



Parks

Riverside Park Dinosaur Playground Reconstruction

Located at Riverside Park, along Riverside Drive,
between W 96th and W 98th Streets in the Borough of Manhattan

Public Design Commission Review

December 15, 2023

Stephen Whitehouse, Starr Whitehouse

Total Budget: \$8.66m
Mayor, Eric Adams - \$ 1.0m FY22
City Council District 6, Gale Brewer - \$5.9m FY23
FEMA - \$1.76m FY22-23

Project Size: 1.10 ac

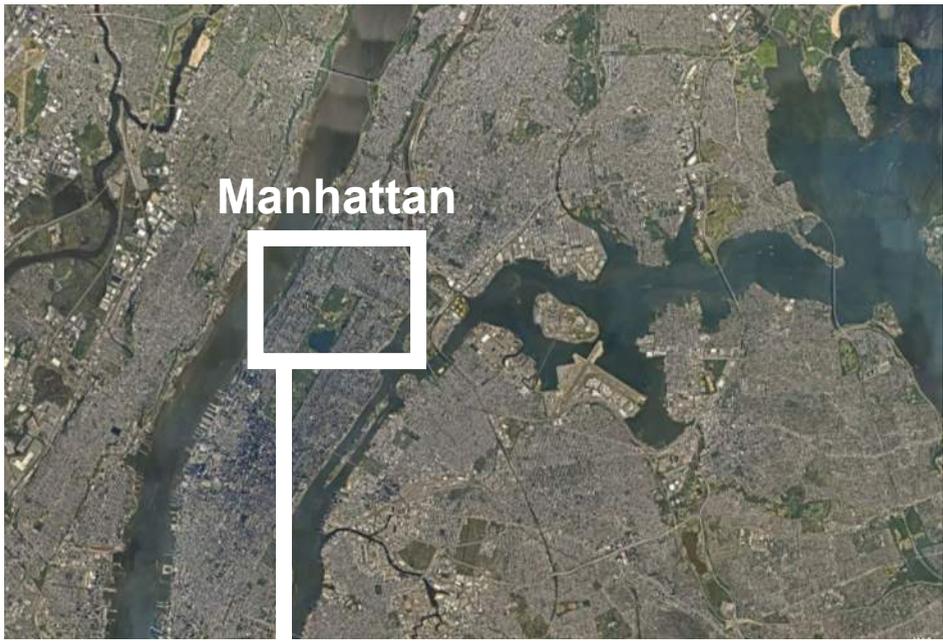
Goals

- Preserve the character of the site
- Increase and Diversify Play Opportunities
- Address Drainage Issues
- Improve ADA Access
- Upgrade Site Furniture



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Dinosaur Playground | Project Goals



Manhattan

City 2 MI



Dinosaur Playground

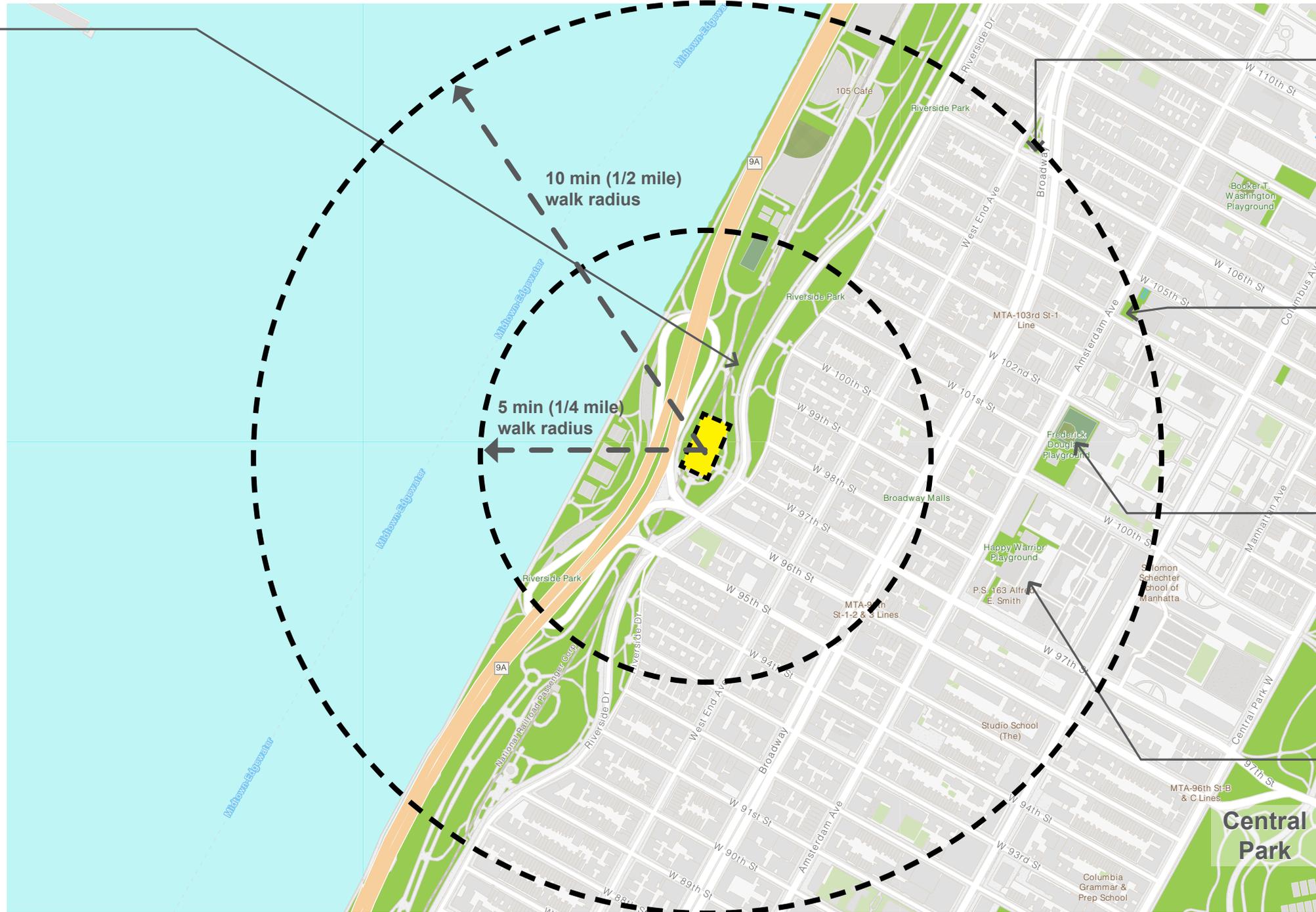
Neighborhood 1000 FT



Site

Site 200 FT

- Riverside Park
- Baseball
- Basketball
- Handball
- Tennis
- Dog Runs
- Food Concession
- Fitness Equipment
- Marina
- Play Equipment
- Public Restrooms
- Spray Shower
- Running Tracks
- Greenway



- Straus Park**
- Seating
- Shade
- Ornamental Plants

- Bloomingdale Playground**
- Basketball (1)
- Play Equipment
- Public Restrooms
- Spray Shower
- Adult Fitness Equipment

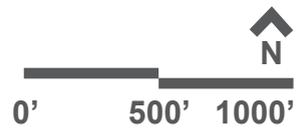
- Frederick Douglass Playground**
- Basketball (1)
- Handball (1)
- Outdoor Pool
- Play Equipment
- Public Restrooms
- Spray Shower

- Happy Warrior Playground**
- Basketball (1)
- Handball (1)
- Play Equipment
- Public Restrooms
- Spray Shower



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Dinosaur Playground | Neighborhood Context





Sanitary & Topographical Map of the City and Island of New York
 Depicted Date: 1865



Digital Map of the City and Island of New York
 Depicted Date: 2023



View from of Steps and Pergola at 96th Street, ca. 1906



Bird's Eye View Facing North from 98th Street, ca. 1911



NYC Parks

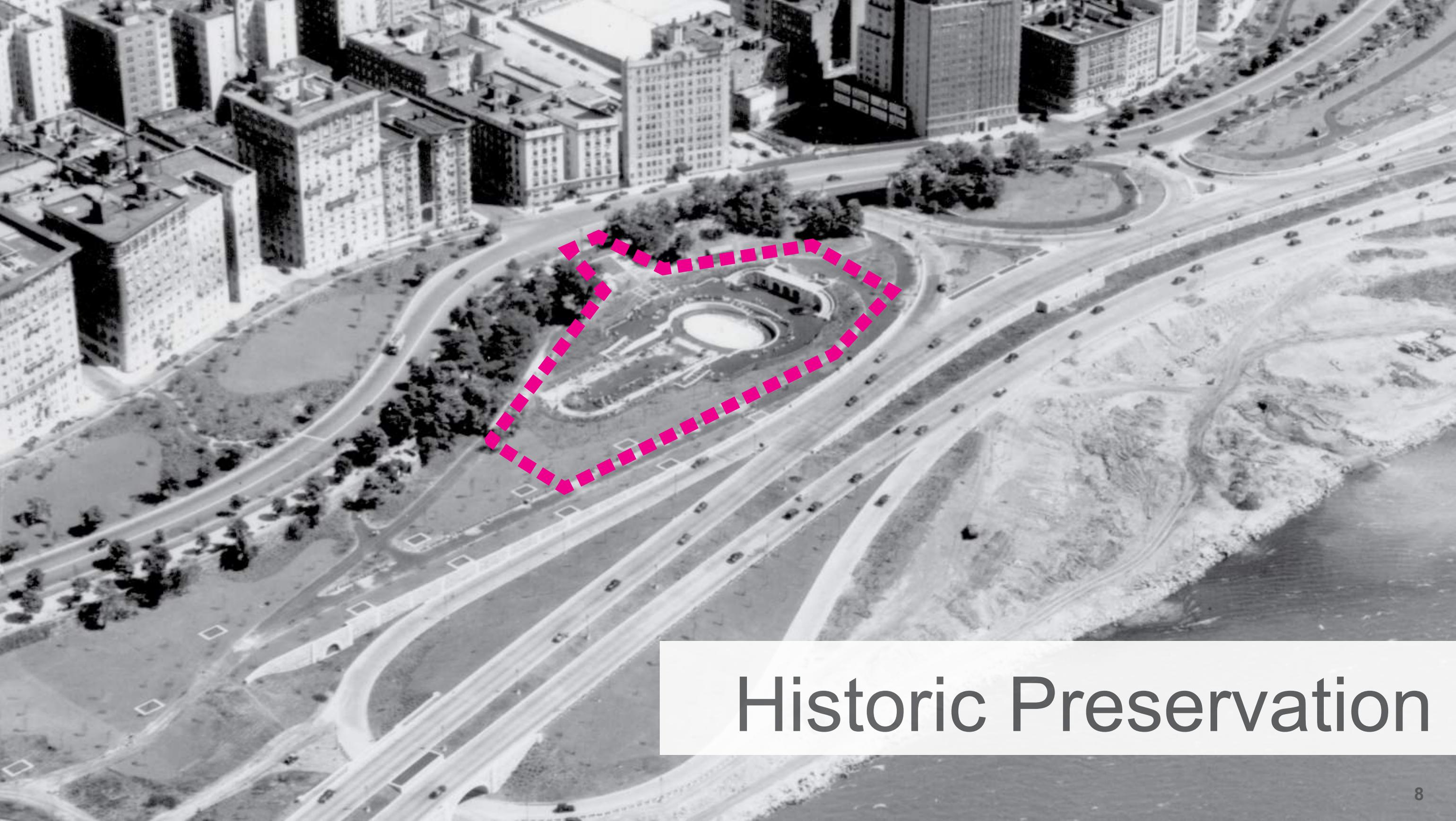


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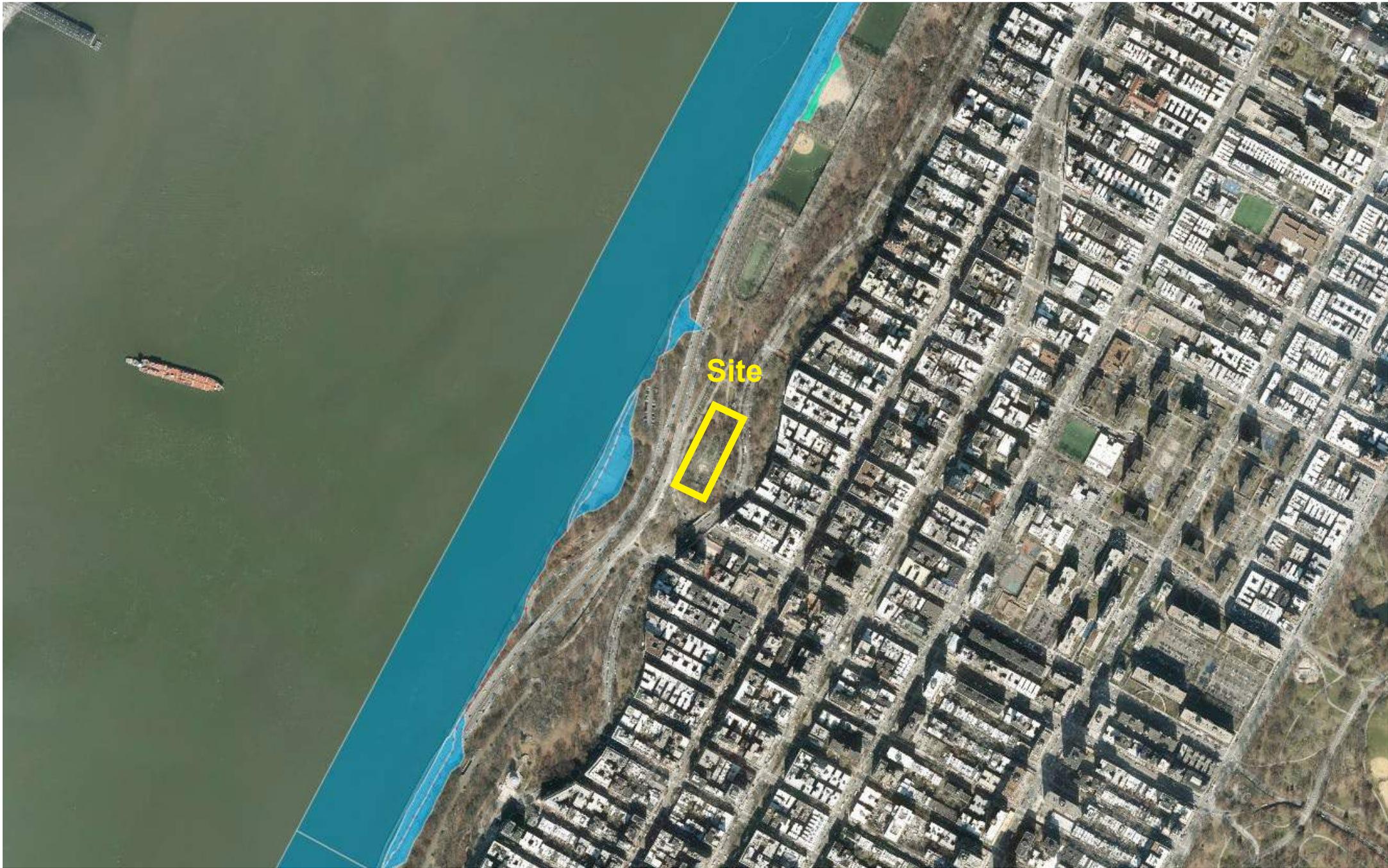
Dinosaur Playground | Historical Photos of Riverside Drive Entrance at 97th St



Historic Preservation



Historic Preservation



Base Flood Elevation (BFE): 11

Flood Hazard Zones

2015 Preliminary Flood Insurance Rate Map

V Zone (100-year floodplain subject to wave action)

Areas along coasts subject to inundation by the 1% annual chance flood event with additional hazards associated with storm-induced waves.

A Zone (100-year floodplain)

Areas subject to inundation by the 1% annual chance flood event.

Shaded X Zone (500-year floodplain)

Areas within the 0.2% annual chance floodplain, areas of 1% annual chance flooding where average depths are less than 1 foot, areas of 1% annual chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1% annual chance flood by a levee.

Limit of Moderate Wave Action (LiMWA)

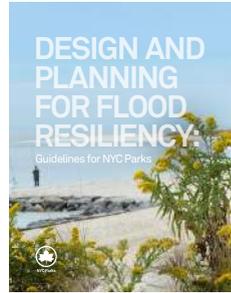
The inland limit of the area expected to receive 1.5ft or greater breaking waves during the 1% annual chance flood event. Data from 2015 PFIRMs.

