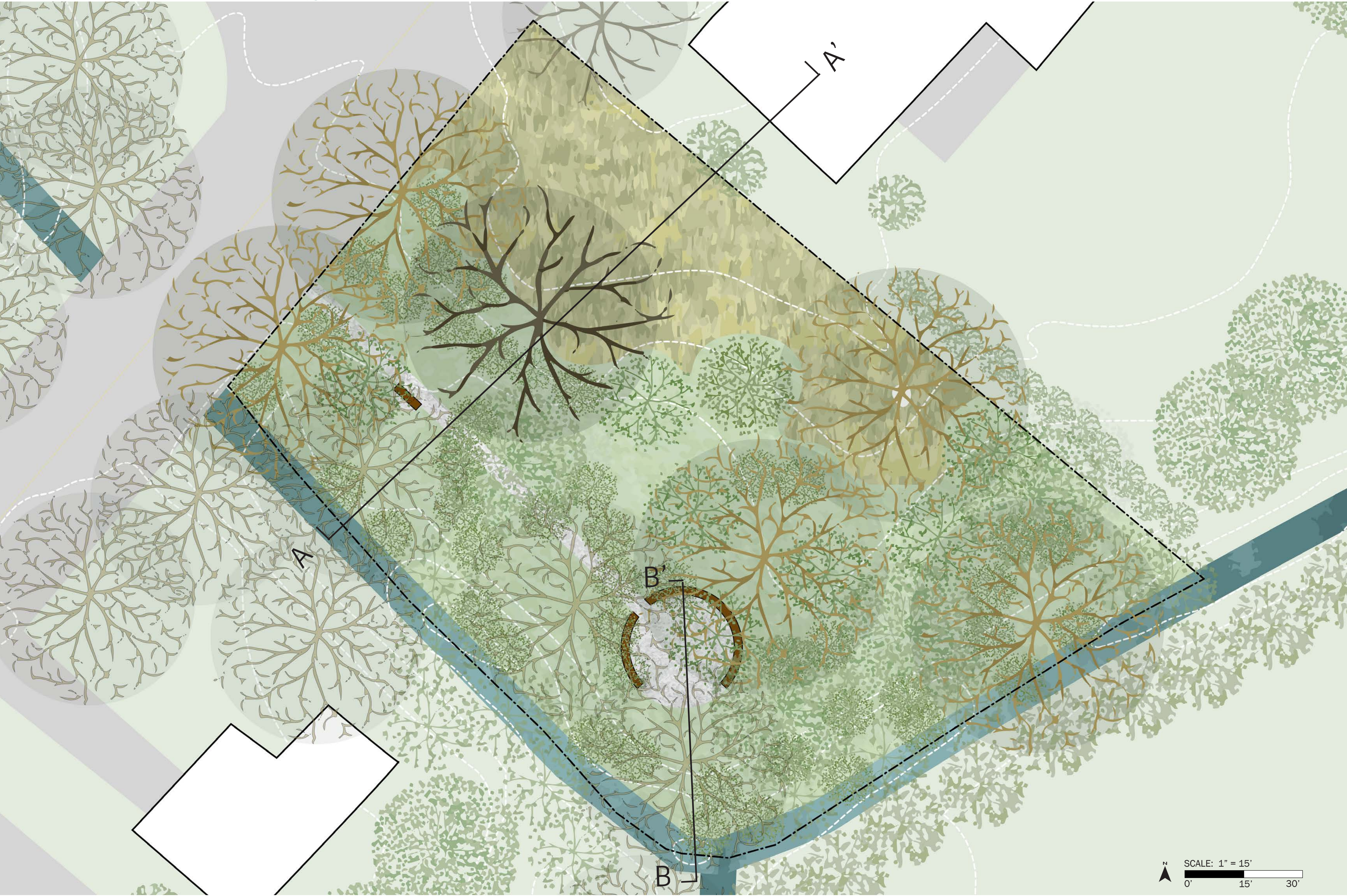
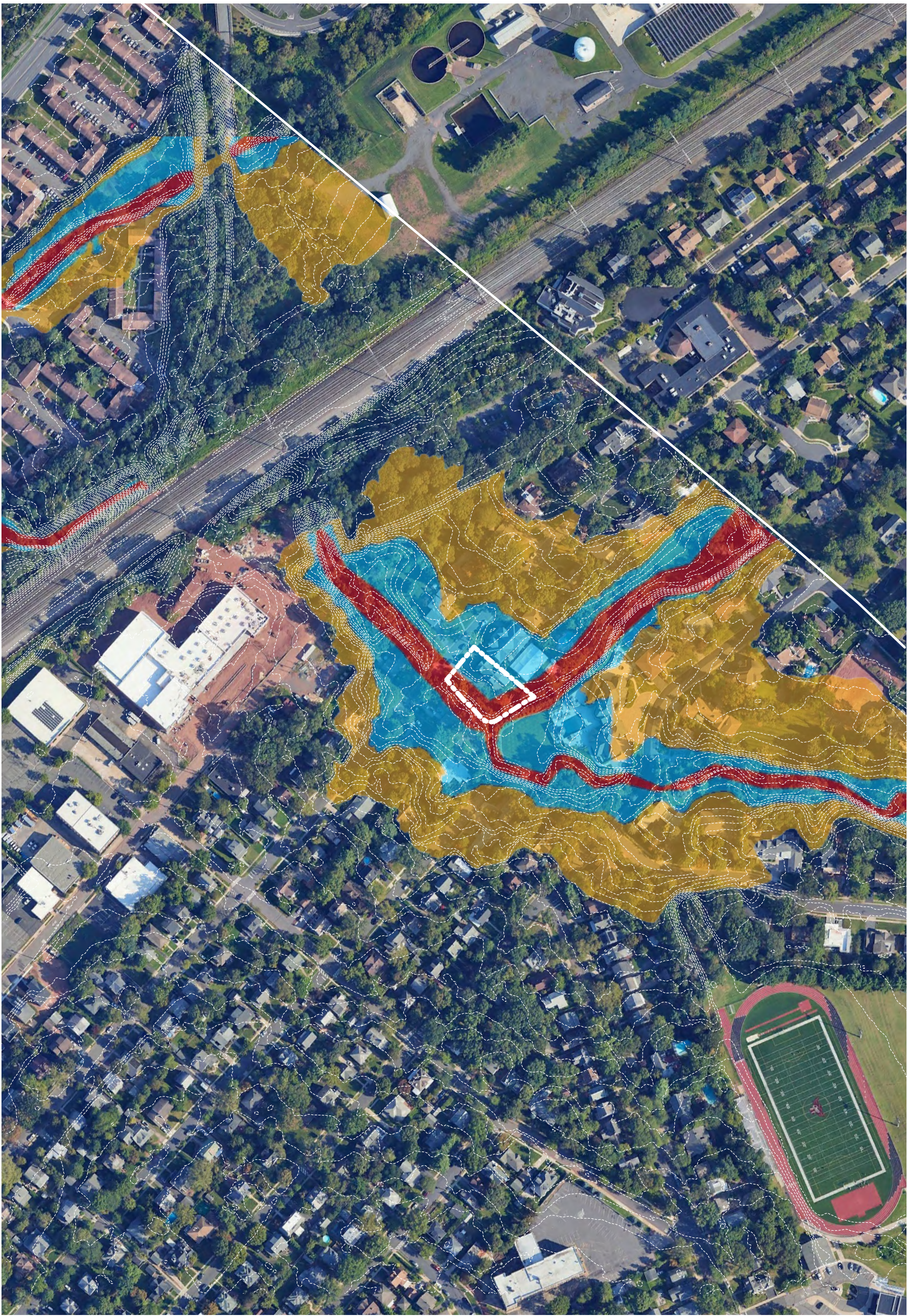


