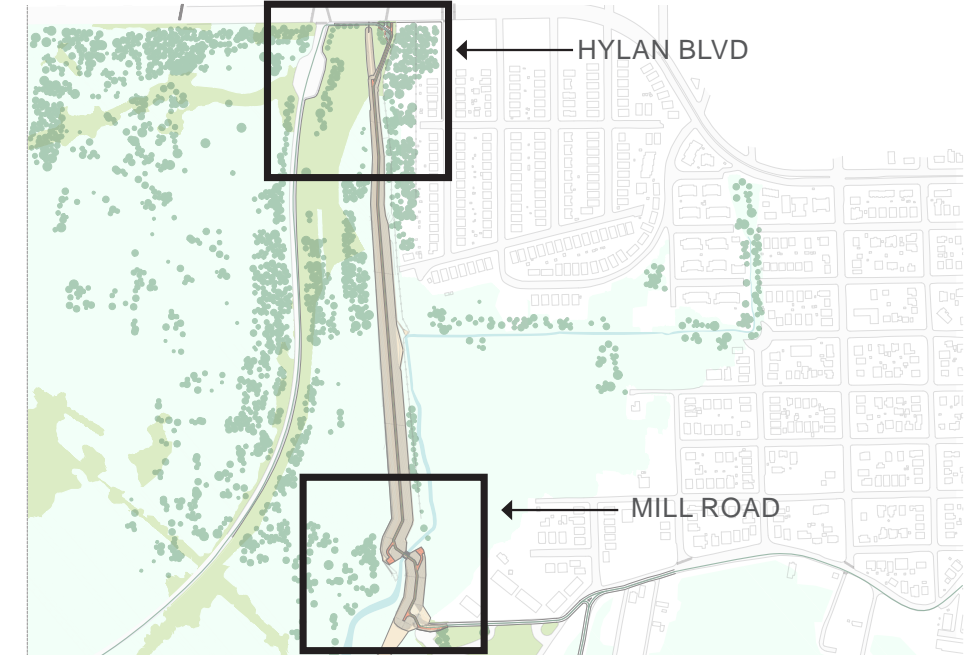
Hylan Boulevard



Mill Road



Key Map

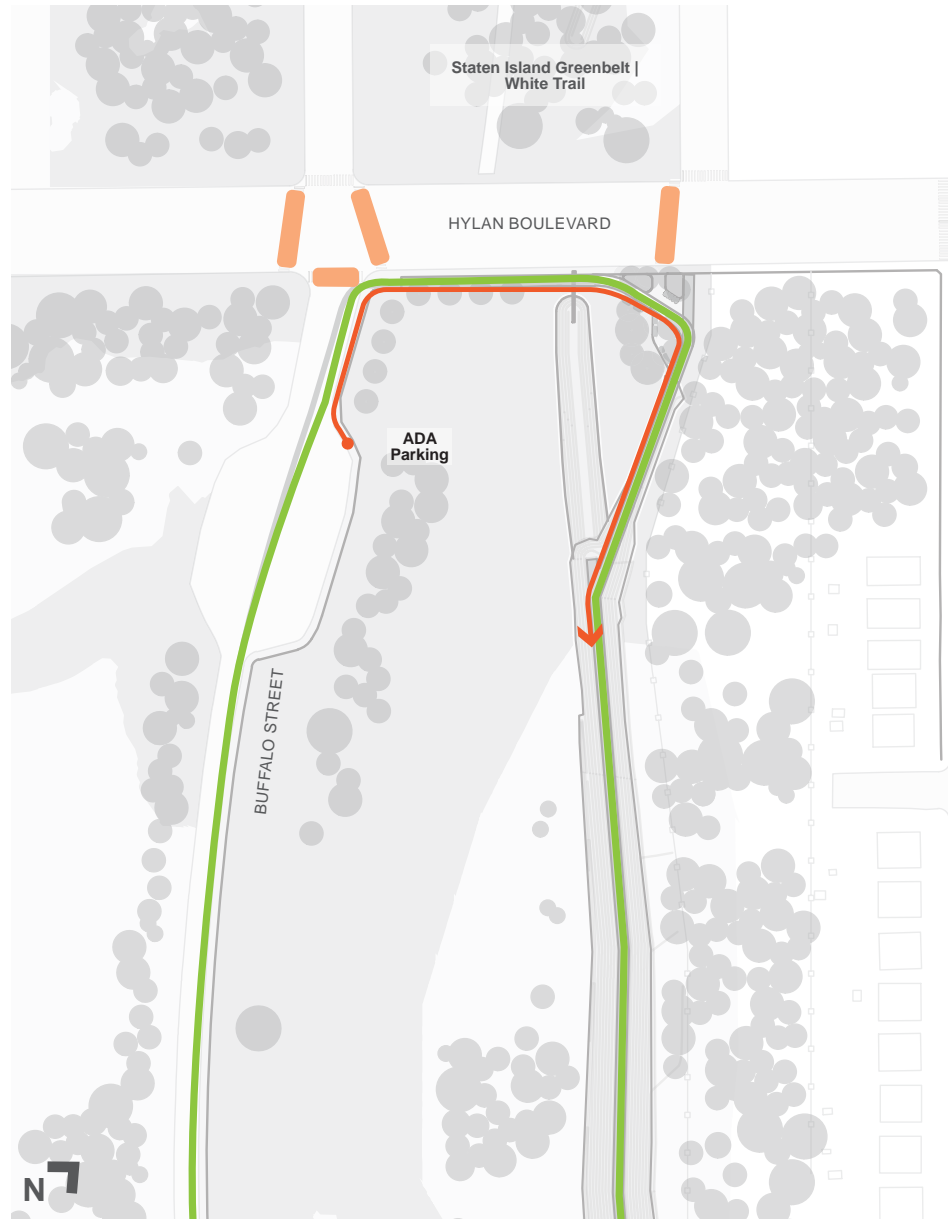


Considerations

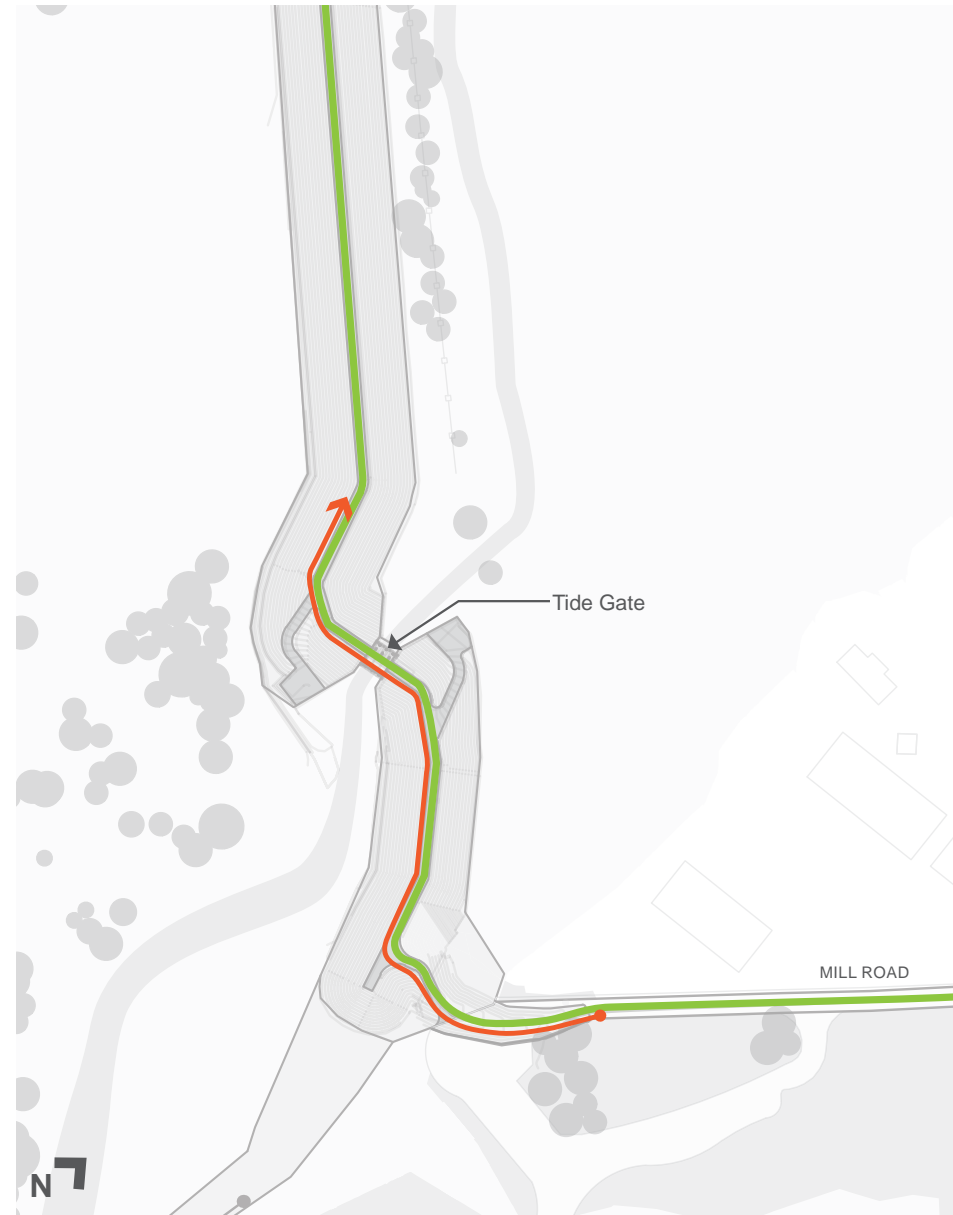
The current USACE Earthen Levee design includes a ramp that is not ADA-accessible. The Shoreline Parks Plan contemplates a City project in the future to build an ADA-ramp in this location, to allow public access up onto the Earthen Levee. The ADA-ramp would require future funding as well as USACE review and approval through their Section 408 program where local municipalities can propose, fund and construct modifications to USACE infrastructure after the USACE infrastructure project is built. Once the USACE constructs the Earthen Levee, NYC Parks will seek funding and coordinate with NYC DEP to advance the proposed ADA-ramp along Mill Road, including an MOU.