Future Floodplain 2050s

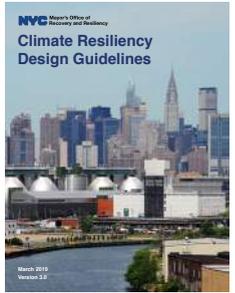
Future 1% Annual Chance Floodplain (100-year)

Future 0.2% Annual Chance Floodplain (500-year)

Resources (Links):



NYC Parks: Design and Planning for Flood Resiliency



NYC MOCR: Climate Resiliency Design Guidelines (v4.0)

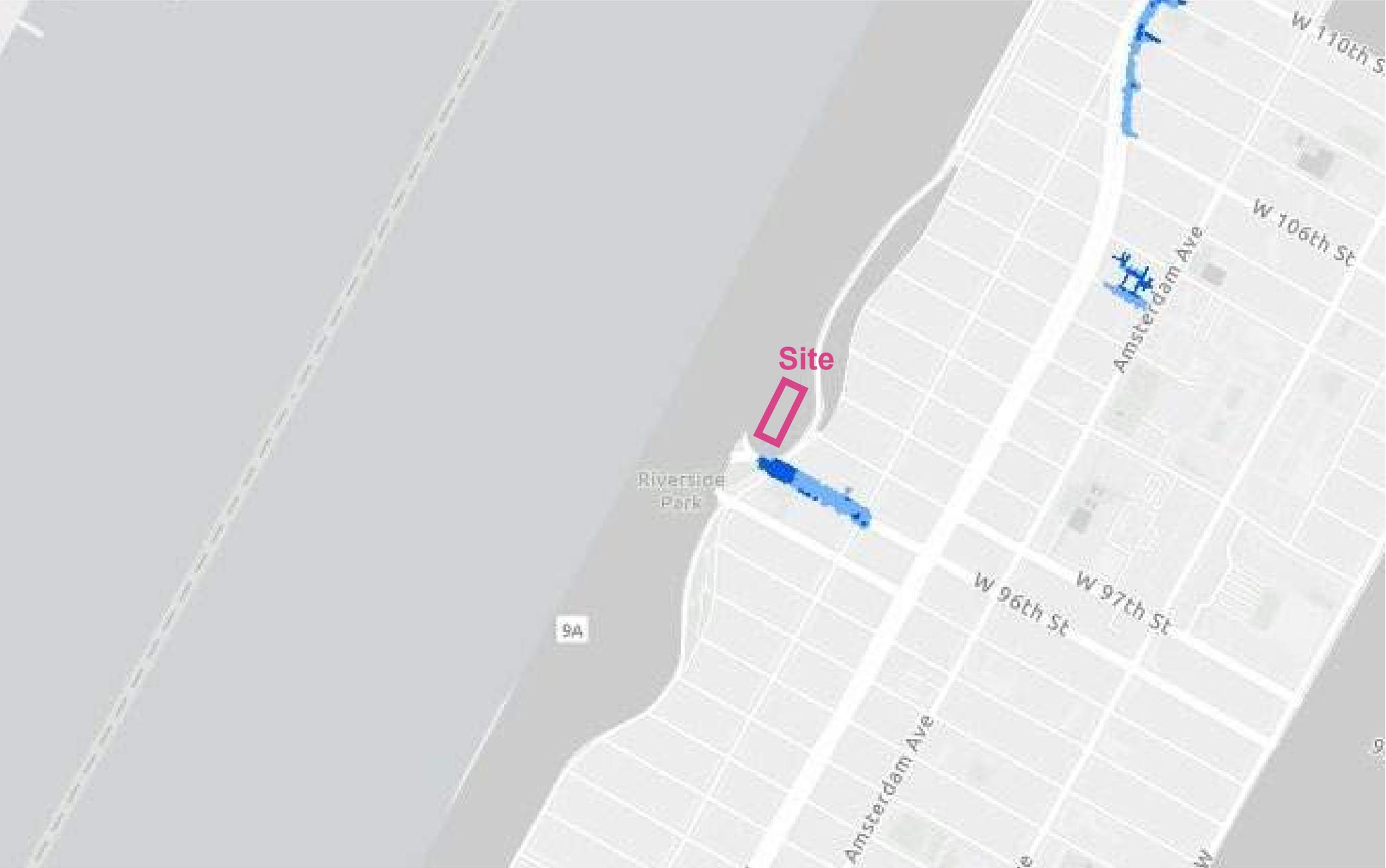
NYC Stormwater Flood Maps (Moderate Flooding)

- Area not included in analysis
- Future High Tides 2050
- National Wetlands Inventory
- Deep and Contiguous Flooding (1ft and greater)
- Nuisance Flooding (greater or equal to 4 in and less than 1 ft)

This map:

- Reflects roughly two inches of rain falling in one hour (also referred to as the 10-year storm, with approximately 10 percent chance of occurrence in any given year)
- Shows a moderate rainstorm that City infrastructure was not designed to handle.
- Reflects 2.5 feet of sea level rise, which is a high estimate for the 2050s.
- Includes impacts of potential blocked storm drains and outfalls from sea level rise.

Flooding from a storm like this would temporarily disrupt transportation and enter buildings and basements, causing minor damages to contents and surfaces.



NYC Stormwater Flood Maps (Extreme Flooding)

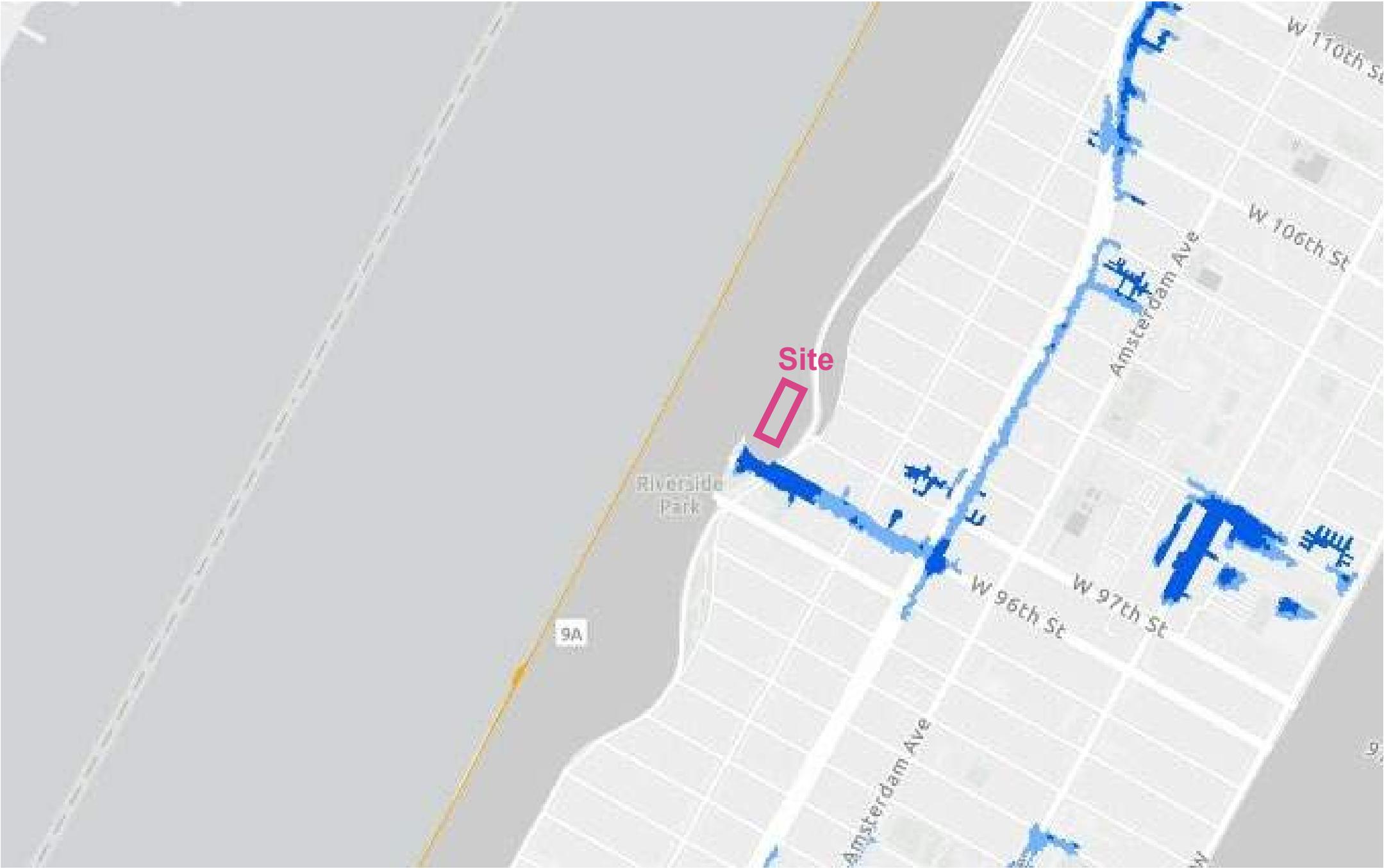
- Area not included in analysis
- Future High Tides 2080
- National Wetlands Inventory
- Deep and Contiguous Flooding (1ft and greater)
- Nuisance Flooding (greater or equal to 4 in and less than 1 ft)

This map:

- Reflects roughly 3.5 inches of rain falling in one hour (also referred to as the 100 year storm, with approximately 1 percent chance of occurrence in any given year).
- Shows an extreme rainstorm that City infrastructure was not designed to handle.
- Reflects 4.8 feet of sea level rise, which is a high estimate for the 2080s.
- Includes impacts of potential blocked storm drains and outfalls from sea level rise.

Flooding from a storm like this would:

- Cause widespread damage and disruption to both private and public property.
- Disrupt roads, subways, regional rail, and potentially power/communication networks.
- Cause flooding across coastal neighborhoods due to sea level rise impacts.





Land Use Categories

- 1 And 2 Family Residential
- Multi-Family Residential (Walkup)
- Multi-Family Residential (Elevator)
- Mixed Use
- Commercial & Office
- Industrial & Manufacturing
- Transportation / Utilities
- Public Facilities & Institutional
- Open Space And Outdoor Recreation
- Parking
- Vacant Land
- Other



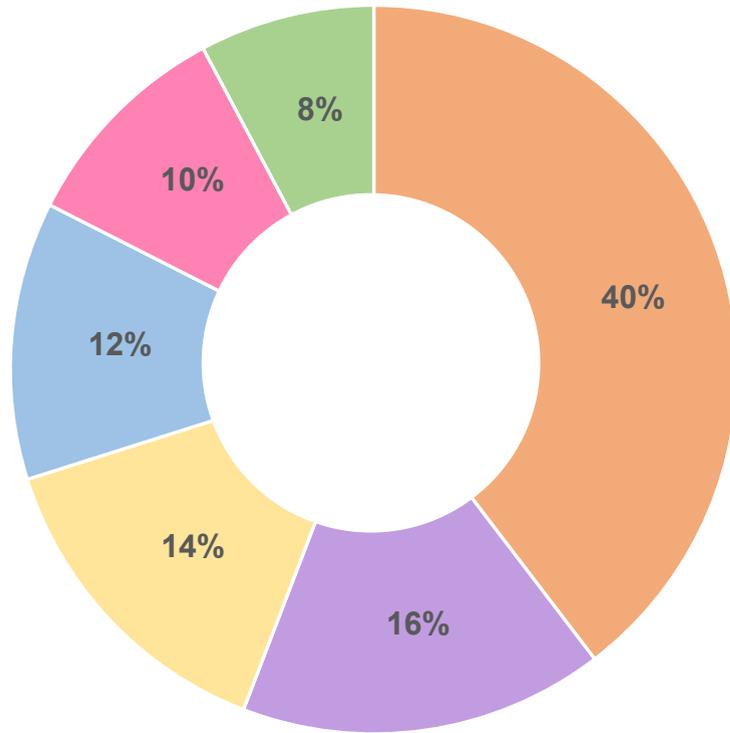
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Dinosaur Playground | Surrounding Land Use

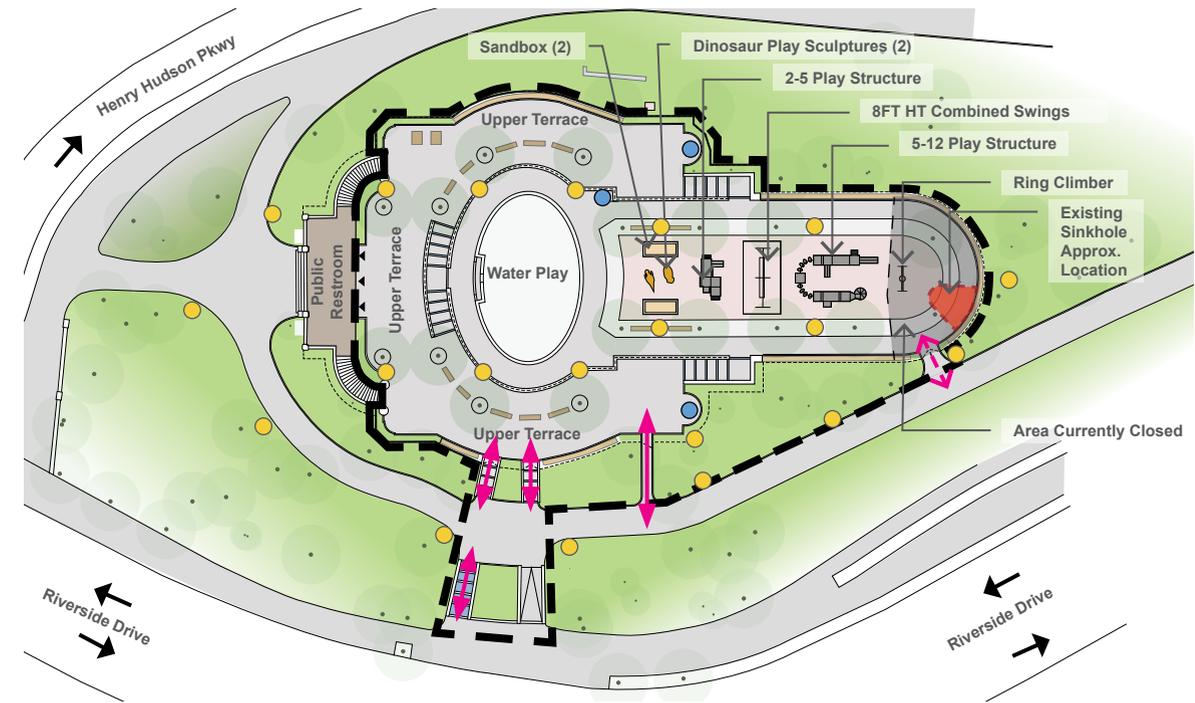
What We Heard:



40 community members and elected officials including Council Member Gale Brewer attended the virtual public meeting on June 12th 2023

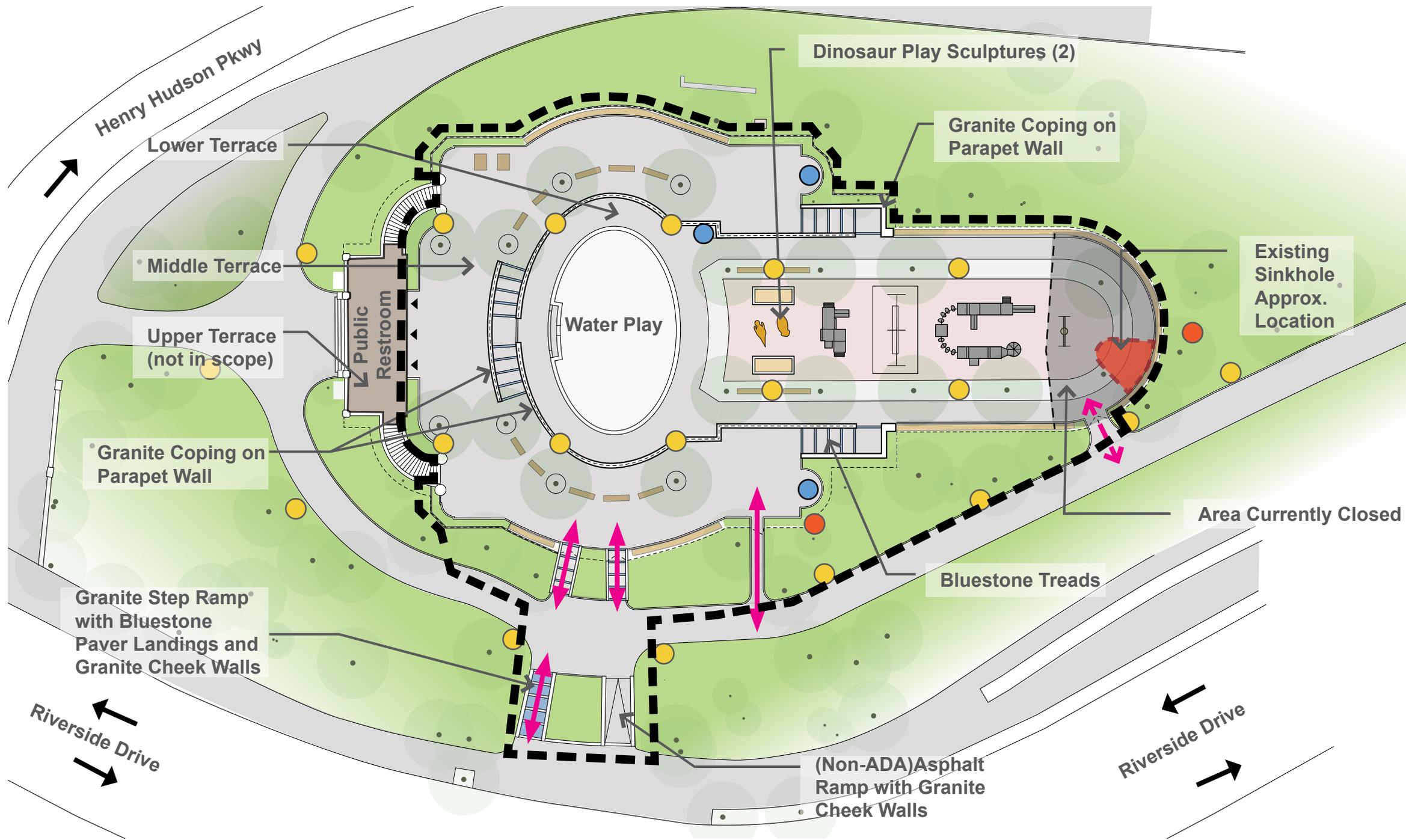
167 comments were collected from the meeting and online survey that lasted three weeks for anyone wanting to share their ideas.