# HIGHLAND PARK BLUE ACRES SITES

## DESIGN CONCEPT

### SITE PLAN: MILL BROOK RIPARIAN BUFFER REVITALIZATION

The intent of this design is to prevent flooding and enhance the ecological value of Mill Brook and the Raritan River. This is accomplished by following the Natural Resource Conservation Service's forested riparian buffer guidelines to place plants that will filter runoff and stabilize the soil to prevent erosion. By including a small path and seating area this park can be used for passive recreation by community members or as a gathering area for small groups for educational purposes.

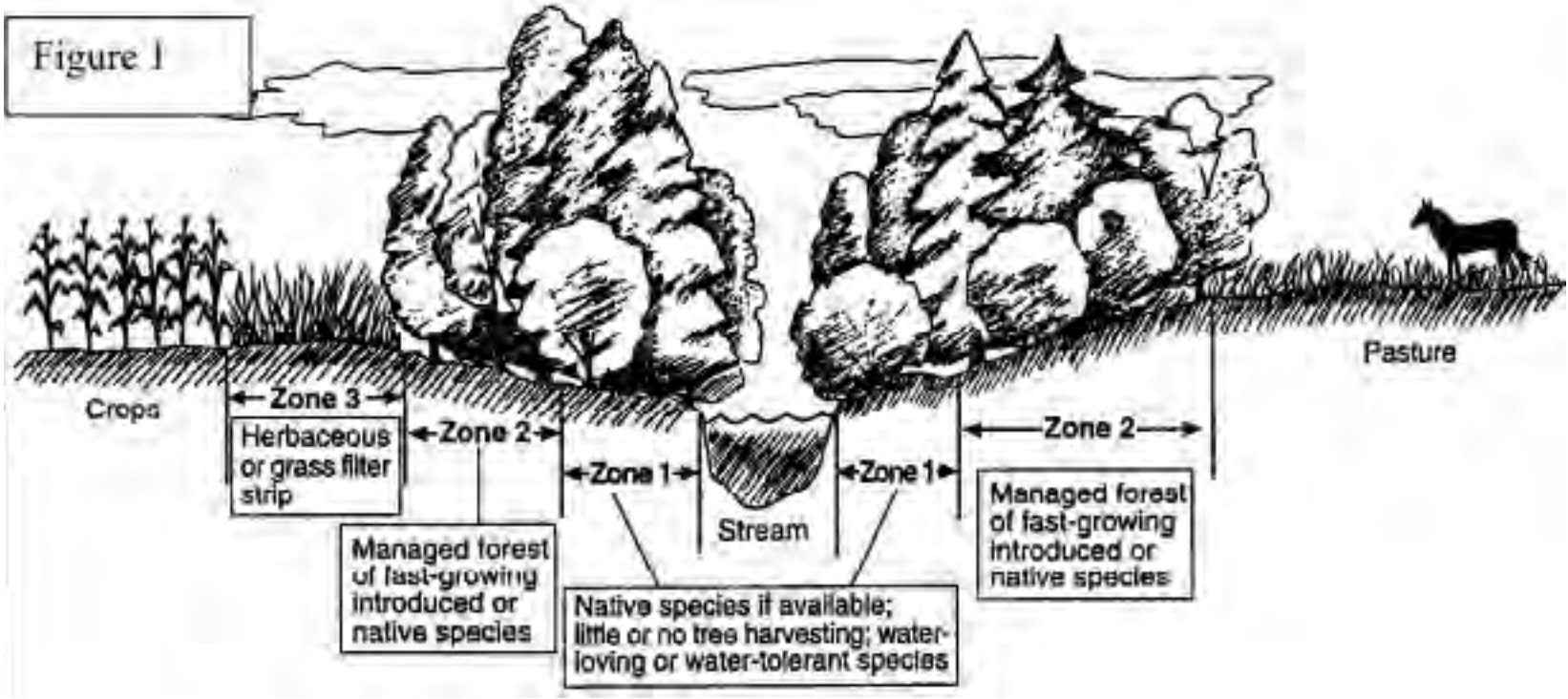




# HIGHLAND PARK BLUE ACRES SITES

## DESIGN CONCEPT

Natural Resources Conservation Service: Riparian Buffer Guidelines



### Zone 3

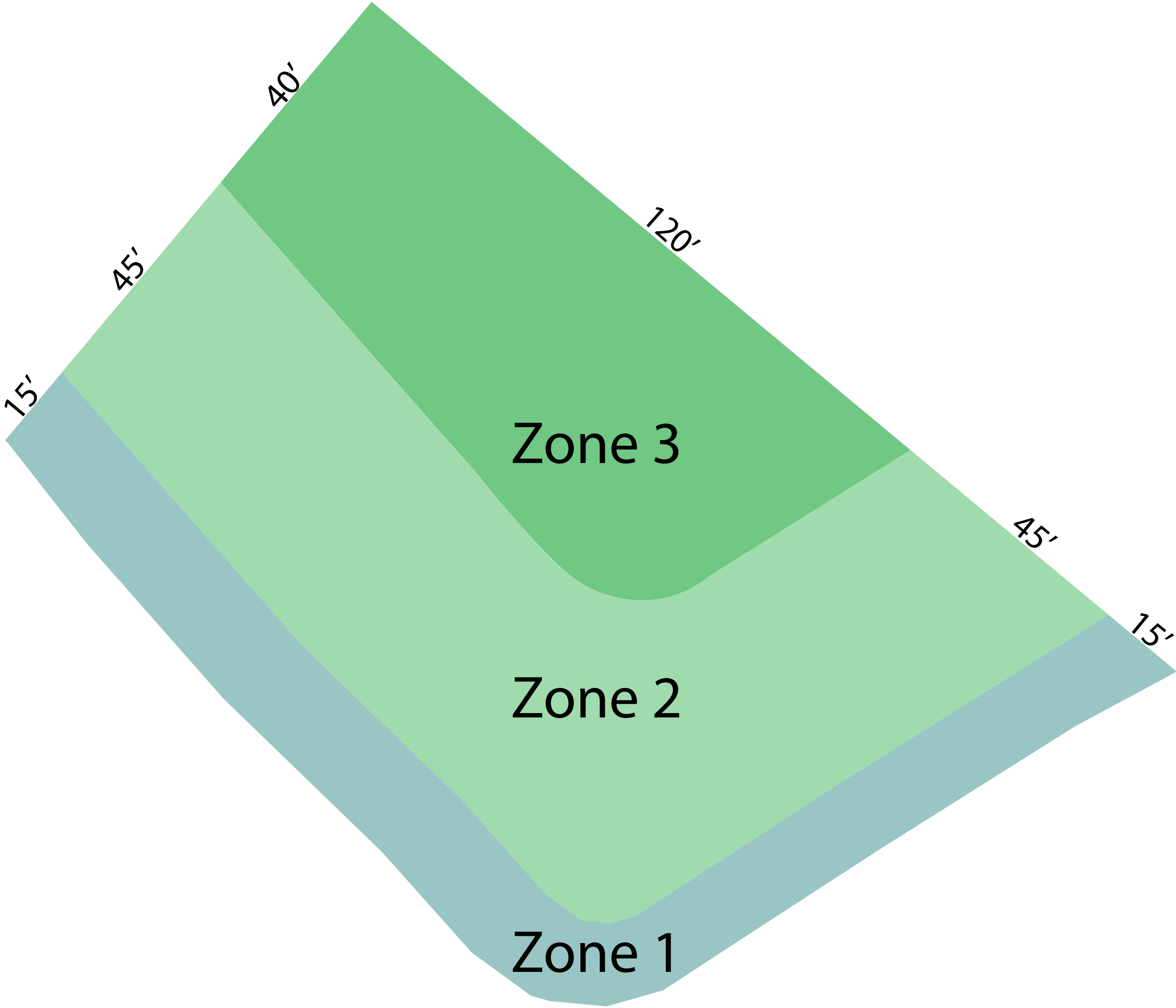
Comon Name	Botanical Name	Mature Height	Native
Switchgrass	Panicum virgatum	6'	Yes
Indiangrass	Sorghastrum nutaus	6'	Yes
Big Bluestem	Andropogon gerardii	6'	Yes
Little Bluestem	Schizachyrium scoparium	6'	Yes
Hard Fescue	Festuca trachyphylla	6'	Yes
Partridge Pea	Cassia fasciculata	6'	Yes