STATEN ISLAND WATERFRONT GREENWAY | EARTHEN LEVEE ACCESS | CIRCULATION + ACCESS

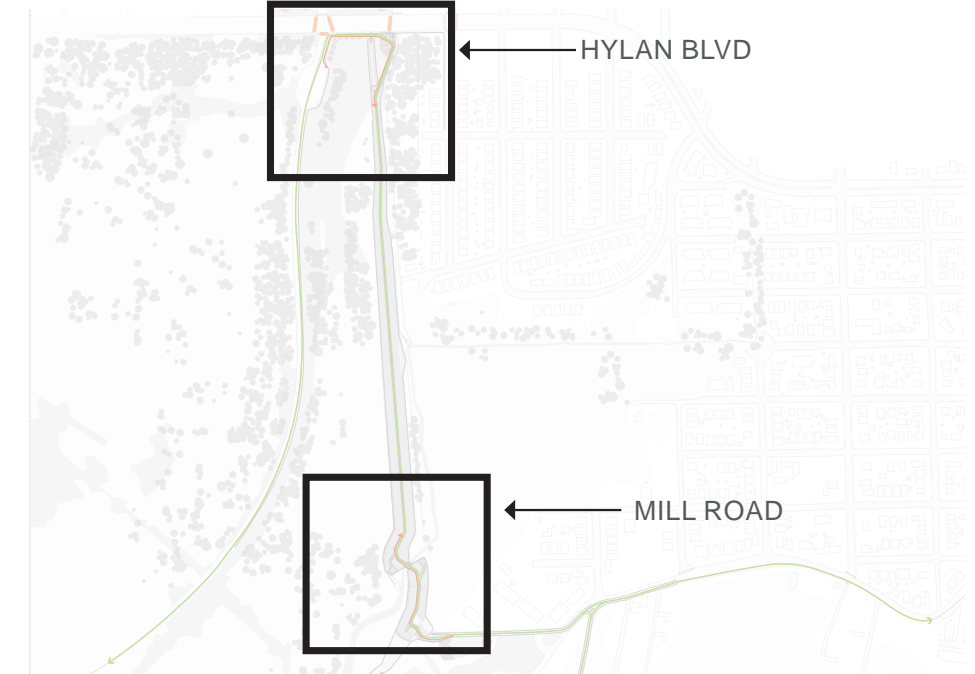
Hylan Boulevard



Mill Road



Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.

- ADA Accessible Route
- Crosswalk
- Waterfront Greenway Alignment



NYC Parks



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Staten Island Shoreline Parks Master Plan



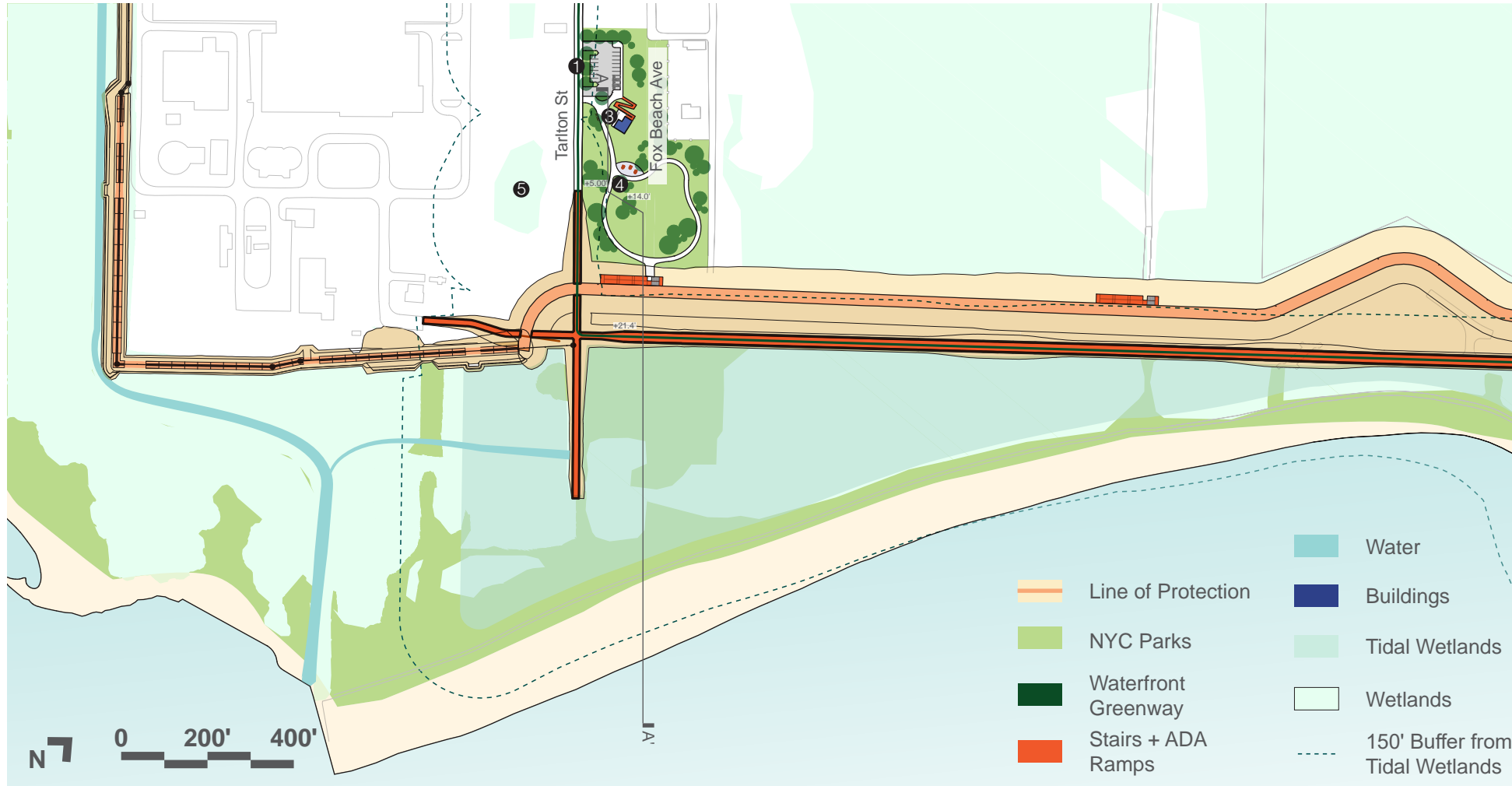
From the new comfort station looking out toward the Line of Protection, visitors can enjoy birdwatching and wildlife viewing.