All comments were reviewed and tallied a summary of our findings based upon public outreach are shown in order of community importance



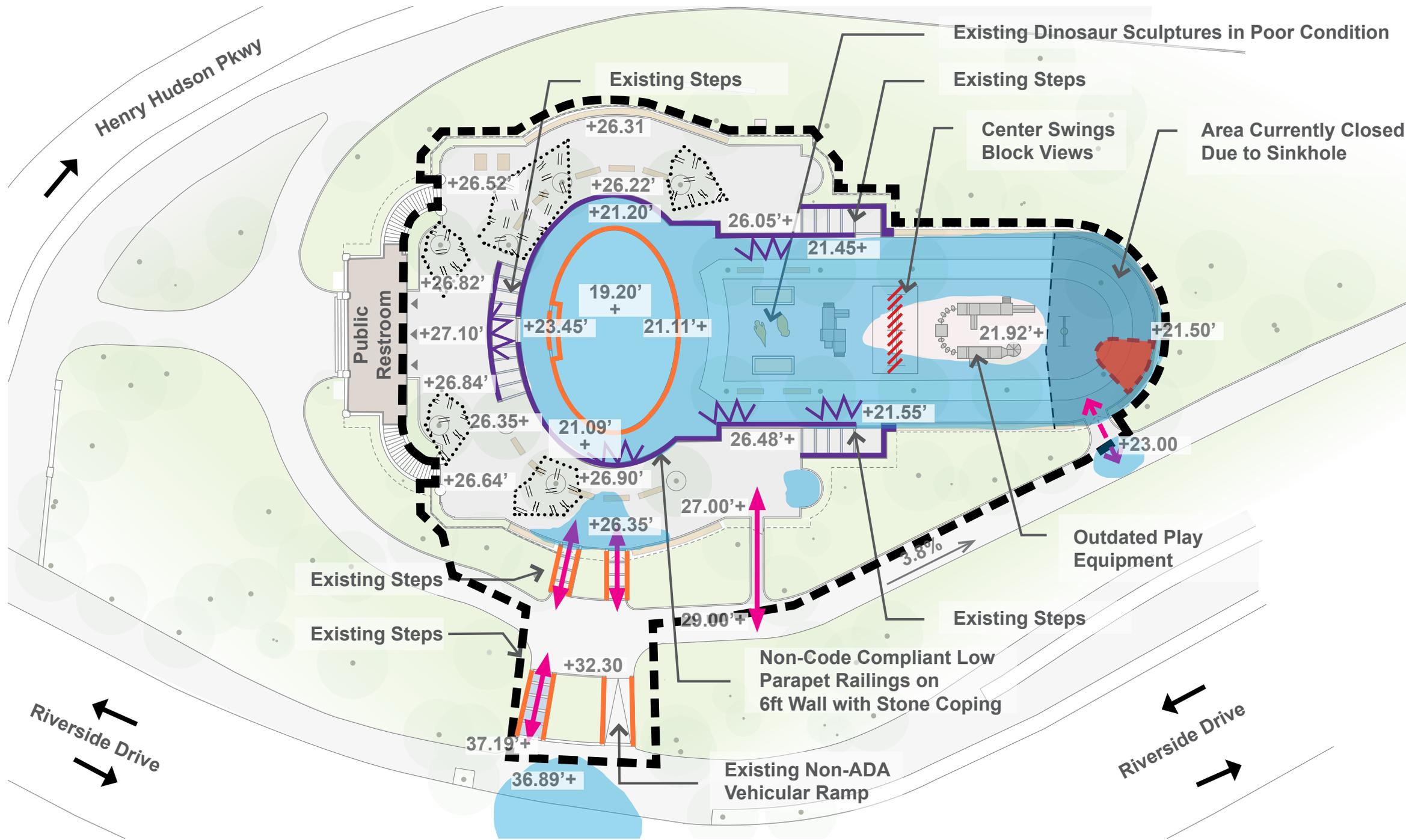
The Input Meeting was held via Zoom on June 12th, 2023

| Play Space | Security / Safety / Maintenance | Amenities | Water Play | Entrance / Access |
|--|---|--|--|---|
| <ul style="list-style-type: none"> Swings Tot Play Separate Age Group Play Climbing Dinosaur Themed | <ul style="list-style-type: none"> Multi-Level Play Sandbox Nature Play Activate Upper Terrace New Play Structures | <ul style="list-style-type: none"> Low Fence on Wall is a Fall Risk General Maintenance General Security/Safety Fix Sinkhole Trash Bins Improve Sightlines | <ul style="list-style-type: none"> Seating Picnic Areas with Tables Activate Upper Terrace New Pavement Wall Murals or Textured finish Drinking Fountains Bright Colors Stroller Parking | <ul style="list-style-type: none"> Dinosaur Theme Sprays Interactive Features Welcoming Entrance Multiple Accessible Entrances Accessible Entry from Riverside Drive Sidewalk |

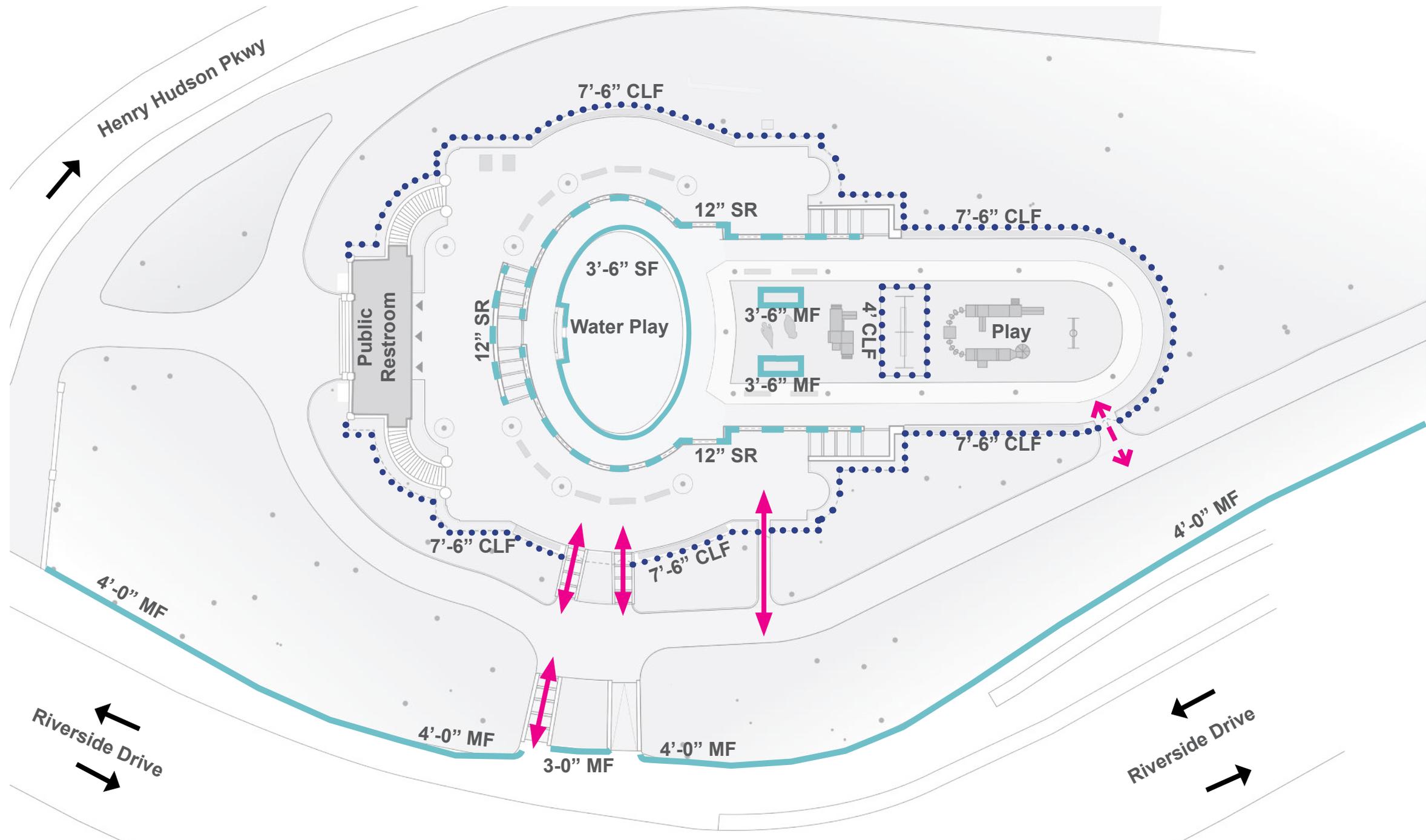


Legend

- Project Limit
- ↔** Park Entrance
- - -** Existing Fence / Railing
- Safety Surface
- Building or Structure
- Asphalt Pavement
- Concrete Pavement
- Bluestone Pavers or Treads
- Tree
- Parks Lightpole
- Parks Sports Lightpole
- Drinking Fountain
- ←** Traffic

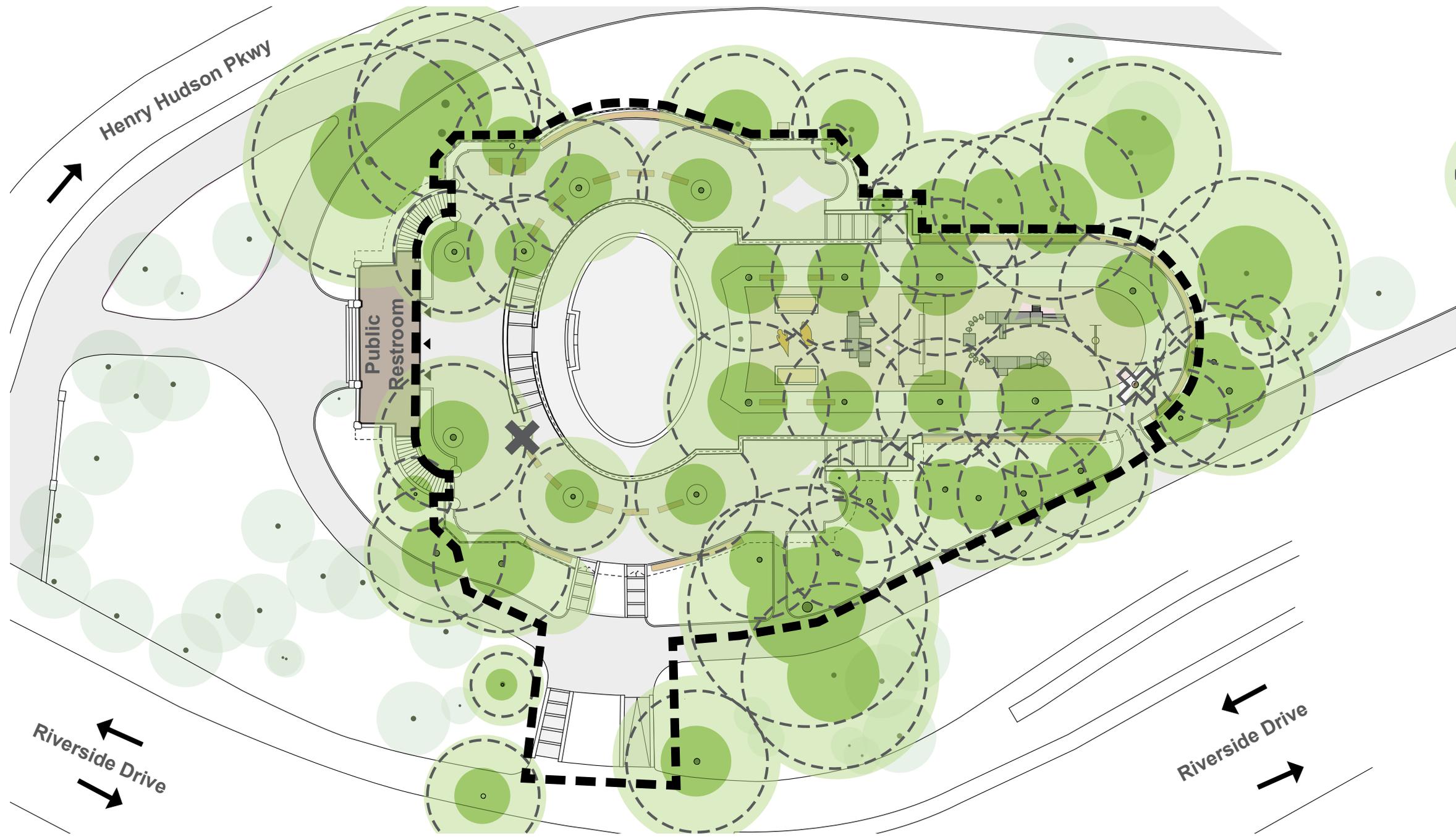


- ### Legend
- Project Limit
 - Building Access
 - Park Entrance
 - Park Entrance (Closed)
 - Traffic
 - Building or Structure
 - Pavement
 - Safety Surface
 - Existing Sinkhole
 - Area prone to Flooding
 - Wall In Poor Condition Spalling, Cracking, Algae
 - Pavement Heaving
 - Sightline Barrier
 - Low Wall/Cheek Wall
 - Wall
 - +25.00'** Existing Grade



Legend

- Building Access
- Park Entrance
- Traffic
- EXISTING MEDIUM FENCES
- x'-x" CLF
- EXISTING LOW/ PLANTING/ HANDRAIL FENCES
- x'-x" METAL FENCE
- 3'-6" METAL FENCE AT WATER PLAY
- 12" STEEL RAIL (Non-Code Compliant)



- ### Legend
- Structural Root Zone (Estimated based on DBH)
 - Canopy
 - Trunk with Diameter at Breast Height (DBH)
 - Critical Root Zone (Estimated based on DBH)
 - ✕ Stump Removal
 - ✖ Tree Removal due to poor condition

Existing Tree Species

| | |
|----|-------------------|
| 37 | London Planetrees |
| 10 | Katsura Tree |
| 4 | Sweetgum |
| 2 | European Hornbeam |
| 2 | American Elm |
| 1 | Black Locust |

DEP Unified Stormwater Rule

- Project is anticipated to disturb greater than 20,000 SF of soil during construction;
- Project is anticipated to create 5,000 sf of NEW Impervious Surface;

DEP Stormwater Management and Permitting will be required.

- Project is not anticipated to create 200 sf of NEW Impervious Surface;

A DEP Site Connection Proposal will not be required.

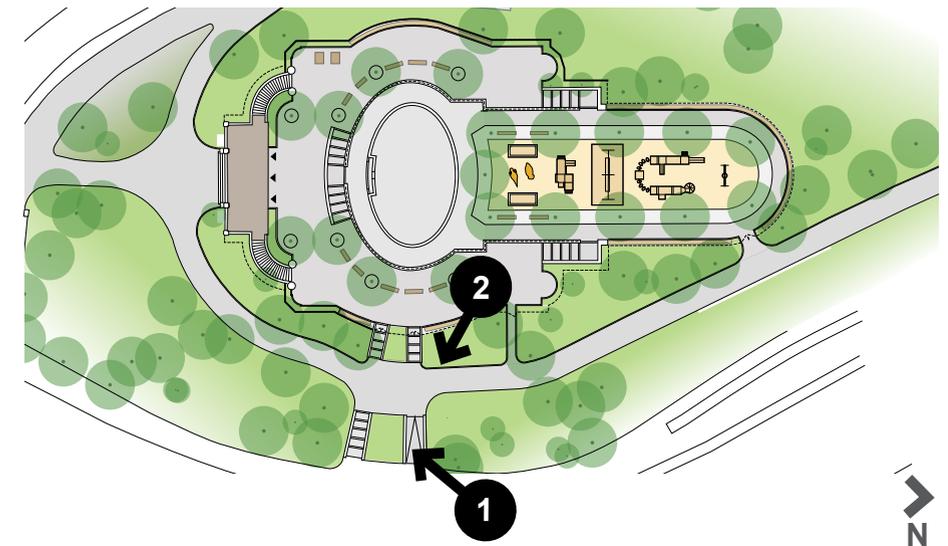




1 - View of the Main Entrance to the Park from Riverside Drive



2 - View of the Entrances from the Playground



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Dinosaur Playground | Site Photos