### Zone 2

Comon Name	Botanical Name	Mature Height	Native
Pitch Pine	Pinus Rigida	60'	Yes
American Holly	Ilex Opava	40'	Yes
White Pine	Pinus Strobus	100'	Yes
Pin Oak	Quercus palustri	60'	Yes
Black Gum	Nyssa Sylvatica	60'	Yes
Red-Osier Dogwood	Cornus stolonifera	10'	Yes
Spicebush	Lindera benzoin	20'	Yes
Sweet Pepperbush	Clethra Alnifolia	10'	Yes
Witch Hazel	Hamamelis virginiana	20'	Yes
Arrowood	Viburnum dentatum	10'	Yes

### Zone 1

Comon Name	Botanical Name	Mature Height	Native
Atlantic White Cedar	Chamaecyparis Thyoides	80'	Yes
Pitch Pine	Pinus Rigida	60'	Yes
Black Willow	Salix Nigra	50'	Yes
Swamp White Oak	Quercus Bicolor	60'	Yes
River Birch	Betula Nirgra	80'	Yes
Pin Oak	Quercus palustri	60'	Yes
Buttonbush	Cephalanthus occidentalis	8'	Yes
Shadbush	Amelanchier canadensis	20'	Yes
Elderberry	Sambucus canadensis	12'	Yes
Winterberry Holly	Ilex verticillata	10'	Yes
Red-Osier Dogwood	Cornus stolonifera	10'	Yes





# HILLSBOROUGH BLUE ACRES SITES

## DESIGN CONCEPT

### SITE PLAN: DUKES PARKWAY ECO PARK

The goal of this park design, is to provide a recreation area for both active and passive recreational activities, while also providing information on the various methods of capture and managing of storm water. The messaging is meant to be, “If we did more of this responsible water management, Blue Acres would not need to purchase properties.”

By including separate bike paths and walking paths separated by a bio-swale, this design is meant to serve as an inspiration for responsible, pedestrian friendly development in surrounding communities. The centerpiece of the storm water management functionality of the site is vegetated basin, which would be designed to capture the storm water from the surrounding neighborhood.

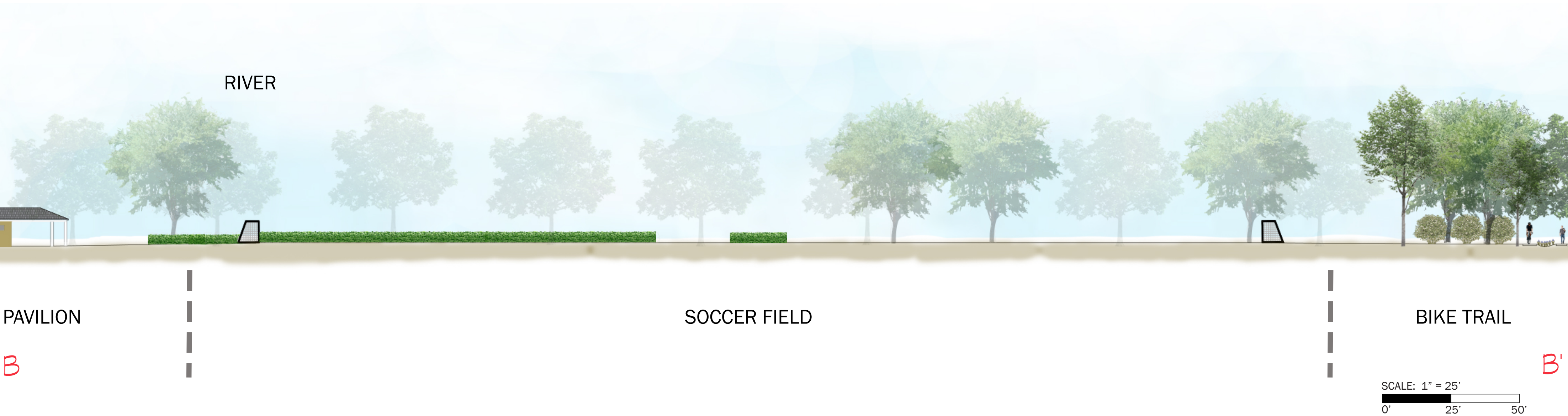




# HILLSBOROUGH BLUE ACRES SITES

## DESIGN CONCEPT

### SECTIONS ELEVATIONS



### ZONE 1: WETLANDS



Swamp Azalea  
*Azalea viscosum*



Tussock Sedge  
*Carex stricta*



Blue Flag Iris  
*Iris versicolor*



Northern Spicebush  
*Lindera benzoin*



Canada Goldenrod  
*Solidago canadensis*

### ZONE 1: TRANSITION ZONE



'Little Joe' Joe Pye Weed  
*Eupatorium dubium* 'Little joe'



Dwarf Fothergilla  
*Fothergilla gardenii*



Winterberry Holly  
*Ilex verticillata*



Virginia Sweetspire  
*Itea virginica*



'Heavy Metal' Switch Grass  
*Panicum virgatum* 'Heavy Metal'

### ZONE 3: PIEDMONT FOREST



'Red Sunset' Red Maple  
*Acer rubrum* 'Red Sunset'