NYC Parks



NEIGHBORHOOD CONNECTIONS | OAKWOOD BEACH | CONCEPT PLAN



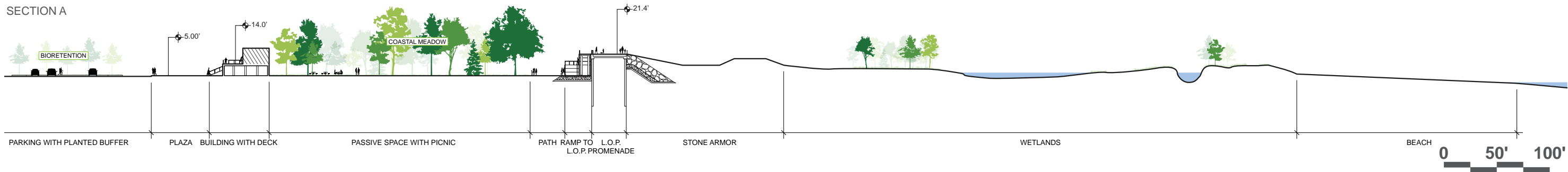
Connection Theme: Birdwatching + Hiking

Oakwood Beach offers a naturalistic entrance to the Shoreline Parks amenities and the greenway with connections to Great Kills Park to the south. Light touch facilities and amenities are provided to support birdwatching and wildlife viewing as well as hiking and picnicking in a rustic setting. While the beach at Oakwood Beach is not a public recreational beach, access is provided to experience the beach, natural areas, and views of the New York Harbor.