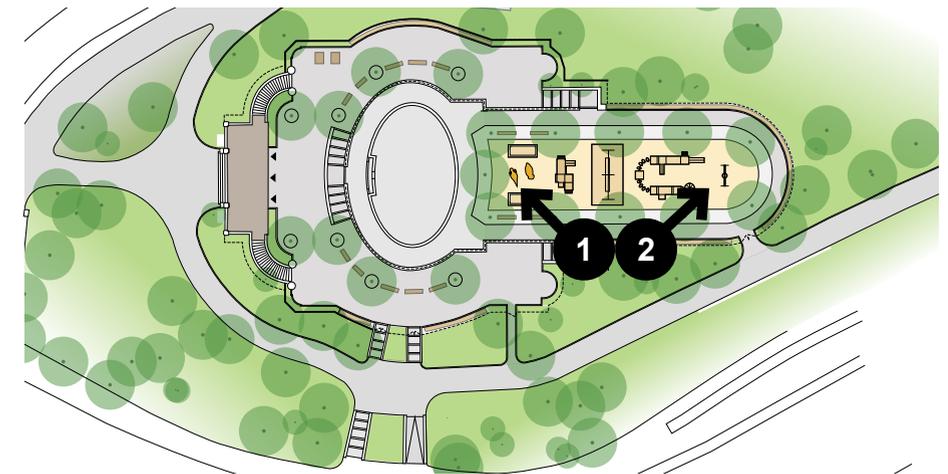




1 - Dinosaur Play Sculptures and Sand Boxes

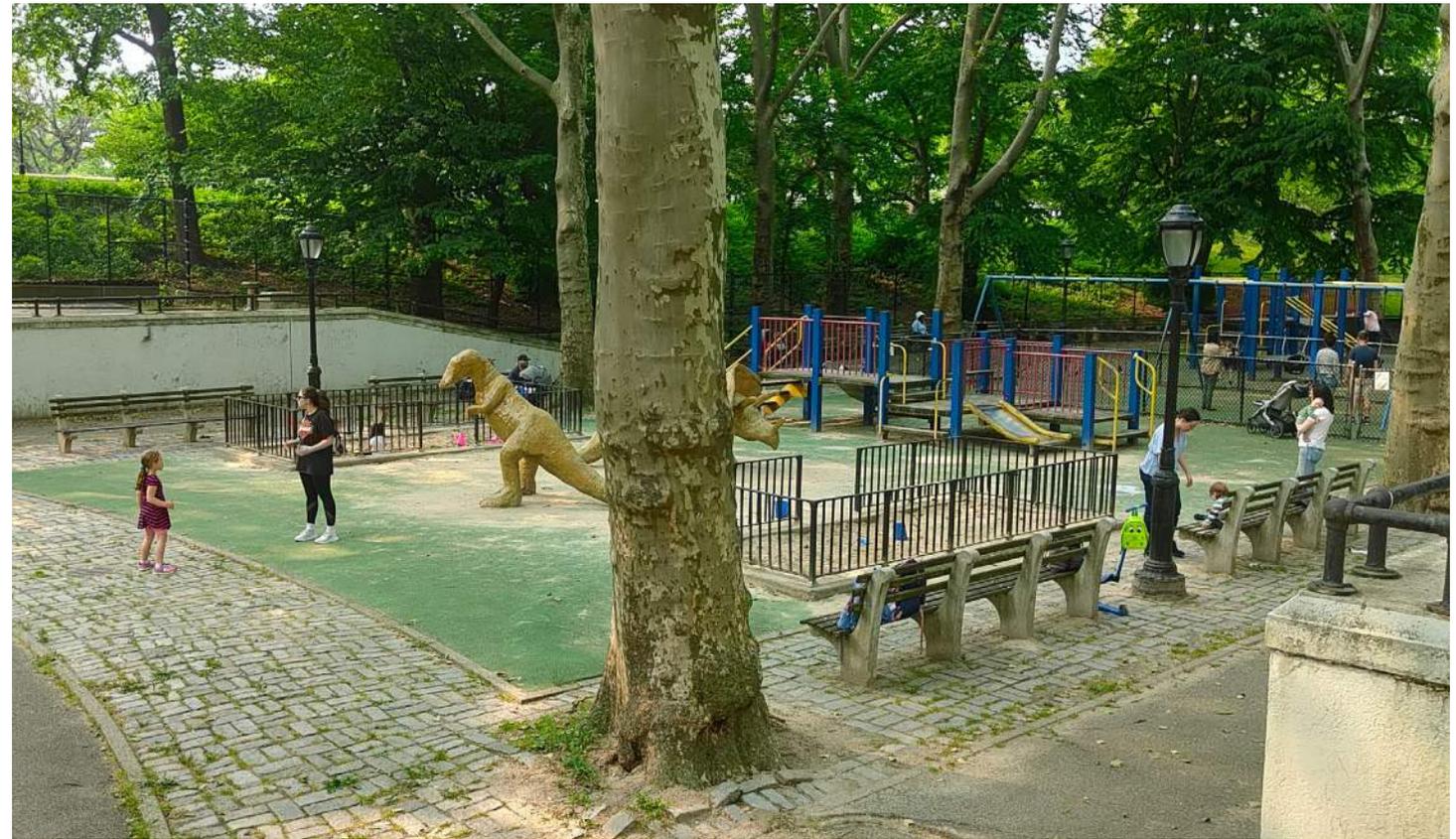


2 - Existing 5-12 Play Equipment

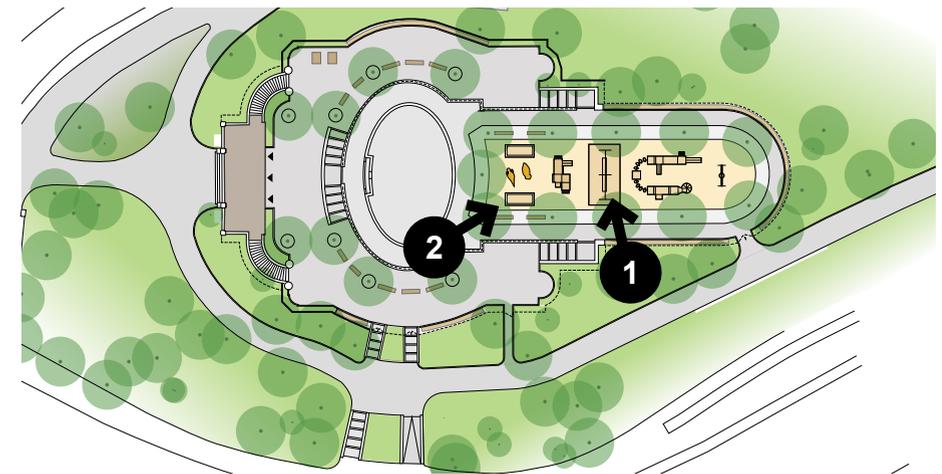




1 - 8FT HT Combined Swings and 2-5 Play Equipment (Background)



2 - View for Play Areas



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Dinosaur Playground | Site Photos

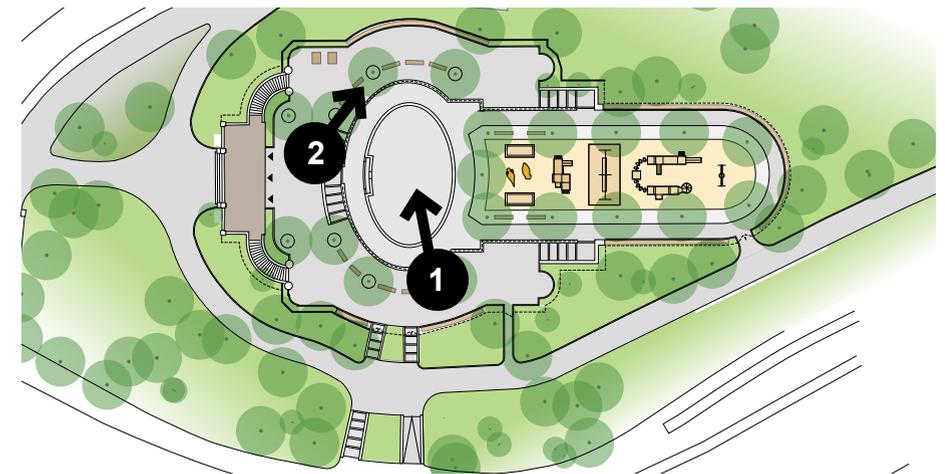




1 - Existing Water Play Area



2 - Seating at Middle Terrace



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Dinosaur Playground | Site Photos

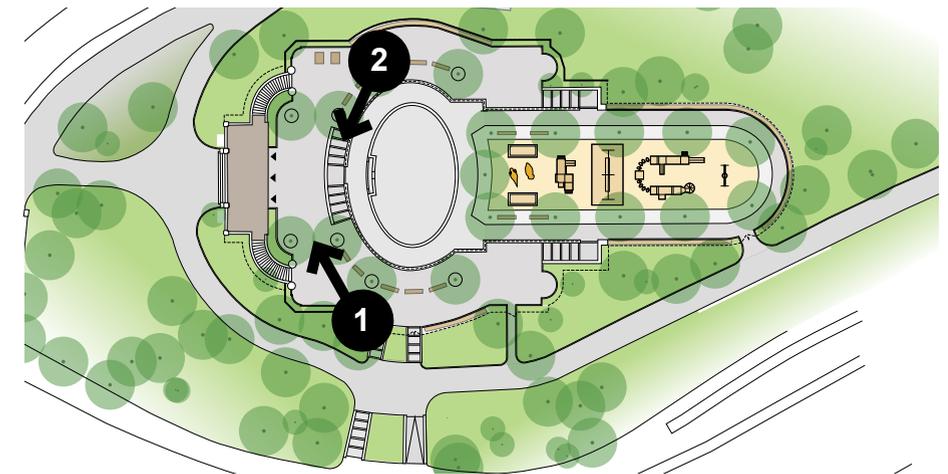




1 - Existing Public Restroom and Steps
Not in Scope



2 - View of Ramp Steps with Bluestone Treads, Granite Stone Coping and Railing



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Dinosaur Playground | Site Photos

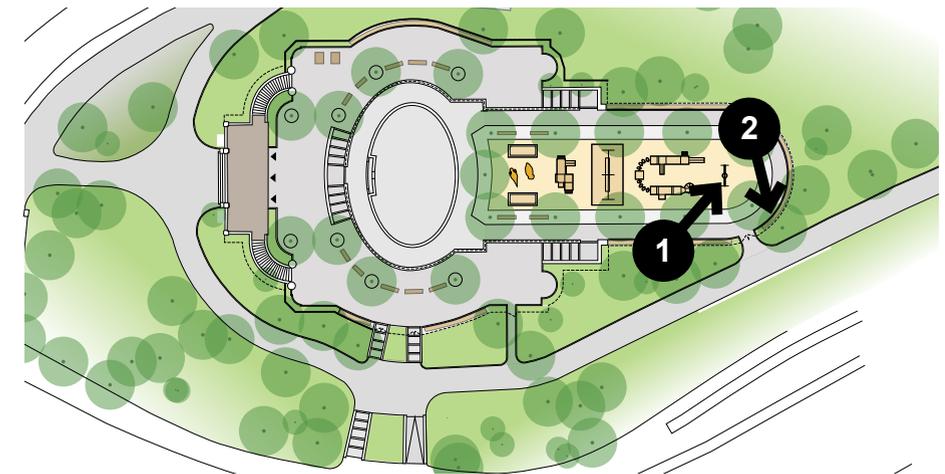


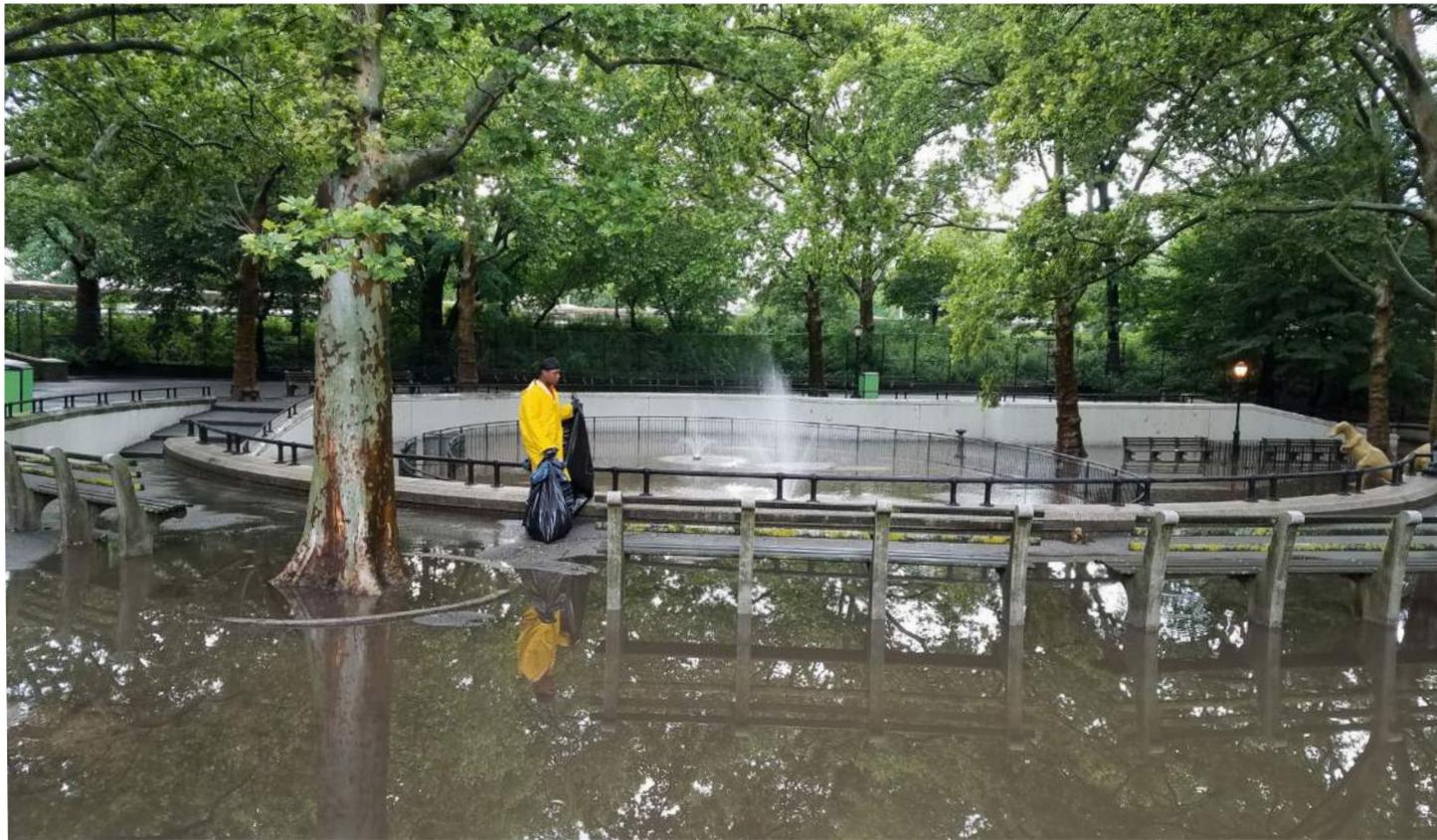


1 - Existing defunct gymnastic hoops in the area of sinkhole
Area Currently Closed