Serviceberry  
*Amelachier arborea*



Shagbark Hickory  
*Carya ovata*



Arrowwood Viburnum  
*Viburnum dentatum*



'Allegheny' Viburnum  
*Viburnum x rhytidophylloides*

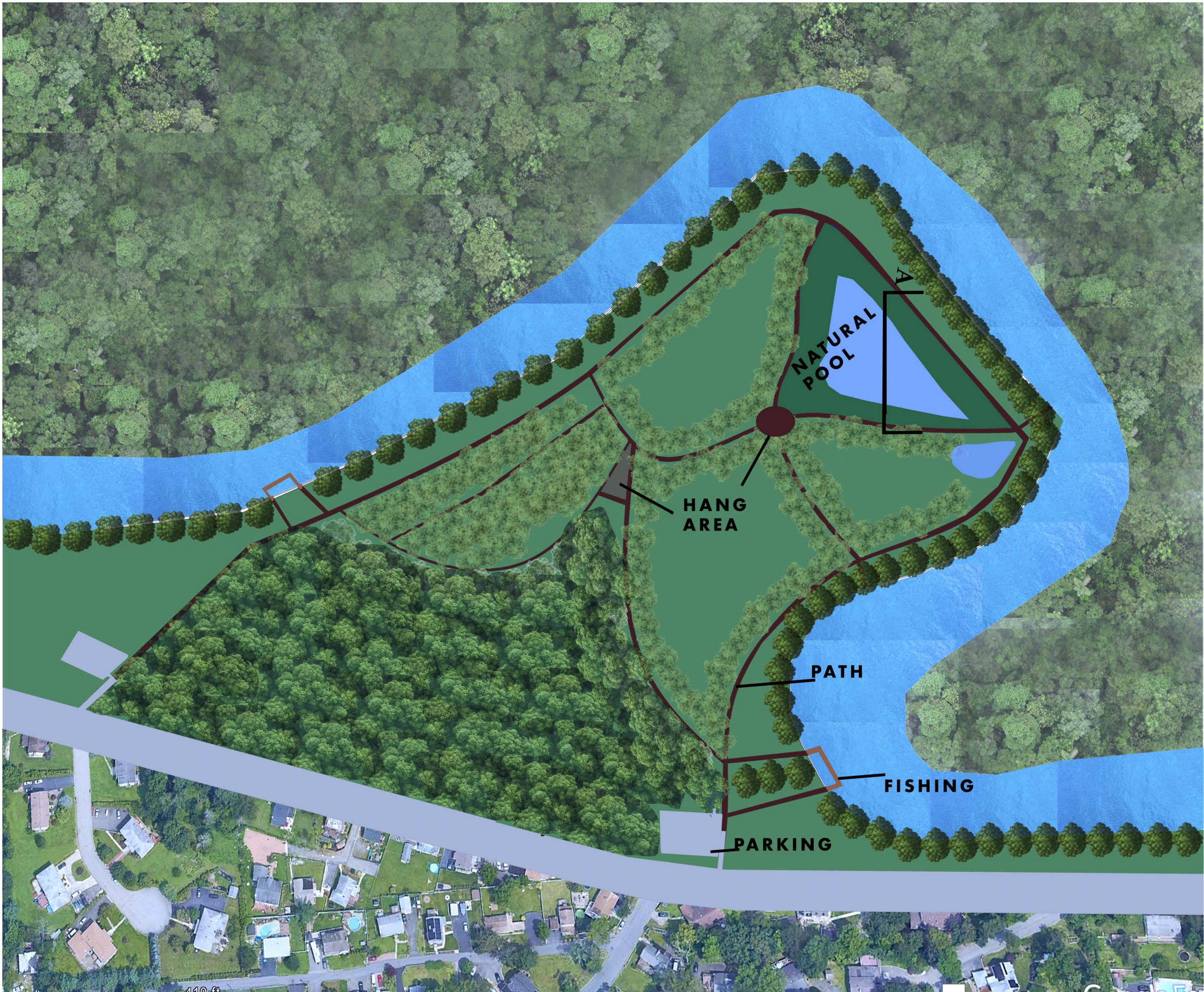


# LINCOLN PARK BLUE ACRES SITES

## DESIGN CONCEPT

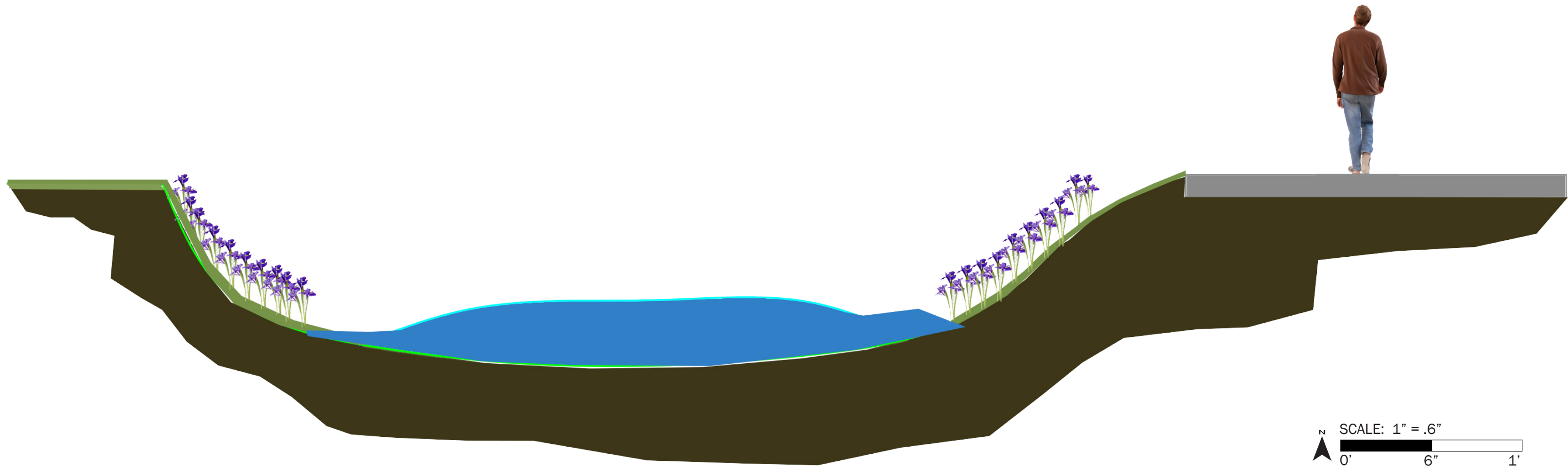
### REIMAGINING LINCOLN PARK

The site in Lincoln Park, NJ, experiences flooding due to low-lying areas and poor drainage. The Blue Acres program will help by converting flood-prone properties into natural spaces. My design includes a retention basin, elevated pathways, and numerous trees to cool the area. It also features a fishing area, spaces for relaxation, and several paths for exercise, creating a flood-resilient and community-friendly environment.