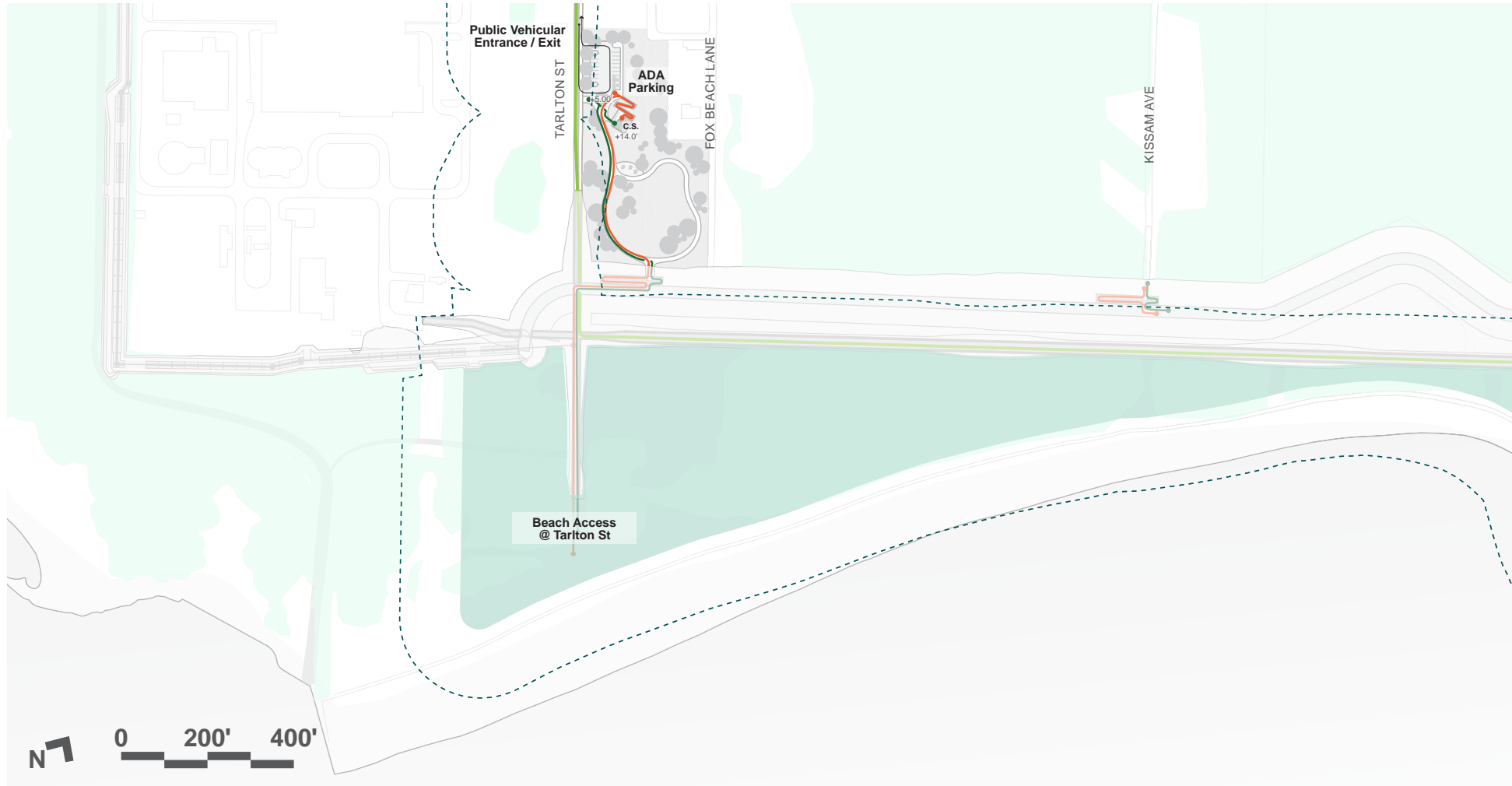
Proposed capital projects

1. Bicycle greenway
2. Parking lot
3. Comfort station + plaza
4. Picnic area
5. Restored wetlands

SECTION A

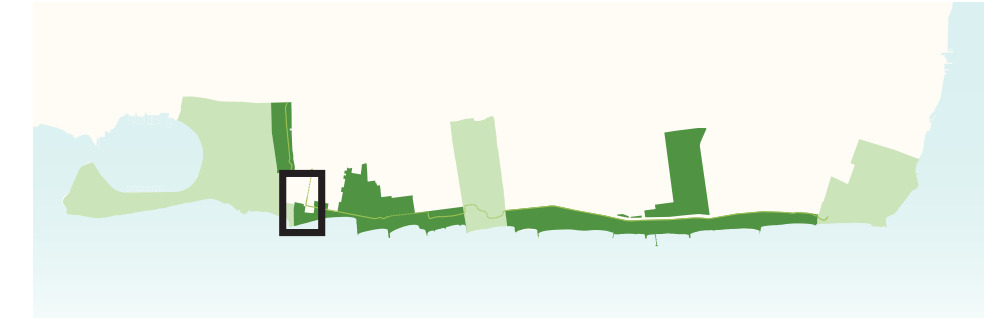


NEIGHBORHOOD CONNECTIONS | OAKWOOD BEACH | CIRCULATION + ACCESS



- ADA Accessible Route
- Pedestrian Route
- c.s.** Comfort Station
- Shoreline Bike Path Alignment
- Public Vehicular Route
- Wetlands
- Tidel Wetlands
- 150' Buffer from Tidal Wetlands

Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- ADA parking areas are located to be accessible to both comfort station and ramps over LOP.
- Alignments of ramps and stairs on LOP are from USACE Line of Protection proposed design.
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.



Visitors can stop and use new picnic areas while walking towards the Line of Protection and new comfort station.



NYC Parks



NEIGHBORHOOD CONNECTIONS | CEDAR GROVE | CONCEPT PLAN



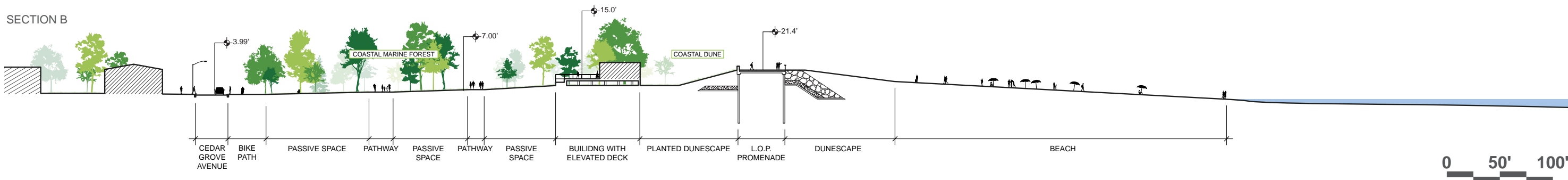
Connection Theme: Natural Areas Recreation

Cedar Grove offers natural recreation amenities connected to the adjacent New Dorp Beach neighborhood. A new drop-off area and service hub provide connections to Cedar Grove and New Dorp Beach. Picnic areas, playgrounds, and paths through the natural areas will complement the restored coastal woodlands and dunes.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Services building (comfort station, lifeguard, PEP)
4. Picnic area
5. Maintenance building and compound
6. Playground
7. Nature walk
8. Woodland paths
9. Expanded playground
10. Kayak storage

SECTION B

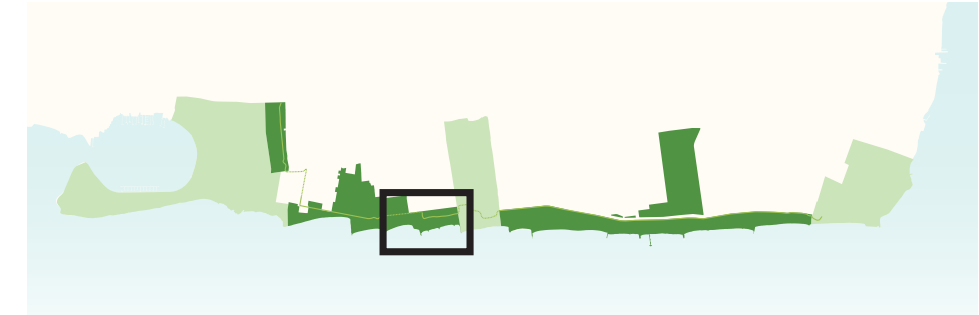


NEIGHBORHOOD CONNECTIONS | CEDAR GROVE | CIRCULATION + ACCESSIBILITY



- ADA Accessible Route
- Pedestrian Route
- Crosswalk
- Shoreline Bike Path Alignment
- Public Vehicular Route
- Maintenance Vehicular Route (M+O, PEP)
- Wetlands

Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- ADA parking area located to be accessible to both comfort station and ramps over LOP.
- Maintenance and PEP vehicles access all park areas via park paths.
- Ramp next to New Dorp Lane Maintenance vehicle ramp located in Miller Field (NPS jurisdiction).
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.



Visitors can use renovated basketball courts, new pickleball courts, and playgrounds on their way to the new comfort station.