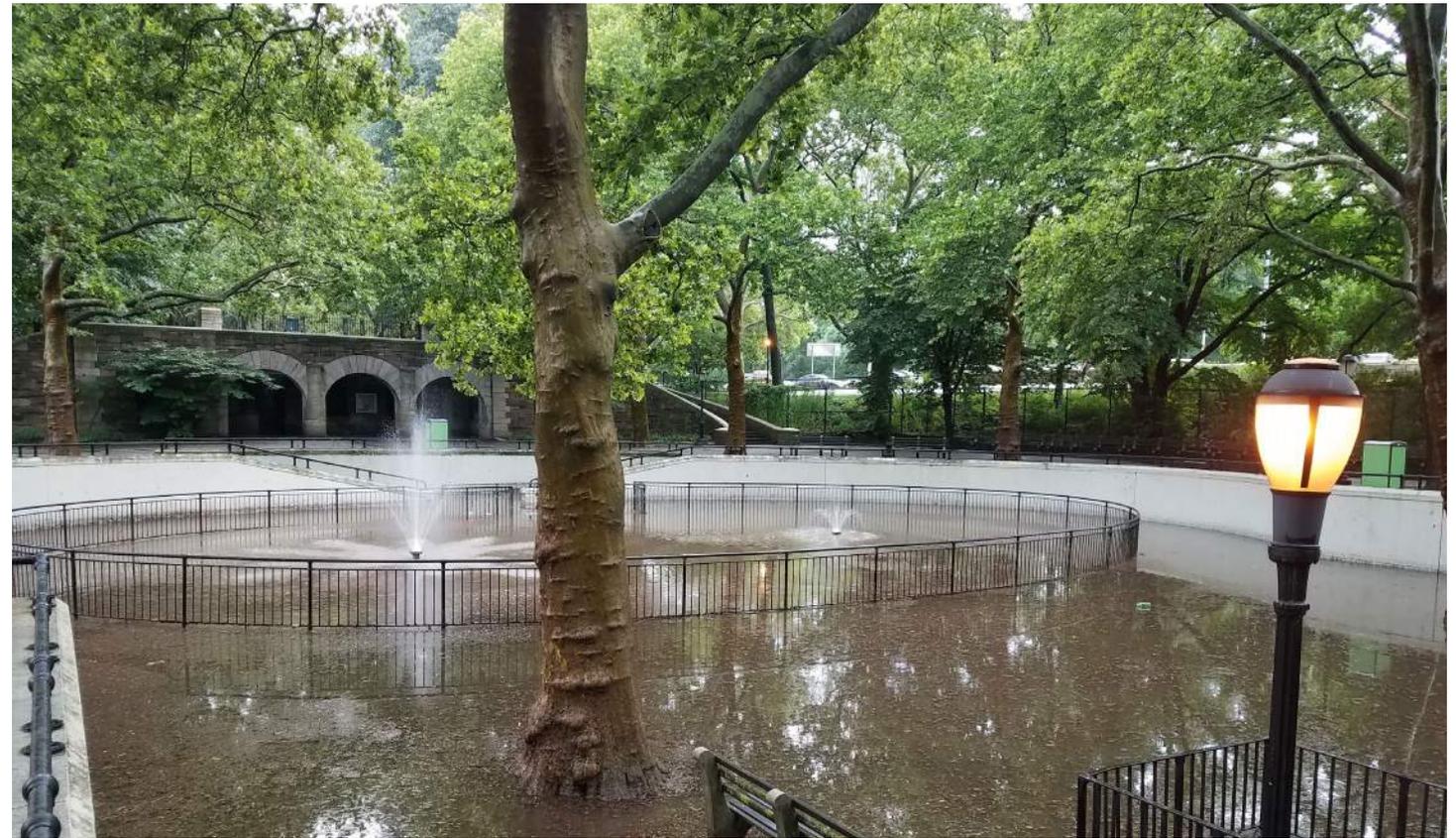


2 - Existing Sinkhole at North Side of Playground

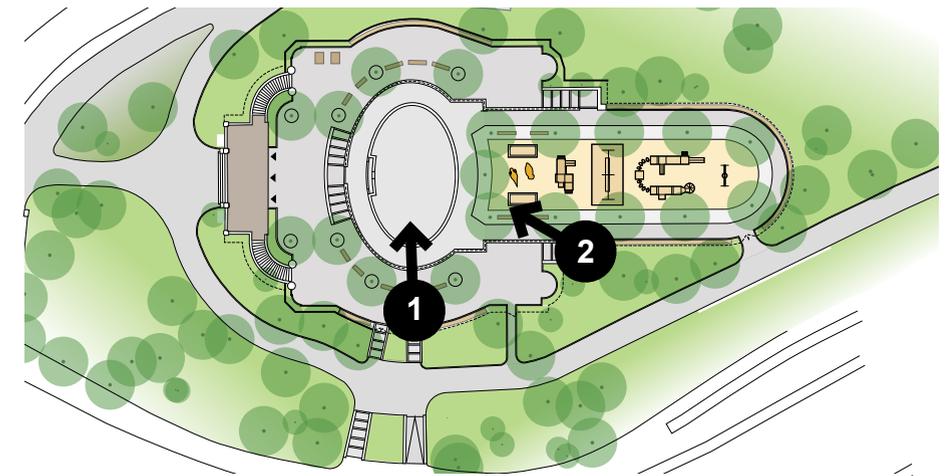




1 - Extreme Flooding at Middle Terrace Seating Area



2 - Extreme Flooding at Water Play and Play Areas at Lower Level

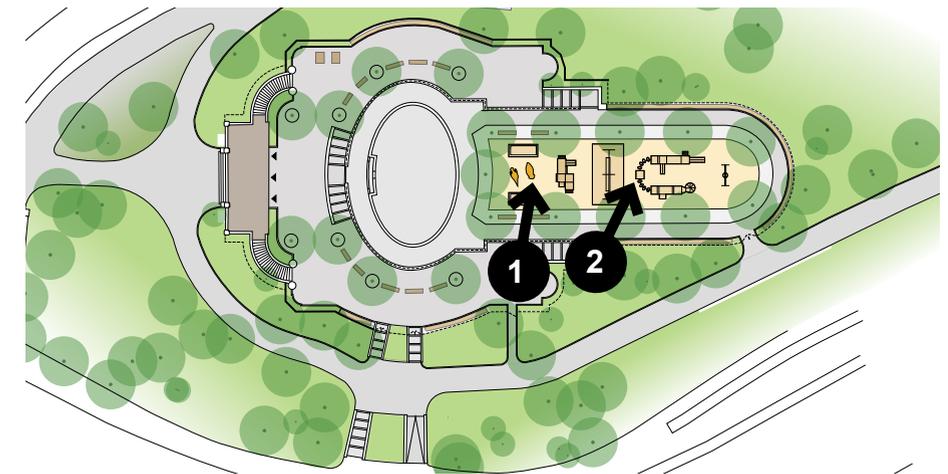




1 - Extreme Flooding at Sand Box and Dino Play Area

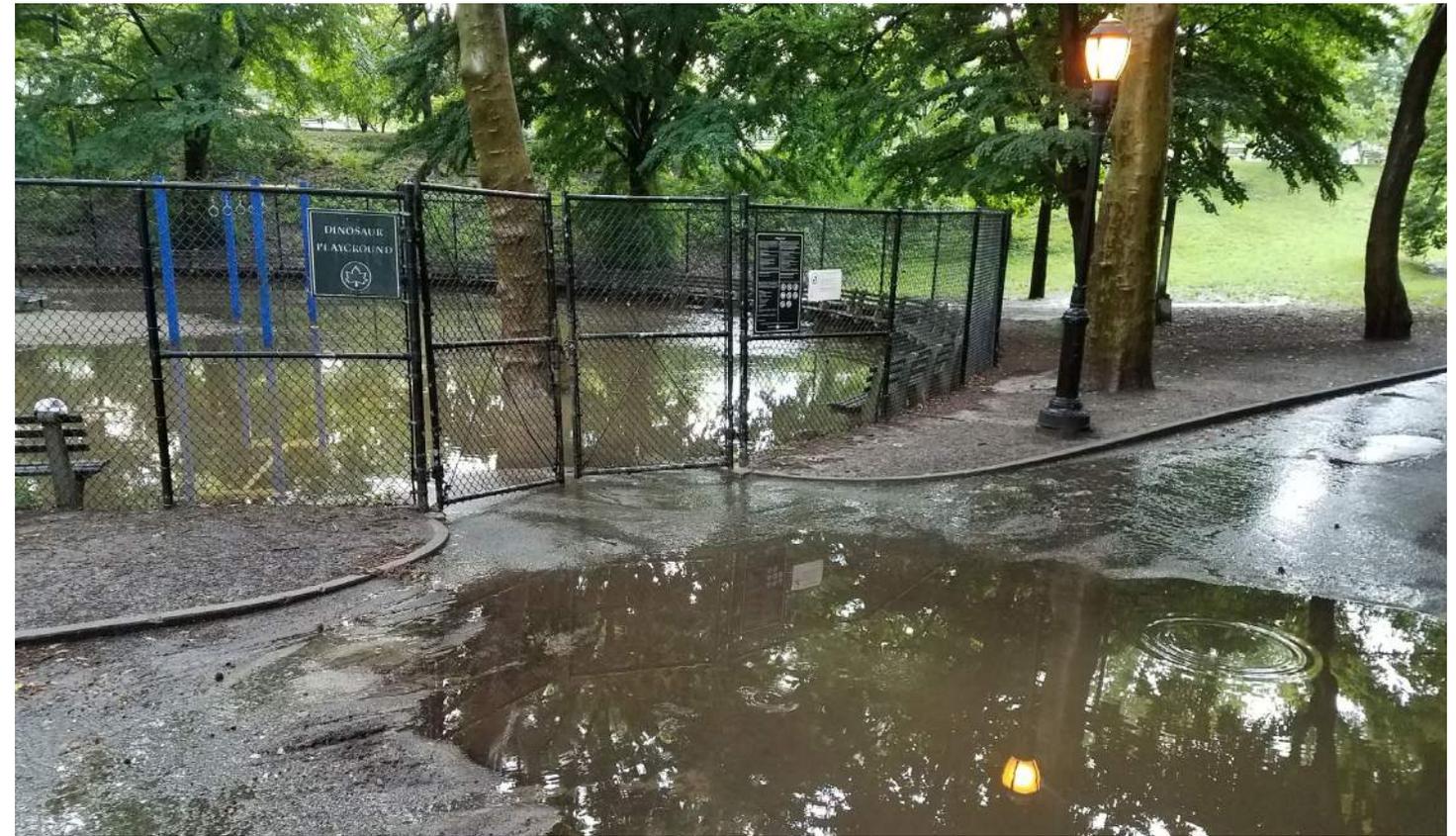


2 - Extreme Flooding at Lower Play Area

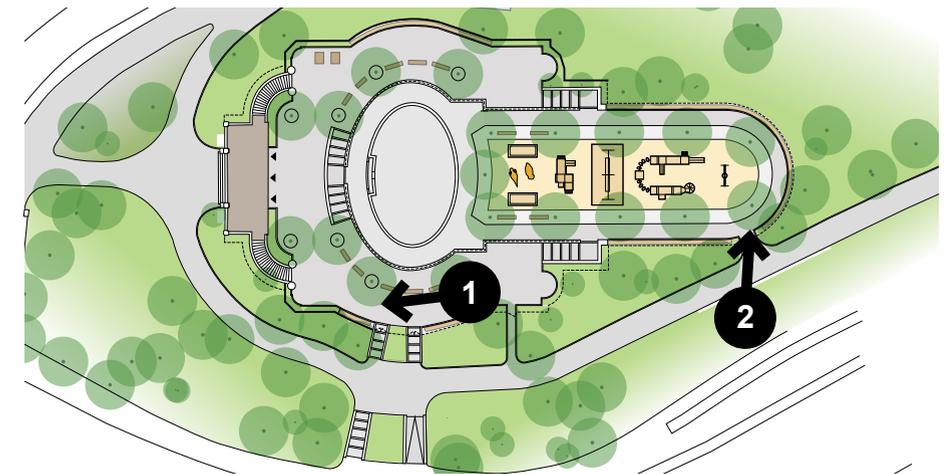




1 - Typical Flooding at Middle Terrace Entrance



2 - Extreme Flooding within Playground and Typical Flooding at North Entrance



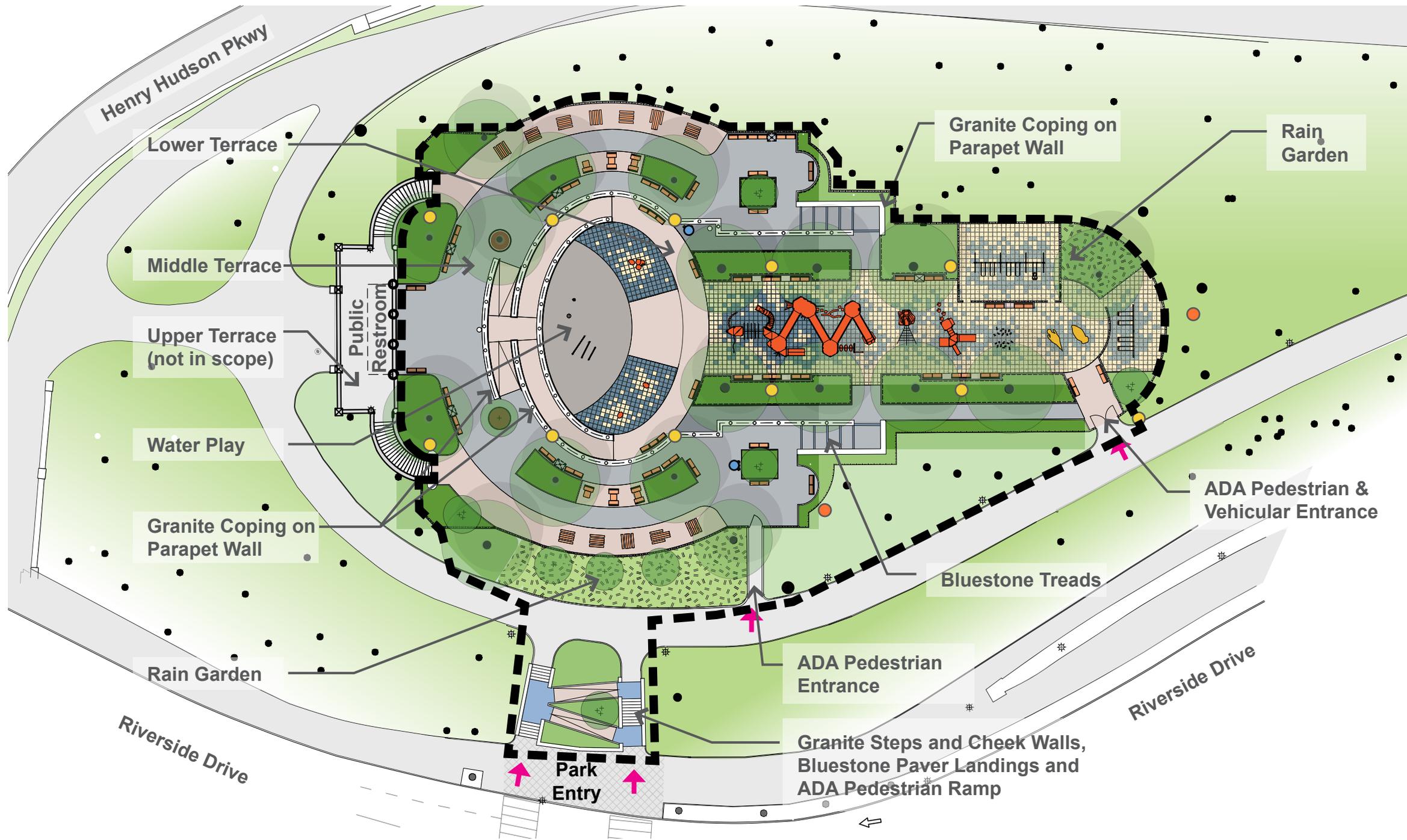
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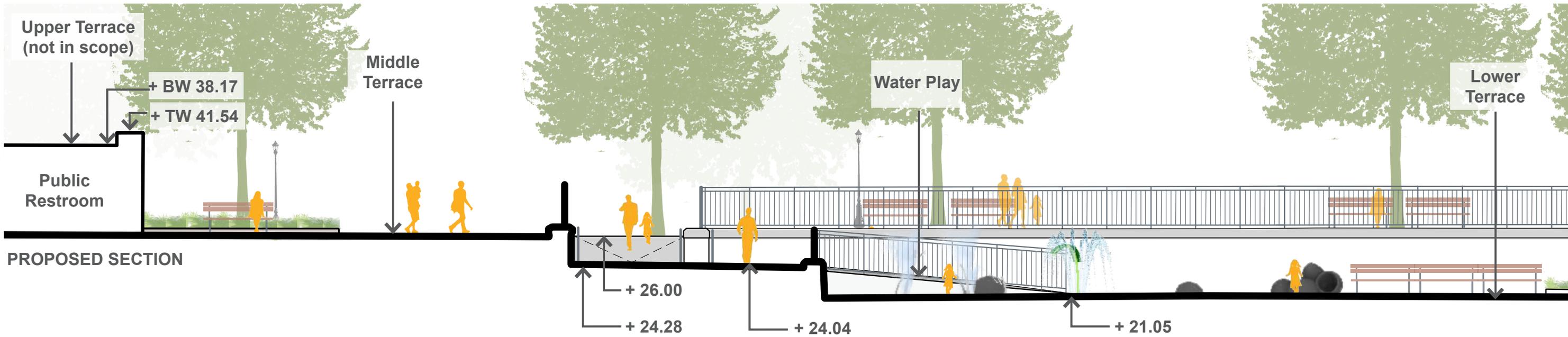
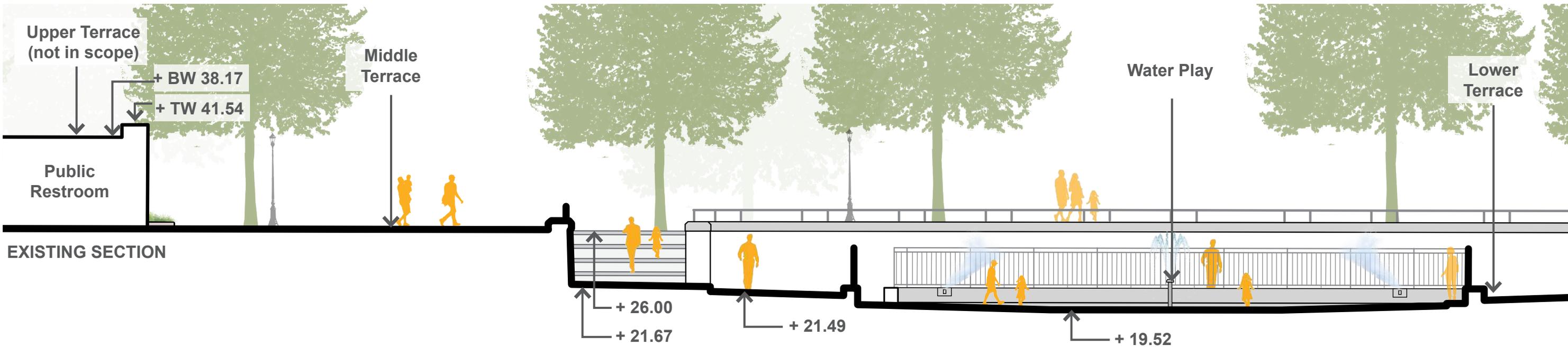
Dinosaur Playground | Site Photos

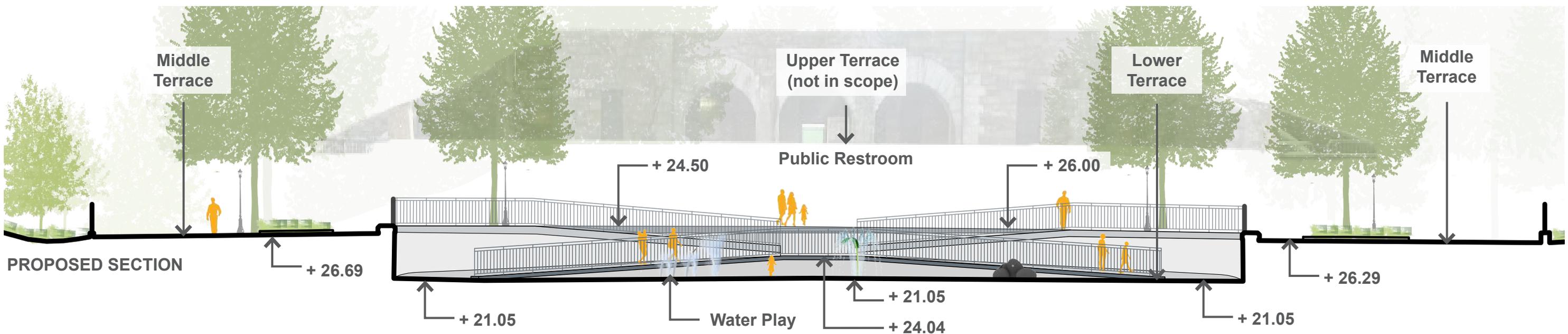
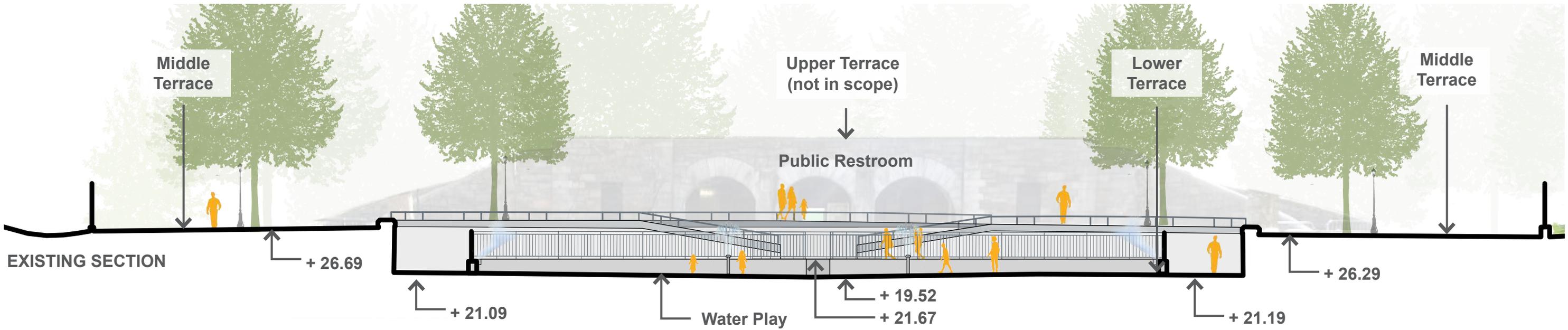