N  
SCALE: 1" = 100'  
0' 50' 100'

### RETENTION BASIN SECTION



N  
SCALE: 1" = 6"  
0' 6' 1'

JOSE CHAVEZ





# LINCOLN PARK BLUE ACRES

## SITES

## DESIGN CONCEPT

### PLANT PALETTE



River Birch



London Plane Tree



American Beech



Purple Iris

### SITE VISIT





# OLD BRIDGE BLUE ACRES SITES

## DESIGN CONCEPT

### SITE PLAN: OLD BRIDGE WATERFRONT PARK

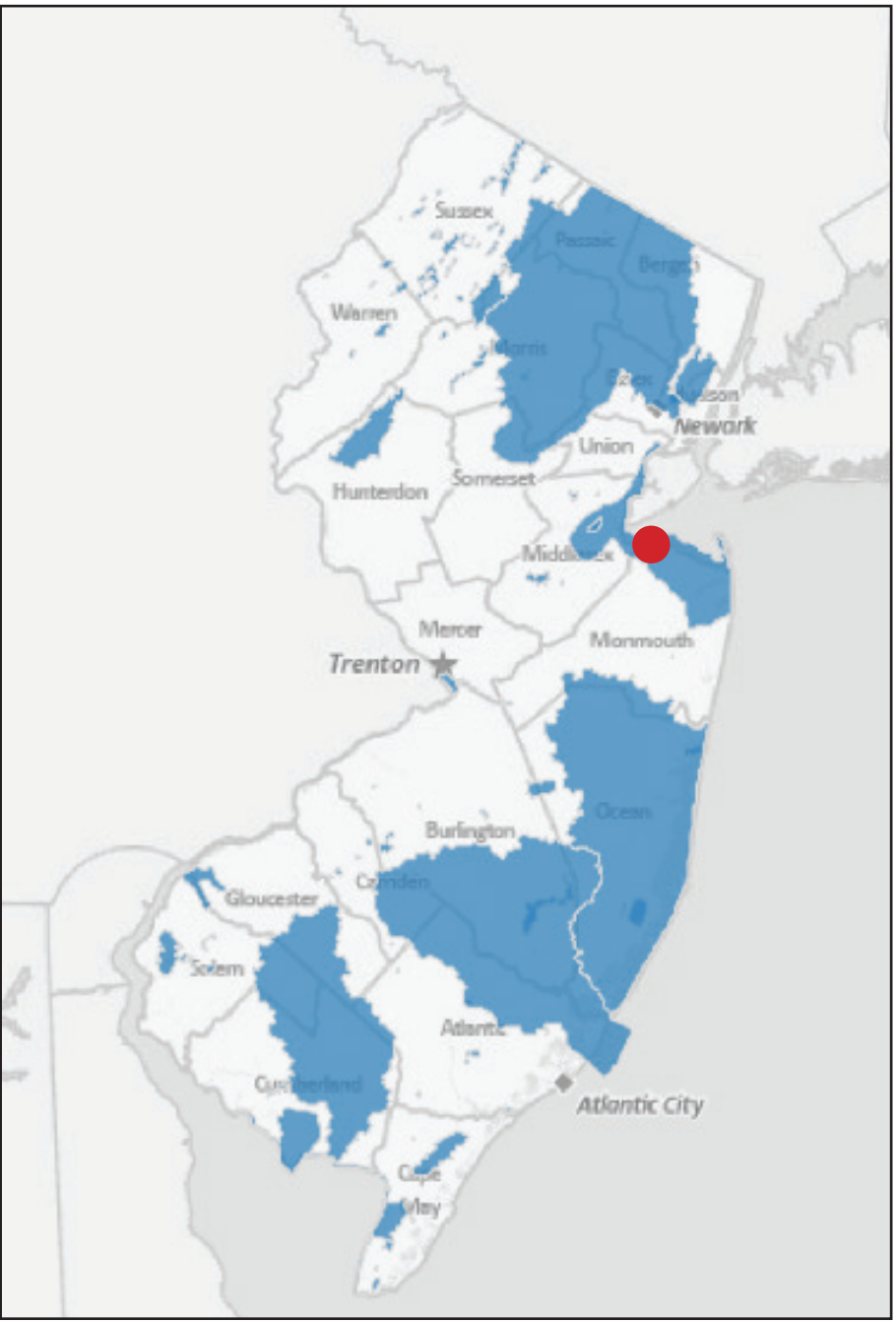
In Old Bridge, Blue Acres properties line the Raritan Bay and can easily be incorporated into the existing Old Bridge Waterfront Park, which beachgoers have enjoyed since 1999. A parking lot next to the project area provides easy access for visitors, and there is a existing network of amenities.

The site is also entirely within an EPA priority wetland, which makes it subject to specific development restrictions under New Jersey’s Freshwater Wetlands Protection Act.

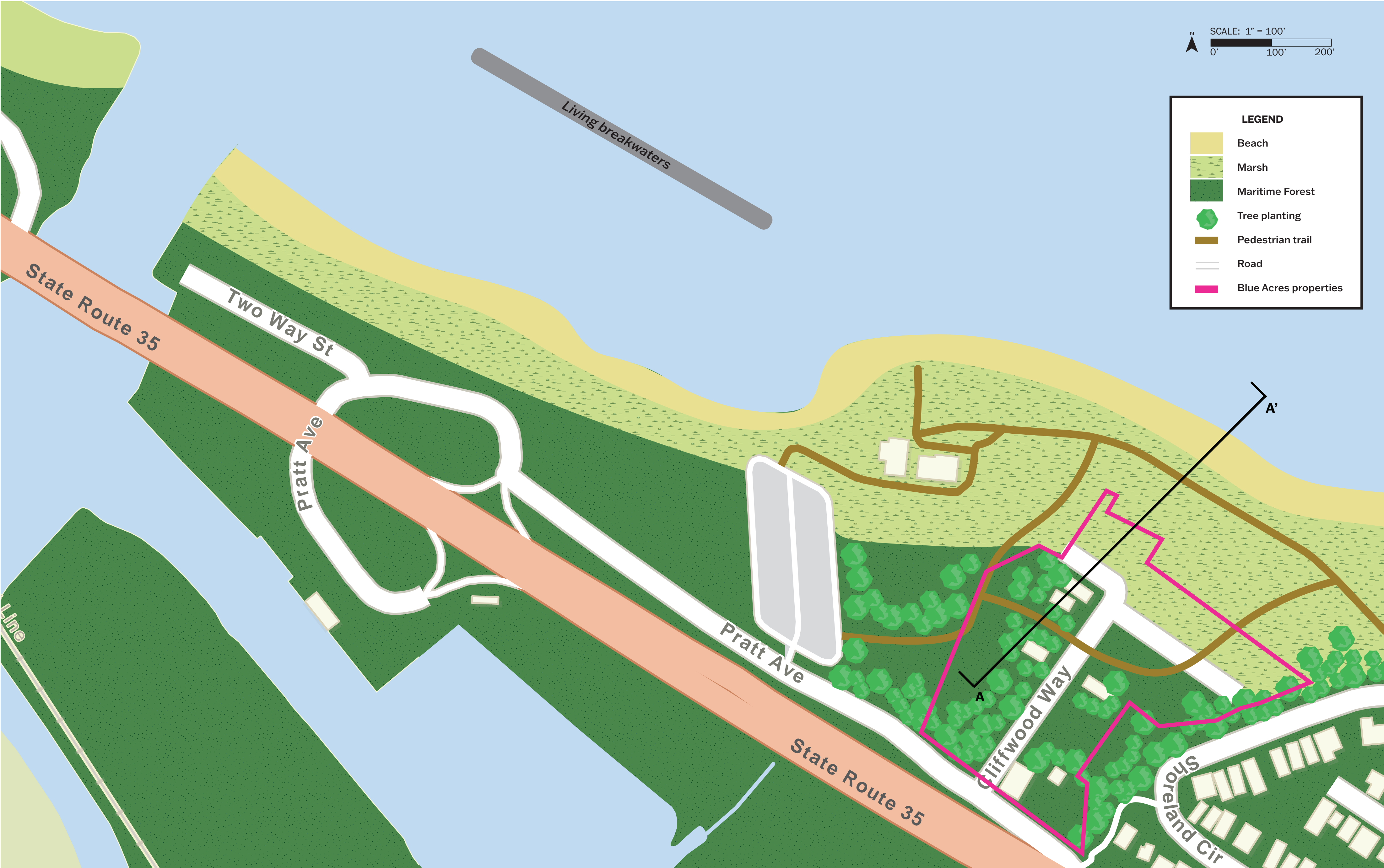
Beyond the homes at risk of flooding, the entire park has suffered damage due to the effects of climate change and sea-level rise, such as significant damage from 2012’s Superstorm Sandy. Future threats to the park include beach erosion and subsequent marsh migration. To plan for these threats, the acquired Blue Acres properties provide an opportunity to preserve a migration pathway for the marsh.