NYC Parks



NEIGHBORHOOD CONNECTIONS | MIDLAND AVE + TIMOSHENKO FIELD | CONCEPT PLAN



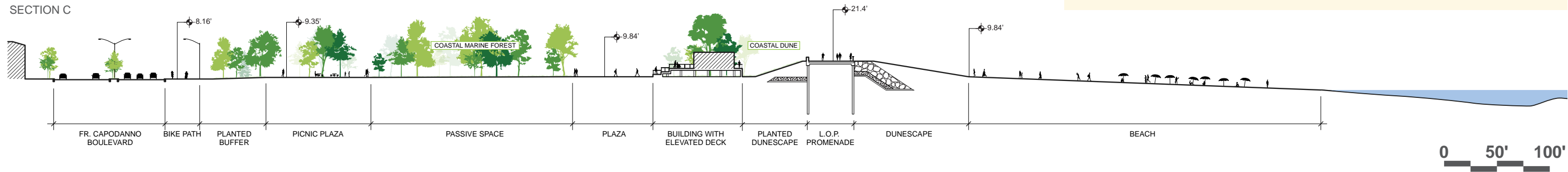
Connection Theme: Sports

Midland Avenue is a regional destination for sports and active recreation as well as major parking and access point for Midland Beach. A new pedestrian circulation network connects a diversity of programmatic areas including picnicking, existing basketball and handball courts, a relocated skatepark, renovated and new playgrounds, and a splash pad. The Timoshenko Field area will feature a new turf soccer field and pickleball courts.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Maintenance building and compound
4. Services building (comfort station, lifeguard, PEP)
5. Pickleball courts
6. Picnic area + lawn
7. Splashpad
8. Hardcourts renovation
9. New skatepark
10. Playground reconstruction + expansion
11. Toddler playground
12. Soccer field

SECTION C

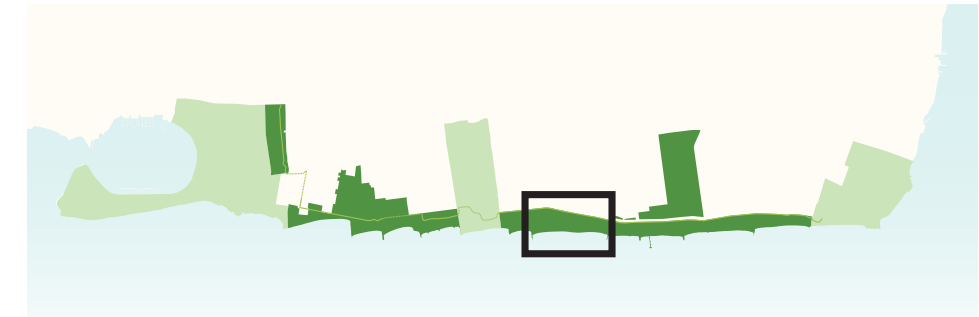


NEIGHBORHOOD CONNECTIONS | MIDLAND AVE + TIMOSHENKO FIELD | CIRCULATION + ACCESS



- ADA Accessible Route
- Pedestrian Route
- Crosswalk
- C.S.** Comfort Station
- Waterfront Greenway Alignment
- Public Vehicular Route
- Maintenance Vehicular Route (Maintenance and PEP)

Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- ADA parking area located to be accessible to both comfort station and ramps over LOP.
- Maintenance and PEP vehicles access all park areas via park paths.
- Maintenance area located to minimize conflicts with pedestrian and public vehicular circulation.
- Alignments of ramps and stairs on LOP are from USACE Line of Protection proposed design.
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.



Seaview visitors can enjoy the updated boardwalk surrounding the fishing pier along with a new playground and fitness trail.



NYC Parks



NEIGHBORHOOD CONNECTIONS | SEAVIEW | CONCEPT PLAN



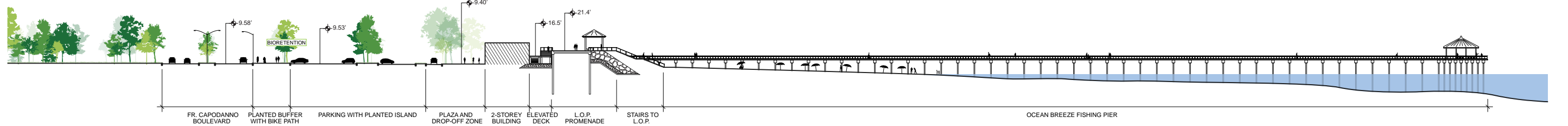
Connection Theme: Civic Gathering

Seaview is the civic hub of the Shoreline with spaces for community gathering and celebration. The neighborhood connection's performance lawn will be expanded, the existing memorial will be integrated with the flood protection barrier, and Freedom Plaza will be renovated to make it more pedestrian friendly. A renovated comfort station will anchor the drop-off area with new connections to the Ocean Breeze Pier. To the north of the comfort station, a playground and fitness trail will offer amenities to complement the Ocean Breeze Athletic Complex across Father Capodanno Boulevard.

Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Services building (comfort station, lifeguard, PEP)
4. Performance lawn
5. Freedom Plaza renovation
6. Playground
7. Woodland paths
8. Fitness trail
9. Dog run

SECTION D

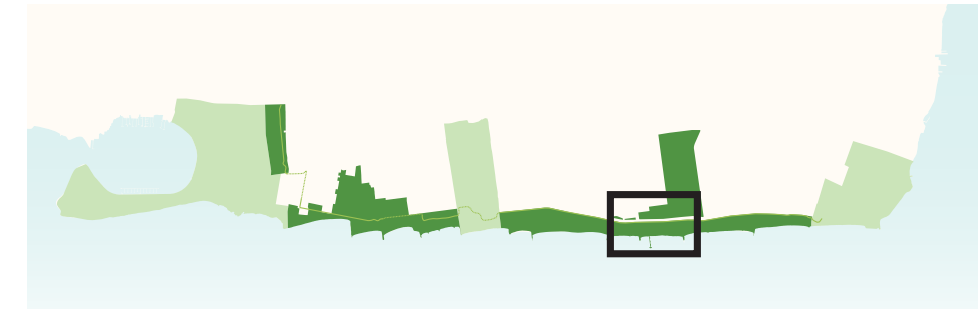


NEIGHBORHOOD CONNECTIONS | SEAVIEW | CIRCULATION + ACCESS



- ADA Accessible Route
- Pedestrian Route
- Crosswalk
- Waterfront Greenway Alignment
- Public Vehicular Route
- Maintenance Vehicular Route (Maintenance and PEP)
- C.S.** Comfort Station

Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- ADA parking area located to be accessible to both comfort station and ramps over LOP.
- Maintenance and PEP vehicles access all park areas via park paths.
- Alignments of ramps and stairs on LOP are from USACE Line of Protection proposed design.
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.