Legend

-  Project Limit
-  Park Entrance
-  Existing Tree
-  Proposed Tree
-  Existing Asphalt Pavement
-  Asphalt Pavement
-  Concrete Pavement
-  Colored Concrete
-  Asphalt Block Hex Pavers
-  Bluestone Pavers or Treads
-  Safety Surface
-  Planted Beds
-  Rain Garden
-  Parks Security Lighting
-  Parks Sports Lighting
-  Drinking Fountain or Bottle Filler







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Dinosaur Playground | Rendering



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Dinosaur Playground | Rendering



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Dinosaur Playground | Rendering



View North facing the Water Play



View South facing the Playground

Legend



Asphalt



Colored Concrete



Concrete



Safety Surface



White Concrete Wall & Coping



Metal Fence



Wicket Fence



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Dinosaur Playground | Perspectives - Proposed Fence, Ramp, and Walkway at Existing Parapet Walls



View West from Riverside Drive



View East towards Riverside Drive

Legend



Asphalt



Hex Pavers



Bluestone
Pavers



Concrete



Granite Steps, Curbs
and Cheek Walls



Handrailing



Metal Fence

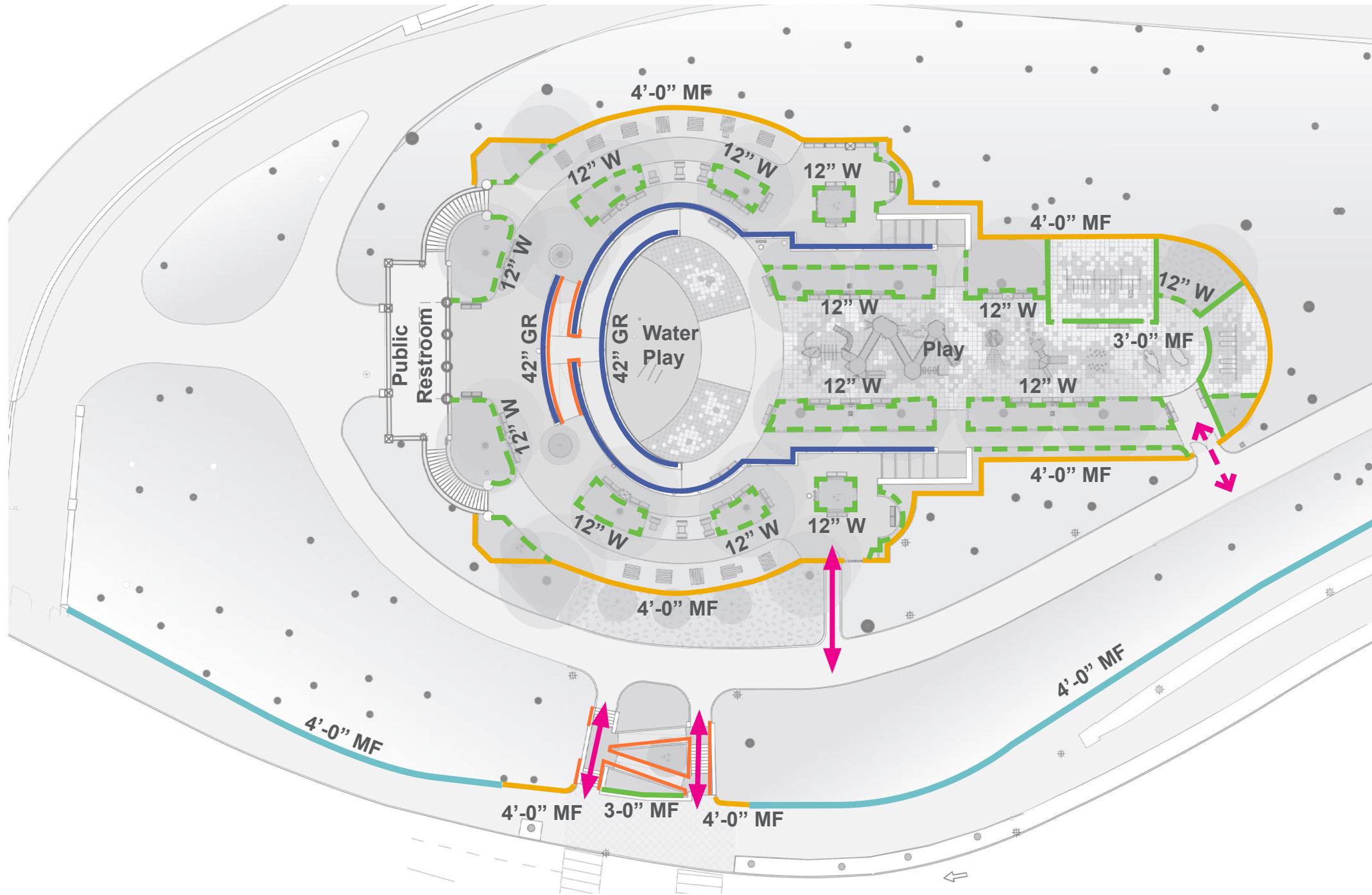


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Dinosaur Playground | Perspectives - Proposed Riverside Drive Stairs and Ramps



LEGEND

RAILING

34" HANDRAIL

42" GUARDRAIL

MEDIUM/ PERIMETER FENCES

4'-0" METAL FENCE

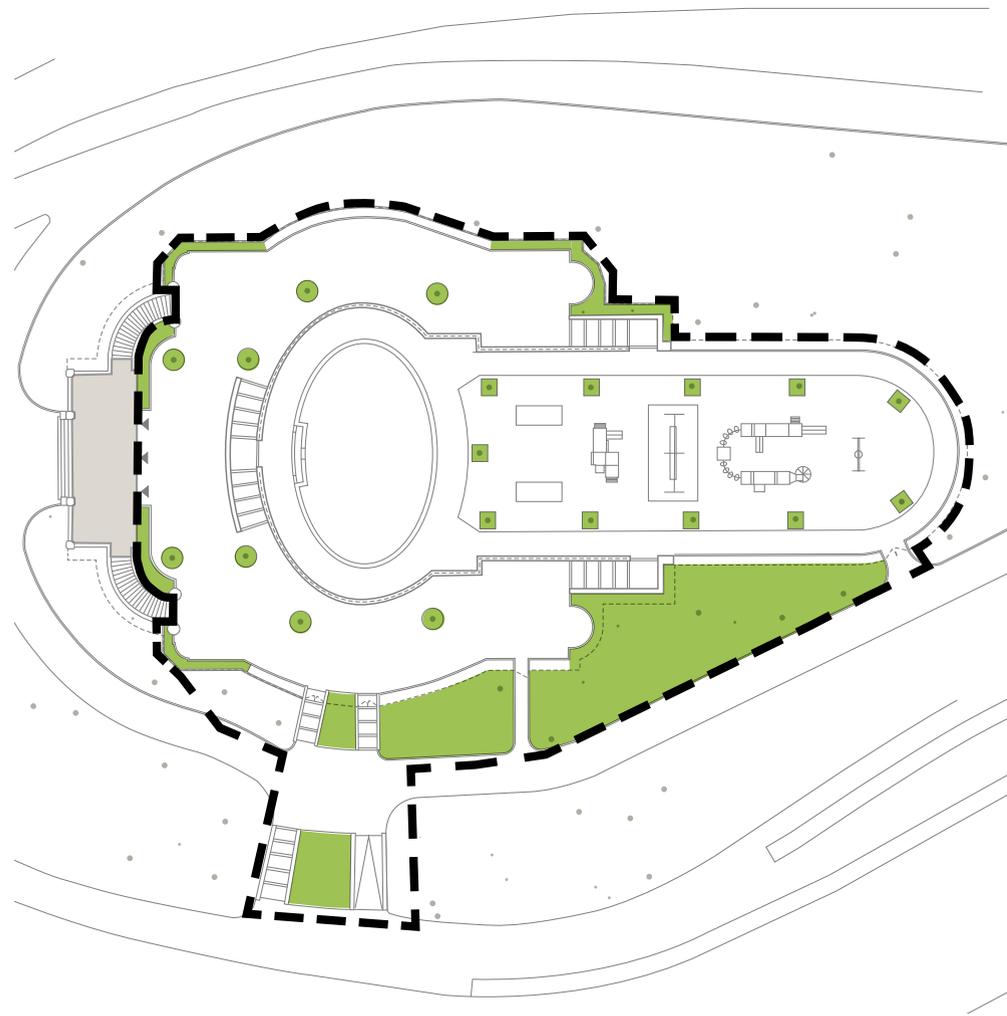
LOW/ PLANTING FENCES

3'-0" METAL FENCE

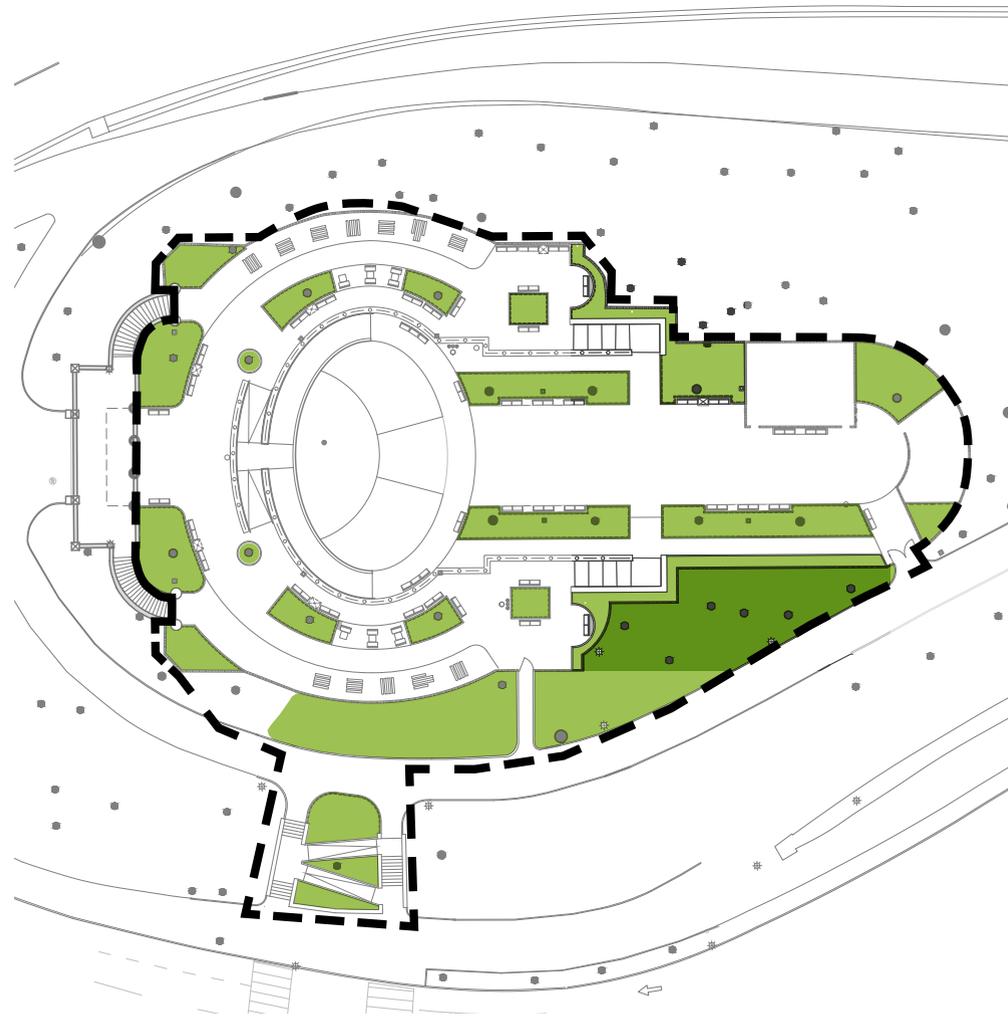
12" WICKET

EXISTING LOW/ PLANTING/
HANDRAIL FENCES

x'-x" METAL FENCE



Existing Permeability: 16%



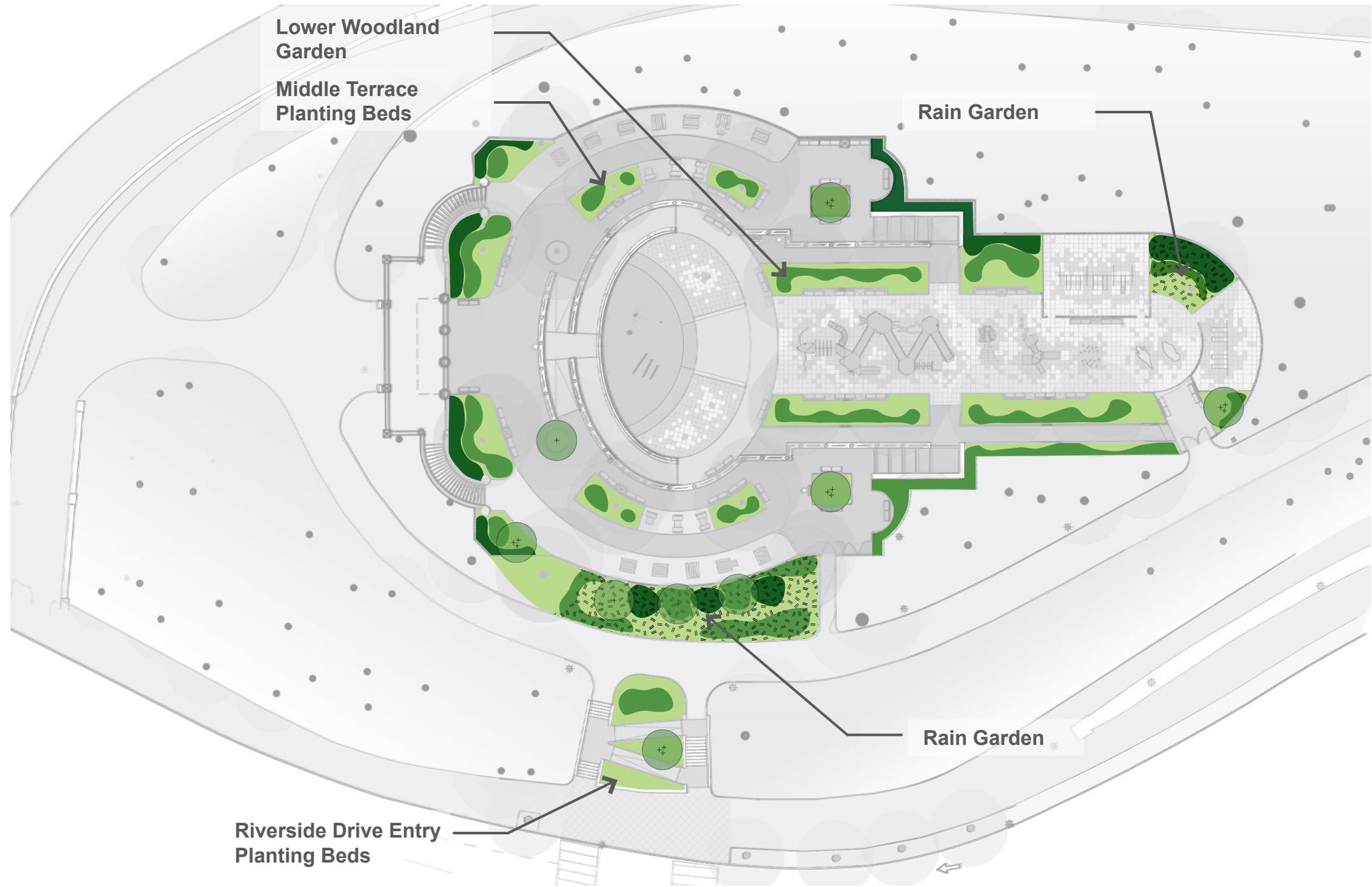
Proposed Permeability: 35%

LEGEND

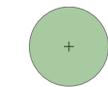
-  Planting Bed or Tree pit

SUSTAINABLE PRACTICES

- Reduce storm water runoff with RainGardens
- Balance cut and fill
- Use recycled content material
- Improve tree health and growing conditions
- Use site appropriate resilient plant material