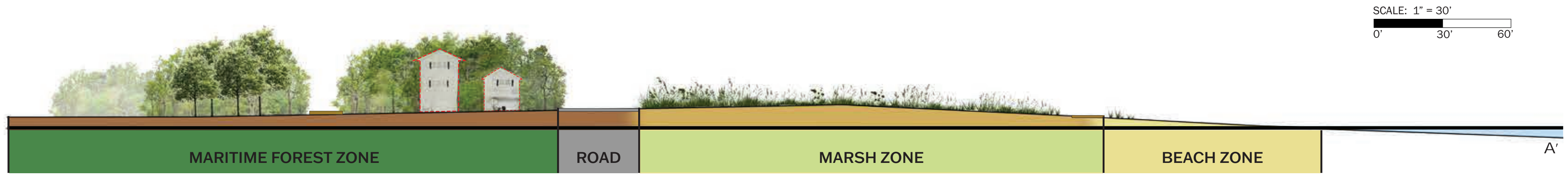
Blue Acres-acquired properties (yellow dots).



EPA priority wetlands in New Jersey (blue).



### SECTION A: VIEW TOWARDS HOMES TO BE DEMOLISHED, NEW TREE PLANTINGS.

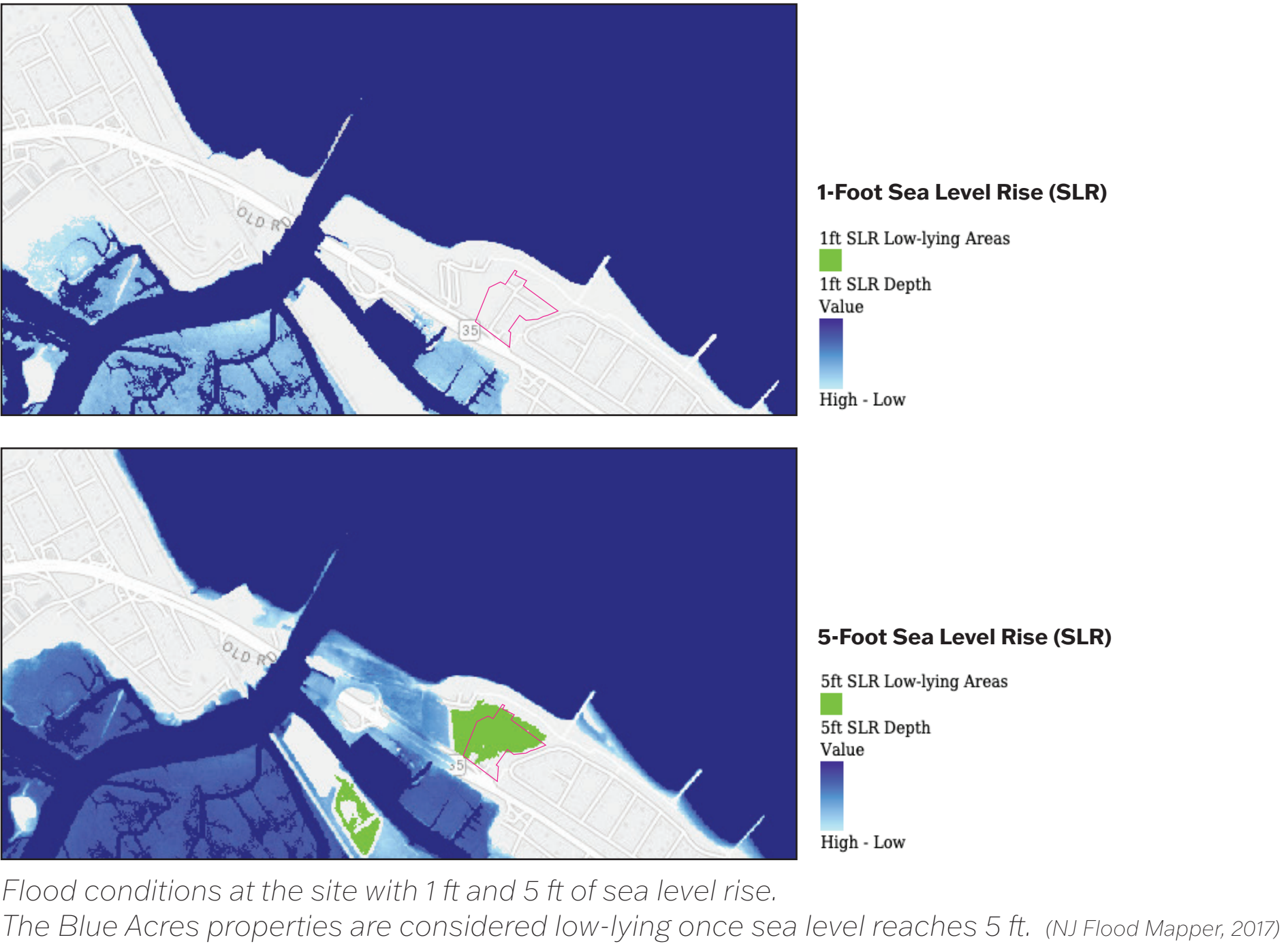




# OLD BRIDGE BLUE ACRES SITES

## DESIGN CONCEPT

### CLIMATE CHANGE-RELATED THREATS



The environmental burdens facing the site are physically evident.