Sand Lane will be a destination for food and amenities with updated concessions and space for food trucks next to the LOP.



NYC Parks



NEIGHBORHOOD CONNECTIONS | SAND LANE | CONCEPT PLAN



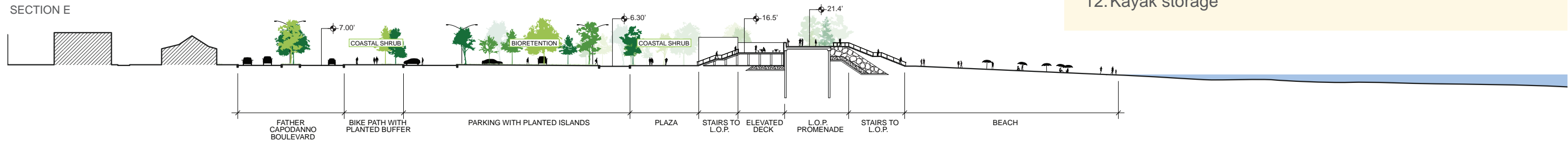
Connection Theme: Food and Amenities

Sand Lane provides access to the Shoreline's northernmost beaches and is where the Shoreline greenway transitions to Fort Wadsworth Park. With the historic Vanderbilt restaurant and event space, Sand Lane is a center for food and amenities along the Shoreline. A concessions building is complemented by space for food trucks and picnicking in the arrival plaza. The existing playground will be reconstructed in coordination with site circulation realignments to provide safer connections with clear sight lines.

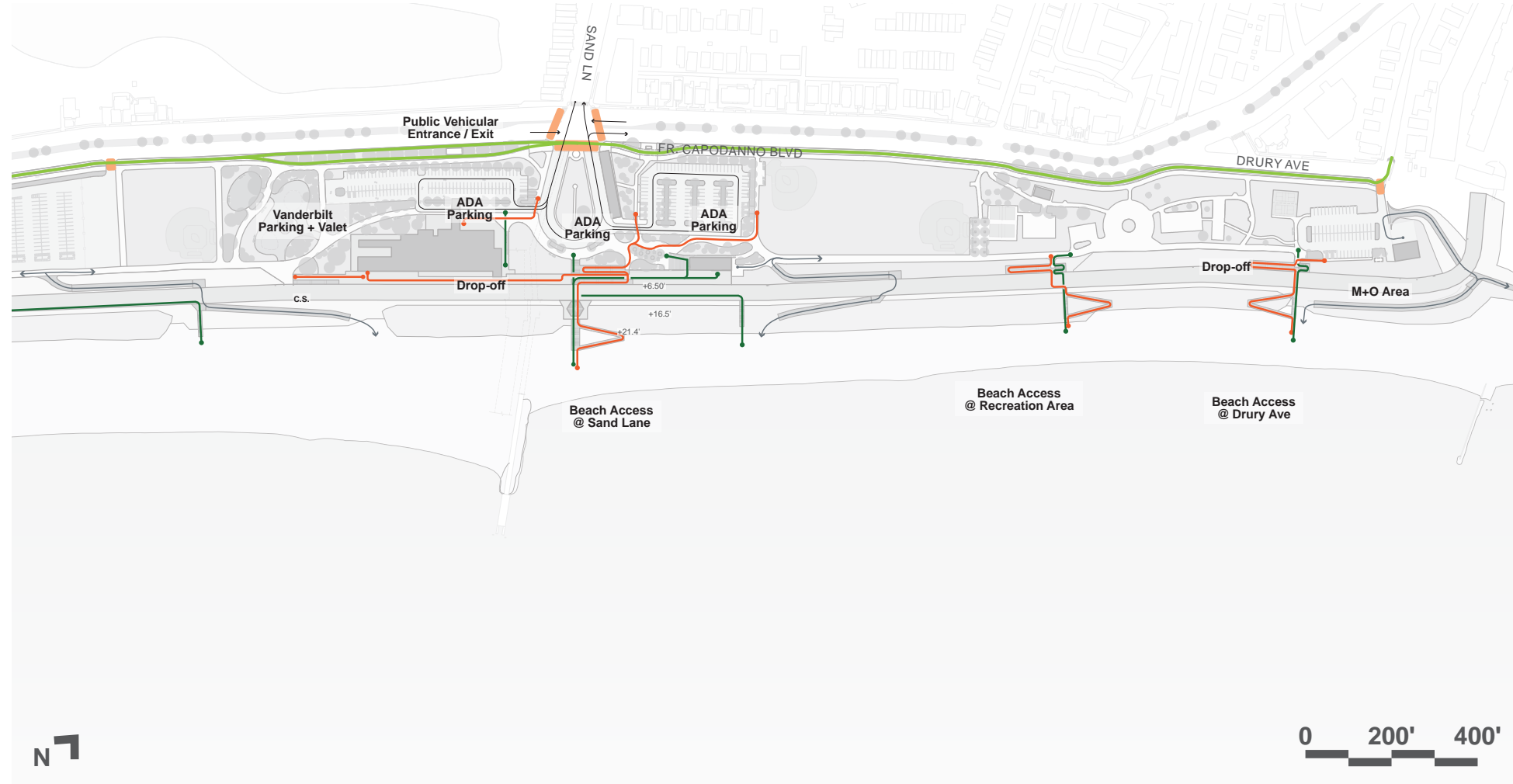
Proposed capital projects

1. Waterfront greenway
2. Drop-off + parking lot reconstruction
3. Vanderbilt parking lot reconstruction
4. Services building (concessions, PEP)
5. Renovated comfort station
6. Deck modifications
7. Dog run
8. Reconstructed playground
9. Reconstructed volleyball courts
10. Pickleball courts
11. Maintenance area and compound
12. Kayak storage