LEGEND

-   Proposed Small Tree
-  Tall Shrubs
-  Medium Shrubs
-  Groundcover
-  Rain Garden



Platanus x acerifolia
London Plane Tree



Crataegus crus-galii var. inermis
Thornless Cockspur Hawthorn, Multistem



Cornus kousa
Kousa Dogwood, Multistem



Itea virginica
Virginia Sweetspire



Prunus laurocerasus 'Otto Luyken'
Cherry Laurel



Fothergilla x intermedia 'Mount Airy'
Fothergilla 'Mount Airy'



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Dinosaur Playground | Middle Terrace and Riverside Drive Entry - Plant Palette



Hydrangea quercifolia 'Sike's Dwarf'
Oakleaf Hydrangea



Carex pensylvanica
Pennsylvania Sedge



Pachysandra procumbens
Allegheny Spurge



Amelanchier lamarckii
Serviceberry, Multistem



Prunus laurocerasus 'Otto Luyken'
Cherry Laurel



Rhus aromatica 'Gro-Low'
Fragrant Sumac



Polystichum acrostichoides
Christmas Fern



Dennstaedtia punctilobula
Hay-Scented Fern



Brunnera macrophylla
Siberian Bugloss



Asplenium scolopendrium
Hart's-tongue fern



Pachysandra procumbens
Allegheny Spurge



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Dinosaur Playground | Lower Woodland Garden - Plant Palette



Taxodium distichum var. distichum
Bald Cypress



Ilex verticillata 'Jim Dandy'
Common Winterberry



Ilex verticillata 'Nana' RED SPRITE
Common Winterberry



Ilex glabra 'Shamrock'
Inkberry



Comptonia peregrina
Sweetfern



Heuchera villosa 'Autumn Bride'
Hairy Alum Root



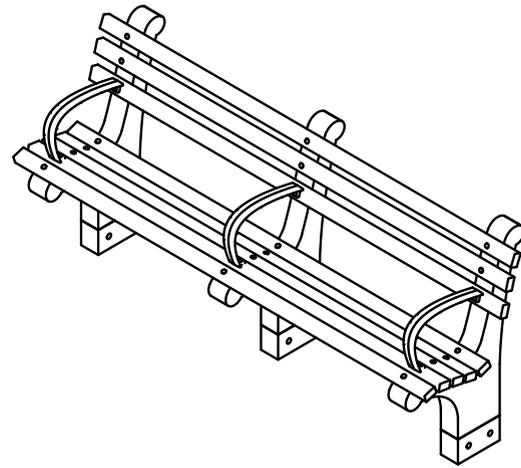
Carex blanda
Common Wood Sedge



Asarum canadense
Wild Ginger



Concrete Type 'B' Bench with Armrests



Concrete Type 'B' Bench with Armrests - Axonometric



Concrete Type 'B' Bench w/o Armrests at Game Tables



Concrete Game Table with Steel Post



Finish of Picnic Tables and Benches, Typ.
Wood Slats:
Kebonized Radiata Pine



Wooden Picnic Tables, Accessible and Regular



Type B Pole With Riverside Luminaire



Bottle Filler
Color: Black



Drinking Fountain- Type "E" HI-LO
Color: Black



Trash Receptacle, Big Belly



NYC Parks



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Dinosaur Playground | Site Materials



Asphalt Block Hex Pavers to match Existing at Riverside Drive



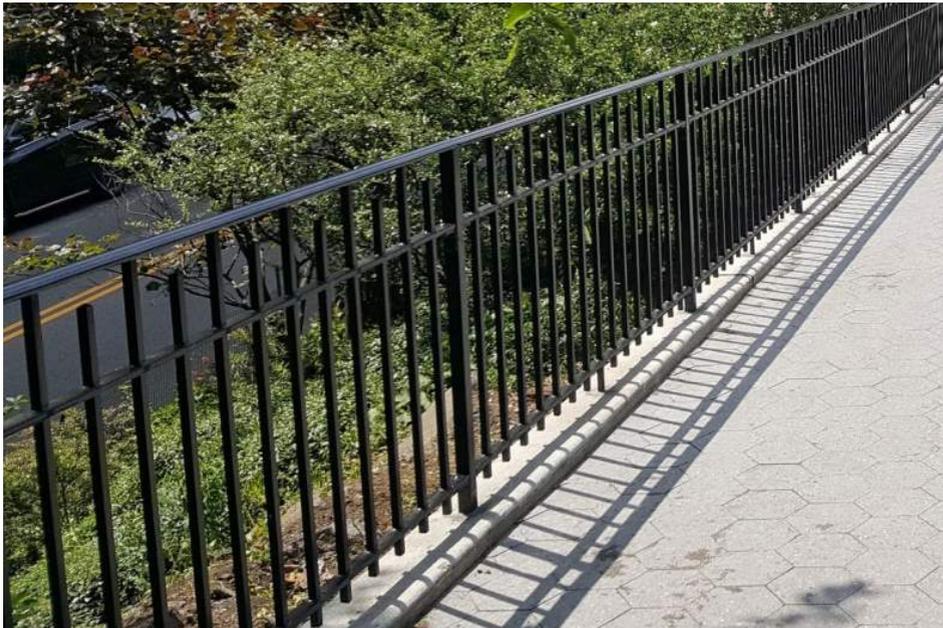
Asphalt Pavement



Colored Concrete Pavement Color: French Gray



Natural Concrete



Steel Fence, 4ft high at Perimeter, 3ft high at Swings



Wicket Steel Fence with Granite Block Edging, 12in high with 2in reveal



NYC Parks



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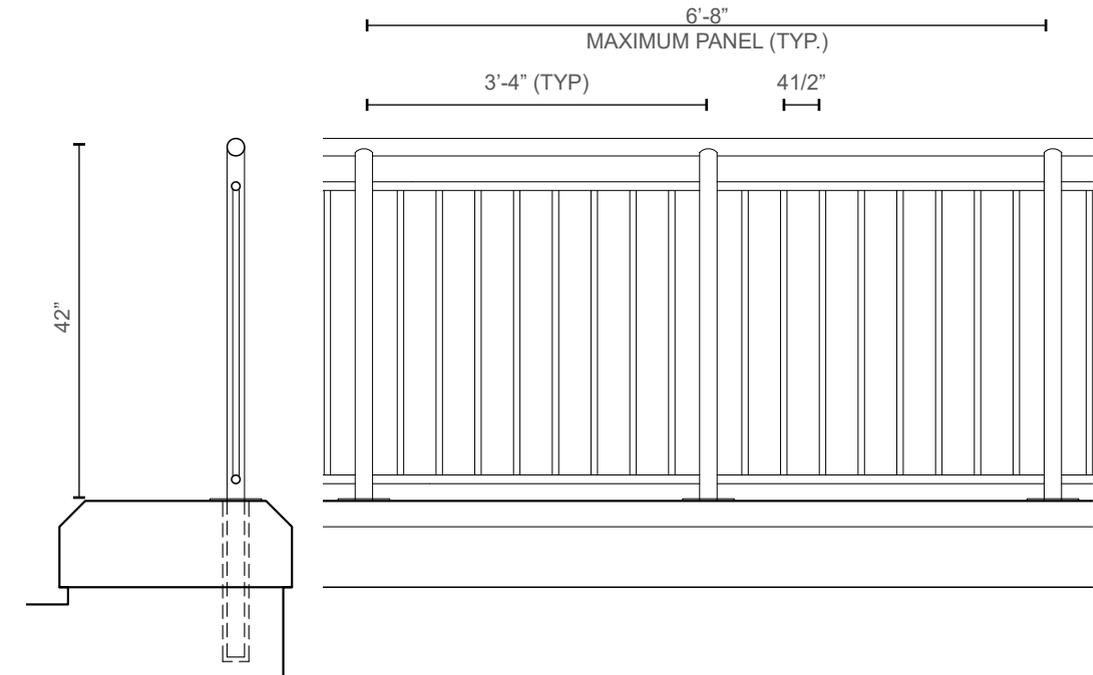
Dinosaur Playground | Site Materials



Raise Existing 12" ht Pipe Railing on Existing 12" ht Parapet wall to compliant height



Existing 42" ht Fence on Wall at Water Play Area



New 42" Railing on Existing 12" ht Parapet wall, Single Posts



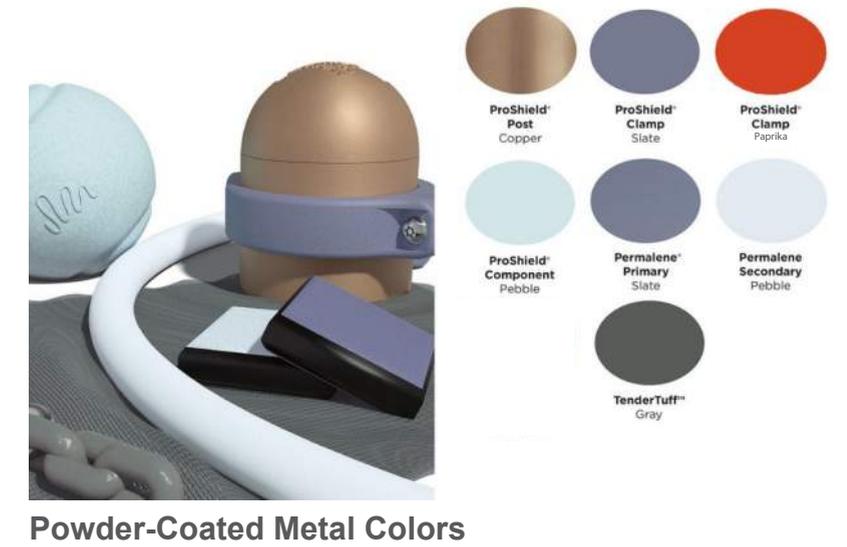
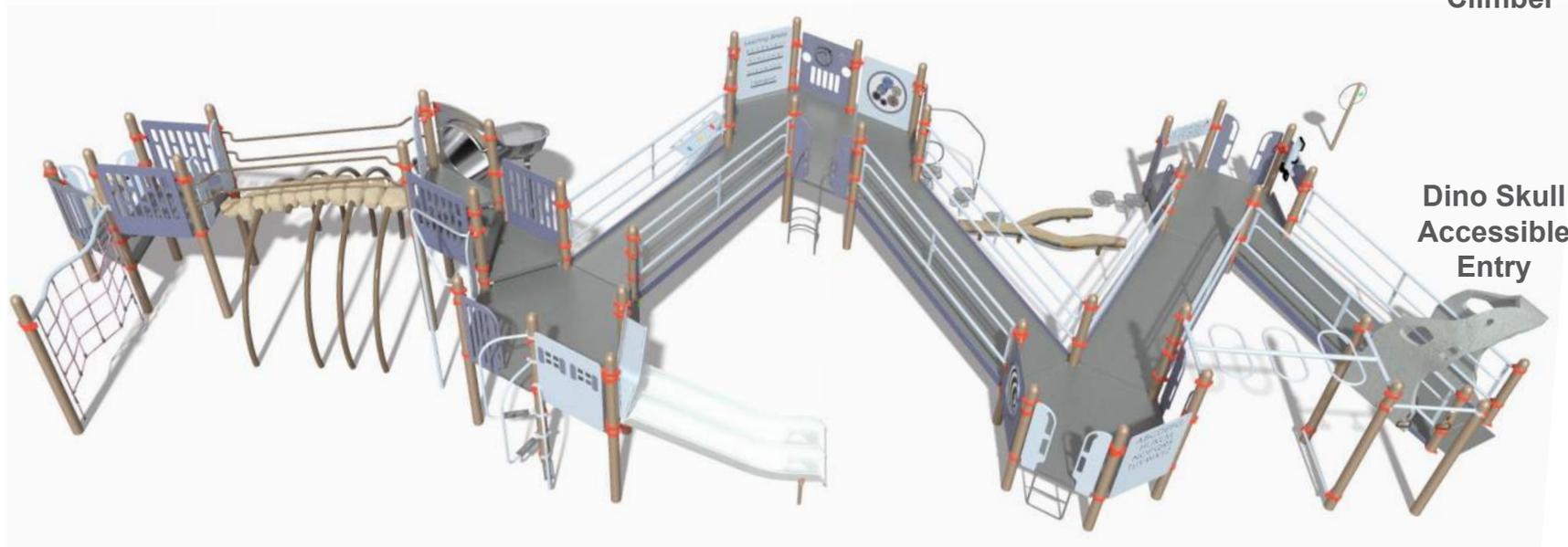
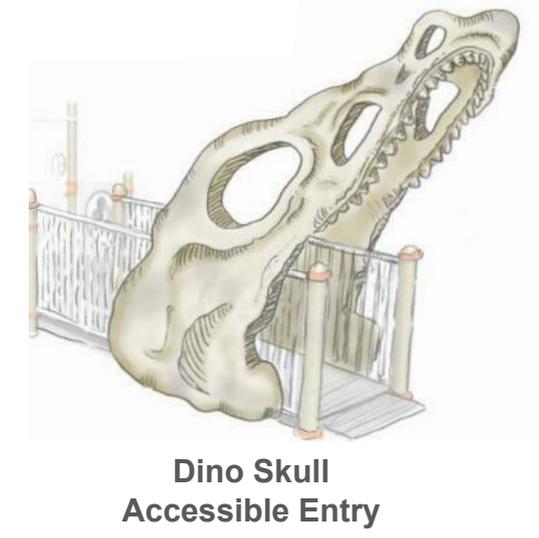
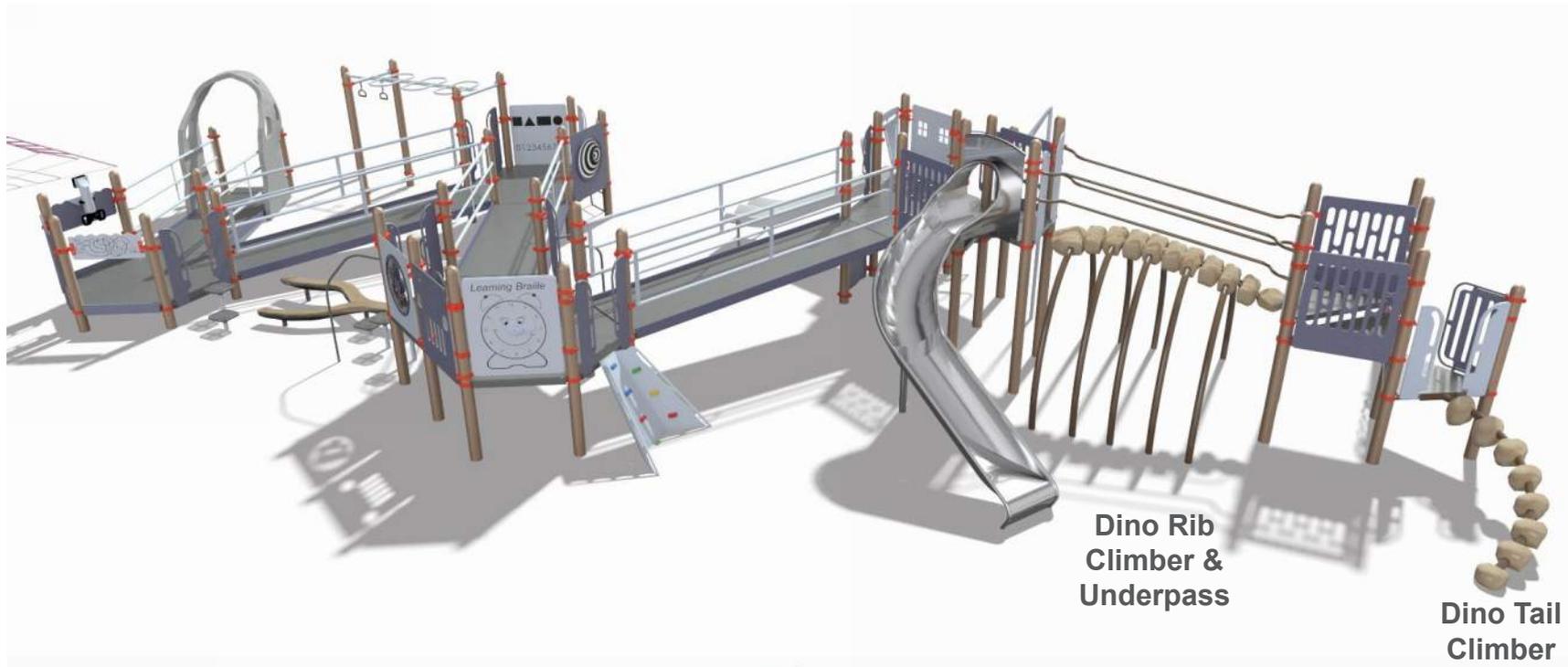
Replace Granite Curb, Bluestone Paver Landings and Granite Stair Treads at Riverside Dr Entry