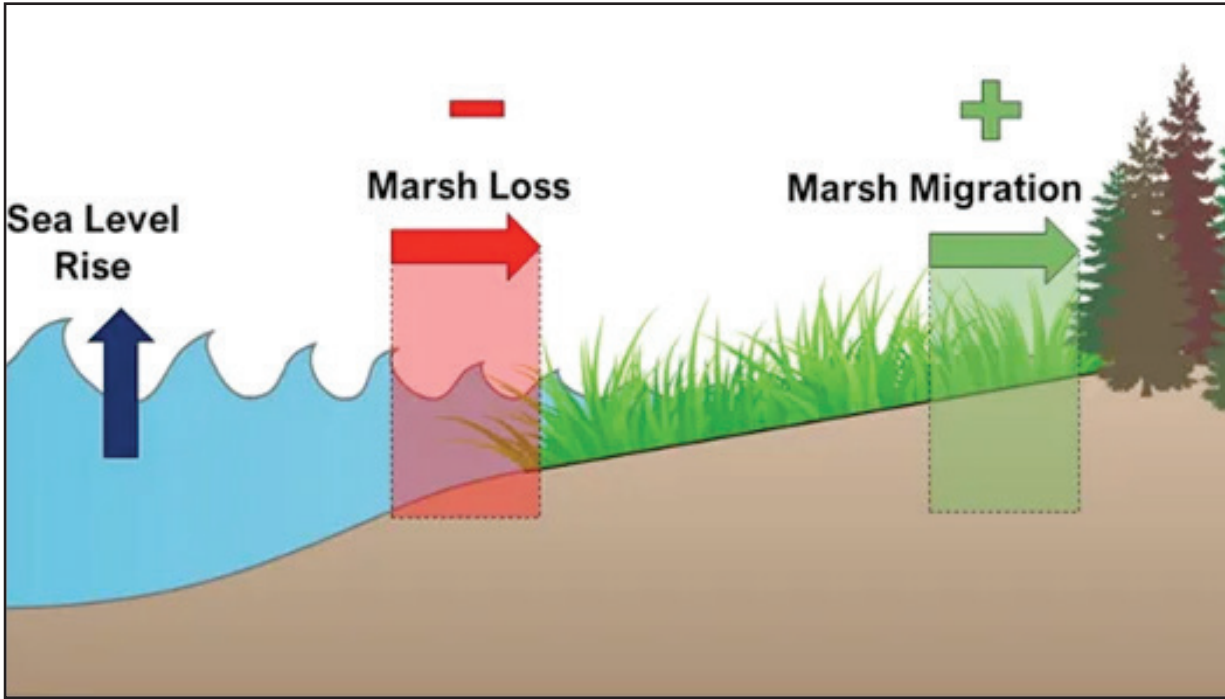
Beach erosion is a growing threat as sea level rises with climate change. A crumbling revetment wall currently flanks Paul’s Beach but is in need of upgrade.

Sea level rise is the largest climate-related threat to tidal salt marshes. As the water rises, the marsh loses ground. This is known as coastal squeeze. Subsequently, marsh grasses migrate inland into currently forested land use. Thus, preserving open space to allow for marsh migration pathways is vital.

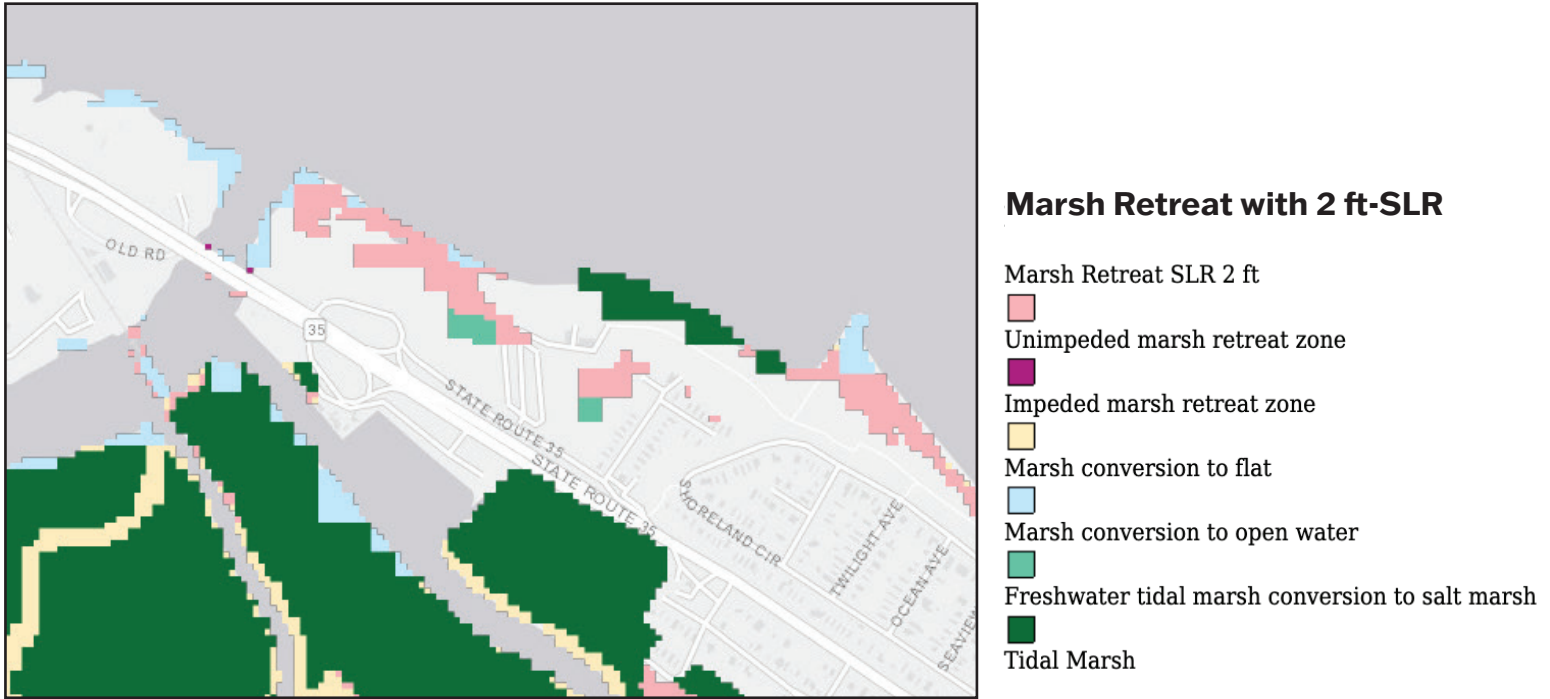
To the west is the Raritan Bay Slag Superfund site, which has been undergoing remediation since 2009. Full remediation would attract more visitors to the coastal attractions of the Raritan Bay, including the project area.