SECTION E

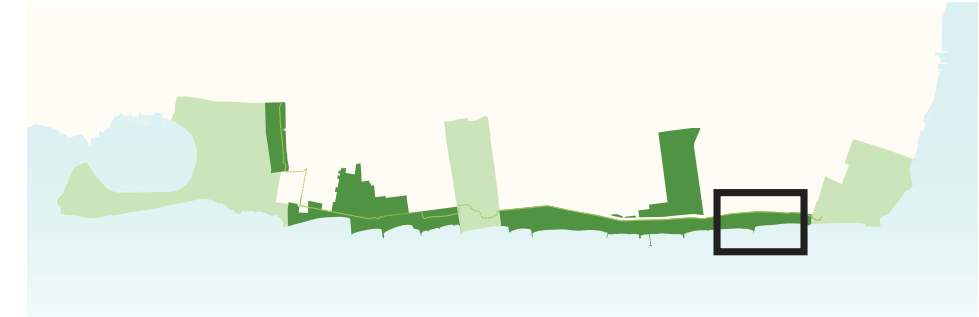


NEIGHBORHOOD CONNECTIONS | SAND LANE | CIRCULATION + ACCESS



- ADA Accessible Route
- Waterfront Greenway Alignment
- Pedestrian Route
- Public Vehicular Route
- Crosswalk
- Maintenance Vehicular Route (Maintenance and PEP)
- C.S.** Comfort Station

Key Map



Circulation and Access Considerations

- All park paths are ADA accessible.
- ADA parking area located to be accessible to both comfort station and ramps over LOP.
- Maintenance and PEP vehicles access all park areas via park paths.
- Maintenance area located to minimize conflicts with pedestrian and public vehicular circulation.
- Alignments of ramps and stairs on LOP are from USACE Line of Protection proposed design.
- NYC Parks will continue discussion and coordination about access and circulation for further with USACE as LOP design progress.

CAPITAL PLAN + NEXT STEPS



COST ESTIMATE | APPROACH

- Conceptual-level cost estimate considers subsurface and surface improvements for all areas disturbed as a result of capital projects.
- Total cost of \$391M for improvements in all Neighborhood Connections and Staten Island Waterfront Greenway in 2022 USD.
- Total cost includes general conditions plus mobilization (6%) and contingency (30%).

COST ESTIMATE | CAPITAL PLAN SUMMARY

	Oakwood Beach	Cedar Grove	Midland Avenue	Seaview	Sand Lane	Total
Construction Cost*	\$25,324,000	\$57,571,000	\$76,390,000	\$33,756,000	\$47,170,000	\$240,211,000
Escalation to 2032 (5% per Year)	\$15,926,128	\$36,206,093	\$48,041,261	\$21,228,967	\$29,664,960	\$151,067,407
Total	\$41,260,000	\$93,780,000	\$77,700,658	\$54,990,000	\$76,840,000	\$391,310,000

* Includes mobilization (6%) and contingencies (30%)



NYC Parks



STARR WHITEHOUSE
Landscape Architects
and Planners PLLC



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Staten Island Shoreline Parks Master Plan

COST ESTIMATE | STATEN ISLAND WATERFRONT GREENWAY

	LF of Greenway	Overall Cost (2022)	Escalation to 2032 (5% per Year)
Oakwood Beach	5,353	\$13,862,000	\$22,579,737
Cedar Grove	7,384	\$17,053,000	\$27,777,540
Midland Avenue	4,529	\$7,559,000	\$12,312,814
Seaview Avenue	3,807	\$7,988,000	\$13,011,610
Sand Lane	4,942	\$8,559,000	\$13,941,709
Total		\$55,021,000	\$89,623,411

Notes on Staten Island Waterfront Greenway Cost Estimate

- The greenway costs are included in the Capital Plan Summary.
- The greenway costs include all mark-ups.
- Exclusions: greenway path connecting to Buffalo Street and on top of the Earthen Levee are excluded from this budget.
- Total cost includes general conditions plus mobilization (6%) and contingency (30%).



SHORELINE PARKS PLAN NEXT STEPS

- Share the Shoreline Parks Plan in Fall 2022.
- NYC Parks will continue to collaborate with USACE, National Park Service (NPS), NYC Department of Environmental Protection (DEP), and NYC Department of Transportation (DOT) throughout the design and construction of the LOP.
- NYC Parks will use the Shoreline Parks Plan to coordinate with the US Army Corps of Engineers and New York State government and seek funding for future capital projects.



An architectural rendering of a park on Staten Island. In the foreground, a woman with blonde hair, wearing a light blue and grey long-sleeved shirt, is seen from the back, looking through binoculars. She is standing on a paved walkway that curves through a lush green landscape. The park features tall grasses, various trees, and a modern building in the background. The sky is bright with scattered clouds and a flock of birds flying. A large white silhouette of a tree is overlaid on the left side of the image.

Shoreline Parks Plan Staten Island

Shoreline Parks Conceptual Plan
August 31, 2022

Starr Whitehouse Landscape Architects and Planners
One, BKSK, Boomi, Matrix, Dharam, GdB

This project is funded by the New York State Department of State under Title 11 of the Environmental Protection Fund (Contract NYC C1000724)

Parks