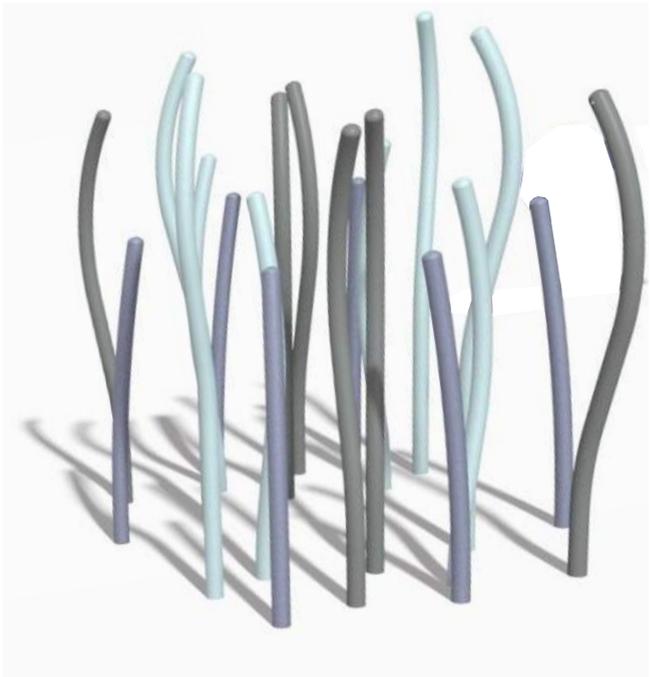
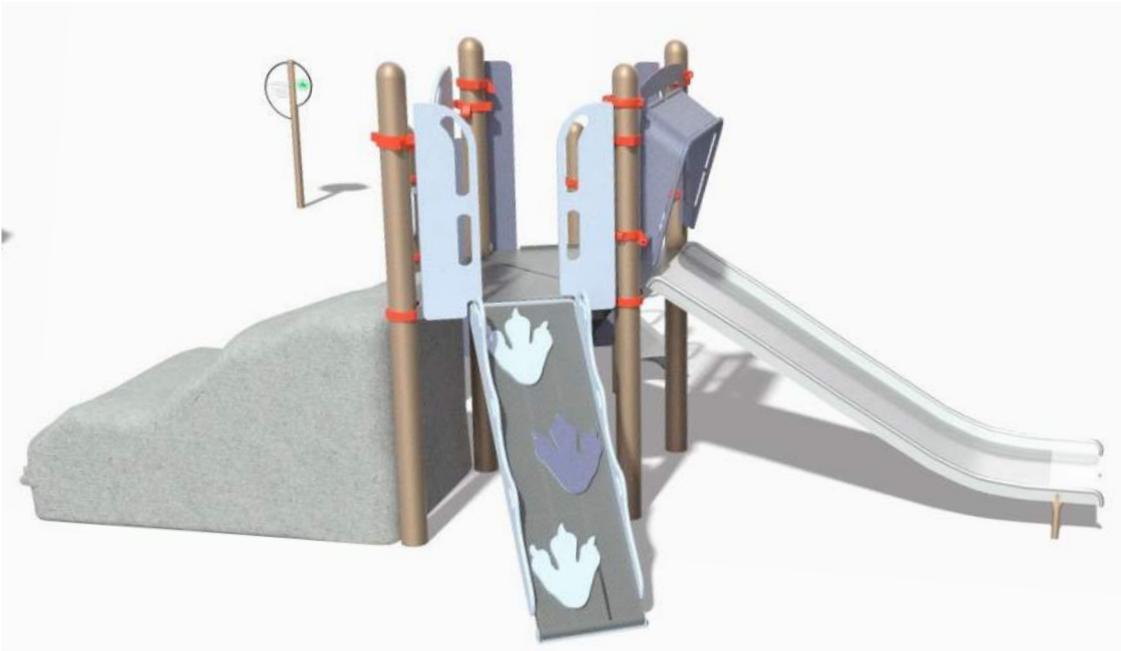
Replace-in-Kind Wall Coping as required



Sand Texture in a Medium Density Appearance, Painted White, For Inner Face of New and Parapet Wall



Overall Play Equipment (5-12)



“Forest” Cluster of Posts



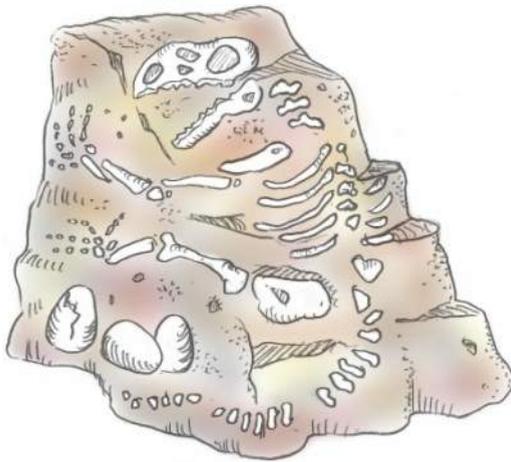
Play Panels at Swing Fence



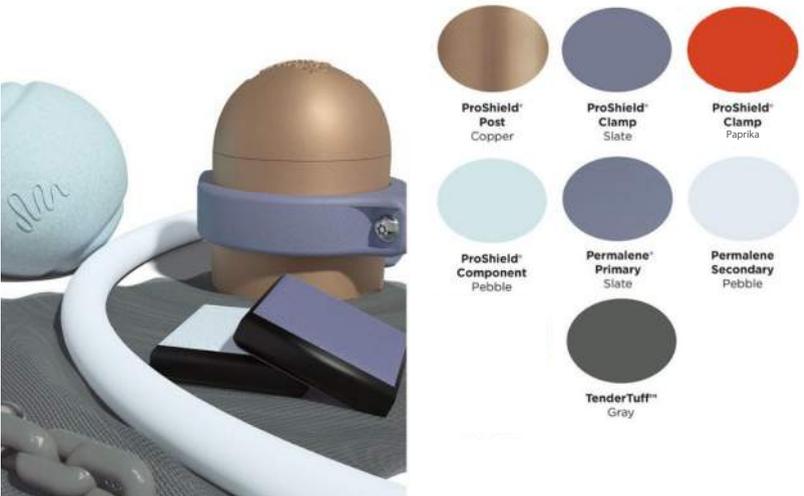
Overall Play Equipment (2-5)



Dino Footprints



Dino Fossil Climber



Powder-Coated Metal Colors

Water Play - Total 25 GPM



WhirlFlex - SM, MD, LG loops
Color: White



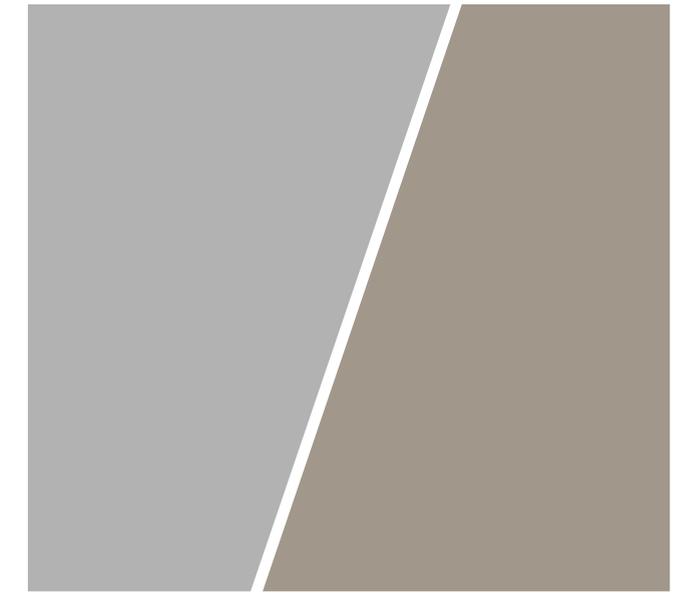
Side Wall Stream Jet x 3
on south ramp wall



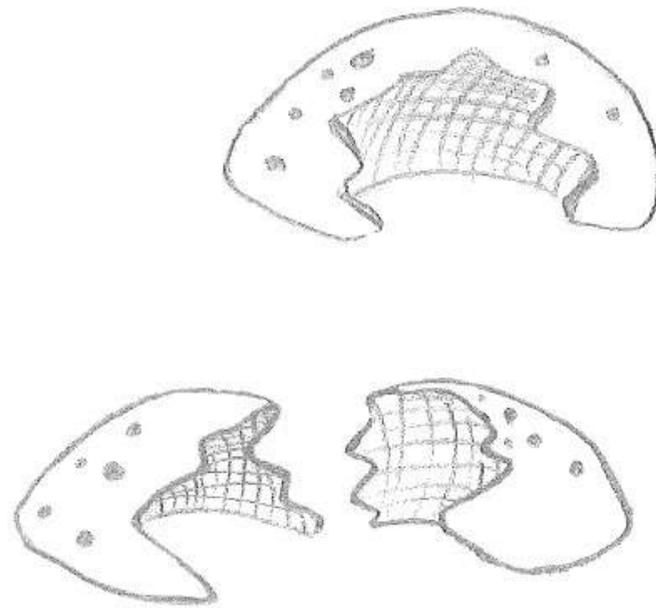
Misting Palm x 1
Color: Limon/Leaf



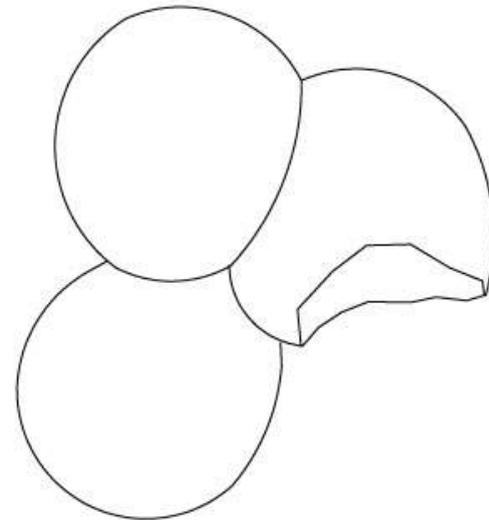
Hydrologix Activator
Color: Green



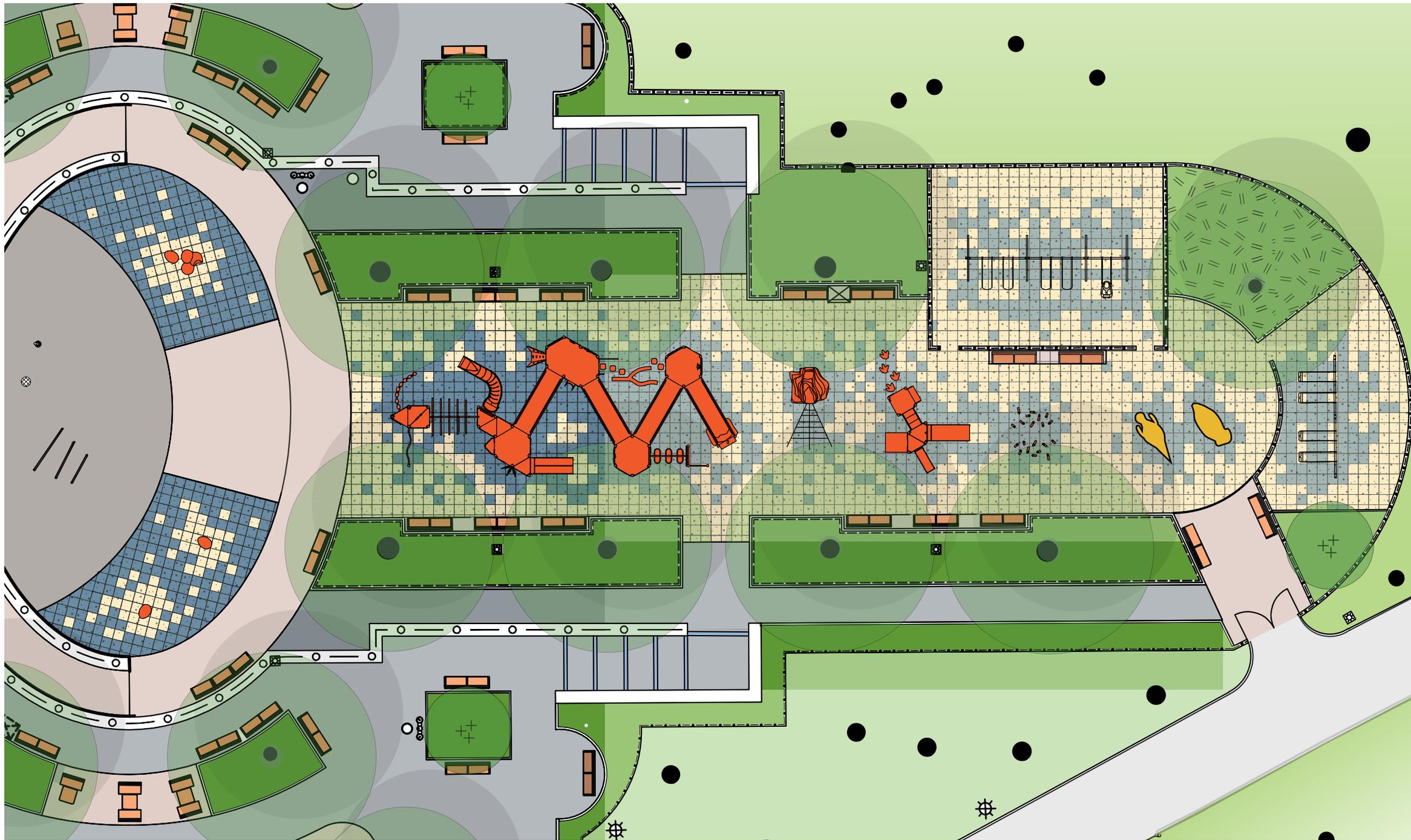
Colored Concrete Pavement
Color: Natural (uncolored) and French Grey



Dry Play (Concept Sketches)



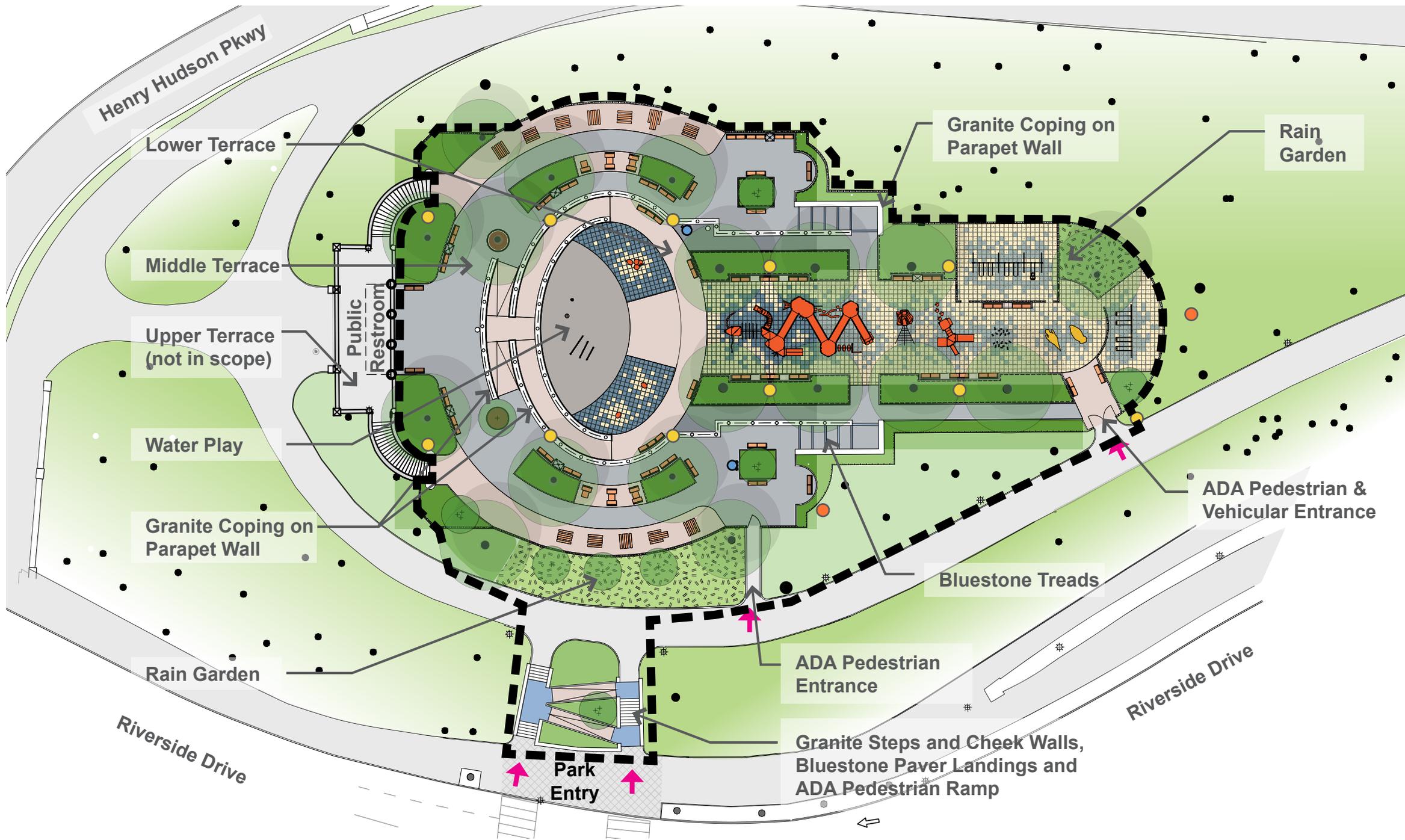
Play Eggs - Sensory, Quiet, Cozy



Safety Surface Material:
Bonded Rubber Crumb Tiles
Colors: 60% Beige
20% Azure Blue
20% Black



Safety Surface Material:
Bonded Rubber Crumb Tiles
Colors: 60% Azure Blue
20% Beige
20% Black



Legend

- Project Limit
- Park Entrance
- Existing Tree
- Proposed Tree
- Existing Asphalt Pavement
- Asphalt Pavement
- Concrete Pavement
- Colored Concrete
- Asphalt Block Hex Pavers
- Bluestone Pavers or Treads
- Safety Surface
- Planted Beds
- Rain Garden
- Parks Security Lighting
- Parks Sports Lighting
- Drinking Fountain or Bottle Filler