Beach erosion and revetment wall at Paul's Beach. (NJ Flood Mapper, 2017)



Marsh migration. (Carolina Wetlands Association, 2023)



### PLANTING PALETTE

Beach Zone

Seabeach amaranth  
*Amaranthus pumilus*

Seaside knotweed  
*Polygonum glaucum*

American beachgrass  
*Ammophila brevilligulata*

Asiatic sand sedge  
*Carex kobomugi*

Seaside goldenrod  
*Solidago sempervirens*

Marsh Zone

Marsh fern  
*Thelpteris palustris*

Cattail  
*Typha latifolia*

Common reed  
*Phragmites australis*

Beach plum  
*Prunus maritima*

Northern bayberry  
*Myrica pensylvanica*

Maritime Forest Zone

Sassafras  
*Sassafras albidum*

Eastern red cedar  
*Juniperus virginiana*

Hackberry  
*Celtis occidentalis*

Pitch pine  
*Pinus rigida*

Black cherry  
*Prunus serotina*



# PATERSON BLUE ACRES SITES

## DESIGN CONCEPT

With only 1.17 acres available through Blue Acres and roughly 10.5 acres of of fragmented residential and industrial properties, restoring these spaces poses significant challenges. This proposed design intervention introduces a bike trail weaving through the urban context of Paterson, New Jersey, featuring three outlooks with scenic views of the river. It is a thoughtful approach to reconnect and revitalize these spaces toward addressing these challenges with practical solutions.

SITE PERSPECTIVE: WATERFRONT VIEW TO RIVER



- MUNICIPAL BLUE ACRES
- MUNICIPAL OPEN SPACE
- FLOOD HAZARD ZONES
  - 1% ANNUAL CHANCE FLOOD HAZARD
  - REGULATORY FLOODWAY
  - SPECIAL FLOODWAY
  - AREA OF UNDETERMINED FLOOD HAZARD
  - 0.2% ANNUAL CHANCE FLOOD HAZARD
  - FUTURE CONDITIONS 1% ANNUAL CHANCE
  - AREA WITH REDUCED RISK DUE TO LEVEE
  - AREA WITH RISK DUE TO LEVEE

SITE PLAN: PATERSON WATERFRONT



SCALE: 1" = 75'  
0' 75' 150'





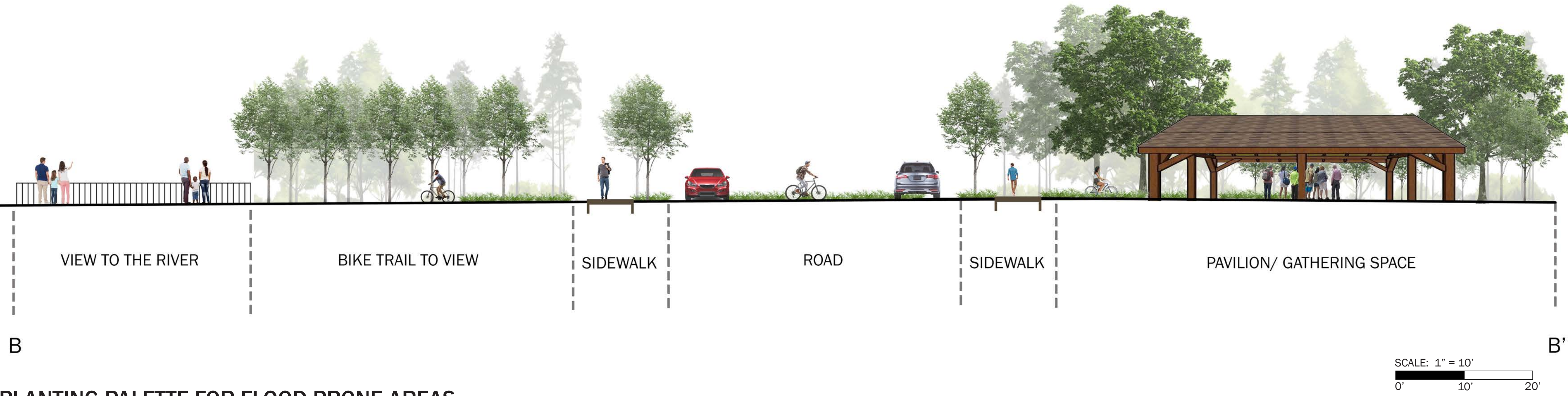
# PATERSON BLUE ACRES SITES

## DESIGN CONCEPT

SECTION A - A' SHOWING VIEW TOWARDS BERGEN STREET



SECTION B - B' SHOWING VIEW TOWARDS PASSAIC RIVER



### PLANTING PALETTE FOR FLOOD-PRONE AREAS






#### SHADE TREES

				
RED MAPLE <i>ACER RUBRUM</i>	SWAMP WHITE OAK <i>QUERCUS BICOLOR</i>	PIN OAK <i>QUERCUS PALUSTRIS</i>	AMERICAN SYCAMORE <i>PLATANUS OCCIDENTALIS</i>	BLACK GUM <i>NYSSA SYLVATICA</i>

#### ORNAMENTAL TREES

				
SERVICEBERRY <i>AMELANCHIER CANADENSIS</i>	SWEETBAY MAGNOLIA <i>MAGNOLIA VIRGINIANA</i>	REDBUD <i>CERCIS CANADENSIS</i>	RIVER BIRCH <i>BETULA NIGRA</i>	IRONWOOD <i>CARPINUS CAROLINIANA</i>

#### SHRUBS AND GROUNDCOVER

				
VIRGINIA SWEETPIRE <i>ITEA VIRGINICA</i>	WINTERBERRY HOLLY <i>ILEX VERTICALLATA</i>	RED TWIG DOGWOOD <i>CORNUS SERICEA</i>	CREeping JENNY <i>LYSIMACHIA NUMMULARIA</i>	MARSH MARIGOLD <i>CALTHA PALUSTRIS</i>



# RAHWAY BLUE ACRES SITES

## DESIGN CONCEPT



### RAHWAY COMMUNITY PARK

Bordering Robinson’s Branch Tributary of the Rahway River, the Rahway Blue Acres parcels contain an existing community garden, and opportunities for enhanced open space and water access.

The design builds on the theme of nature immersion through various enhanced gardens - horticultural, for pollinators, or for water retention - access to water, and a multipurpose trail system.

Rahway Community Park is made more resilient to local flooding with robust native, deep-root grass buffers along the existing wetland buffer, and an overall plant palette of flood resilient and water-absorbent native plants.

### SITE PLAN



Ana Maria Oliynyk MLA ‘25





# RAHWAY BLUE ACRES SITES

## DESIGN CONCEPT

SECTION SHOWING VIEW TOWARDS GARDENS



### SELECT PLANTING PALETTE

#### GRASSES & POLLINATOR PLANTS



Muhlenbergia capillaris  
(Pink Muhly Grass)



Carex pendula  
(Drooping Sedge)



Andropogon gerardii  
(Big Bluestem)



Eutrochium purpureum  
(Joe-pye Weed)



Asclepias tuberosa  
(Butterfly Weed)



Veronicastrum virginicum  
(Culver's Root)



Vernonia fasciculata  
(Common Ironweed)



Asarum canadense  
(Wild Ginger)



Ruellia humilis  
(Prairie Petunia)

#### TREES & SHRUBS



Cornus amomum  
(Swamp Dogwood)



Lindera benzoin  
(Spicebush)



Betula Nlgra  
(River Birch)



Tilia americana  
(American Linden)



Quercus bicolor  
(Swamp White Oak)