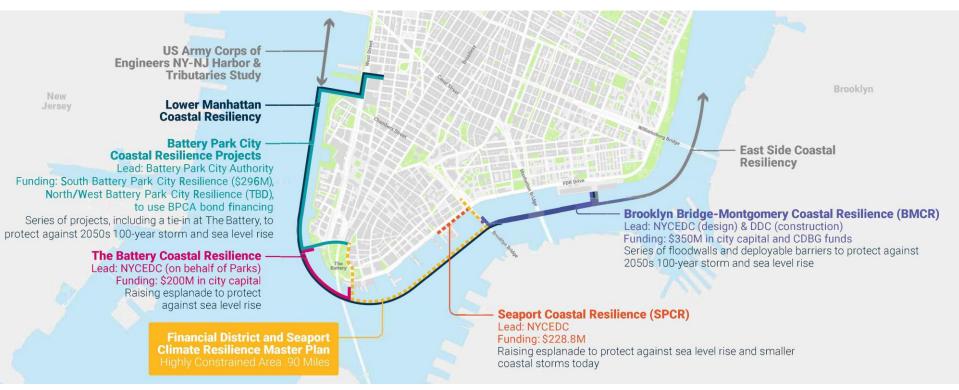


Agenda

- Overall LMCR Update
- Project Updates
 - BPCA Projects
 - Battery Coastal Resilience
 - Fidi/Seaport Master Plan
 - Seaport Coastal Resilience
 - BMCR

In Lower Manhattan, the City, State, and Federal governments have committed over \$1.7B in capital investments for climate adaptation projects. The Financial District and Seaport Climate Resilience Master Plan will fill a missing link in Lower Manhattan's comprehensive flood defense infrastructure.





CB1 | July 2023

Project Timelines

(Est. Dates as of March 2024)

Project	100% Design	Procurement	Construction Start	Construction Complete						
					'23	'24	'25	'26	'27	'28
Brooklyn Bridge- Montgomery Coastal Resilience	Complete	Complete	Underway	Fall 2026						
South Battery Park City Resiliency	Complete	Complete	Underway	Early/Mid 2025						
The Battery Coastal Resilience	Complete	Underway	Underway	Summer 2026						
North/West Battery Park City Resiliency	April 2024	Complete	Early 2025	Early/Mid 2028						
Seaport Coastal Resilience	Early 2026	Late 2025	Early 2026	Early 2028						
FiDi-Seaport Master Plan	Underway	TBD	TBD	TBD						



- 1. Reach 2 Updates
- 2. Reach 3 Updates
- 3. Reach 4 Updates

Reach 2 Updates



Reach 2 Design Goals

URBAN DESIGN / ENVIRONMENTAL CONTEXT

GOALS:

MAINTAIN UNIVERSAL ACCESSIBILITY

MAXIMIZE NUMBER OF TREES

PROTECT AS MANY TREES AS POSSIBLE AT TRIBECA POINT PLANTER

MAINTAIN ADAQUATE SOIL DEPTHS

MAINTAIN 20' FREE AND CLEAR PATHWAY

ESTABLISH MATERIAL DIFFERENCE FOR SECONDARY PATHWAY AND OCCUPABLE AREAS

SUMMER SEASON -- PROVIDE SHADE COOL SPACES FOR OCCUPATION AND CIRCULATION

WINTER SEASON -- EXPAND WIND BREAKS AND

CITY POINT / STUYVESANT HIGH SCHOOL

CONSIDERATIONS:

LIMIT THE NUMBER OF SEATING OPPORTUNITIES IMEDIATLY ADJACENT TO BUILDING





Reach 2 | 40% Plan

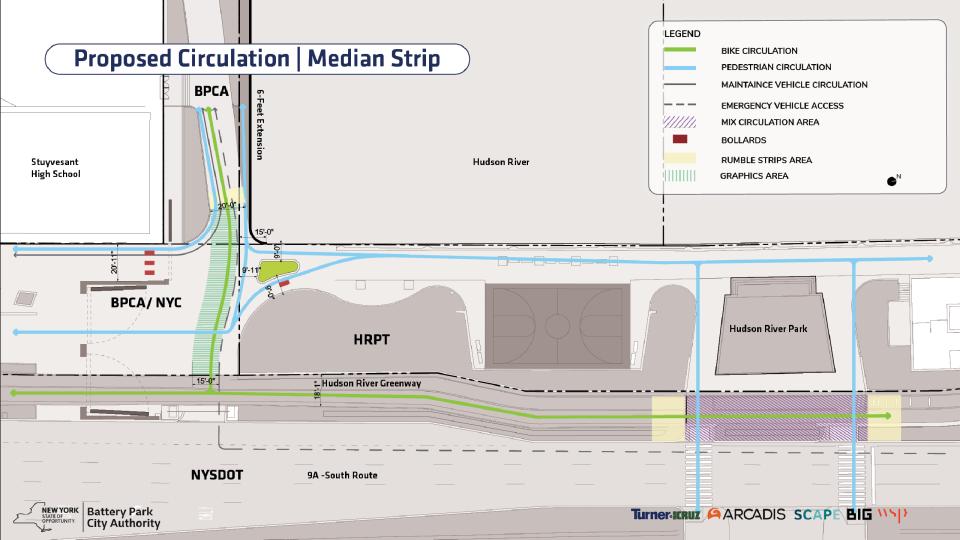


Reach 2 | 40% Plan



Reach 2 | Updated Plan

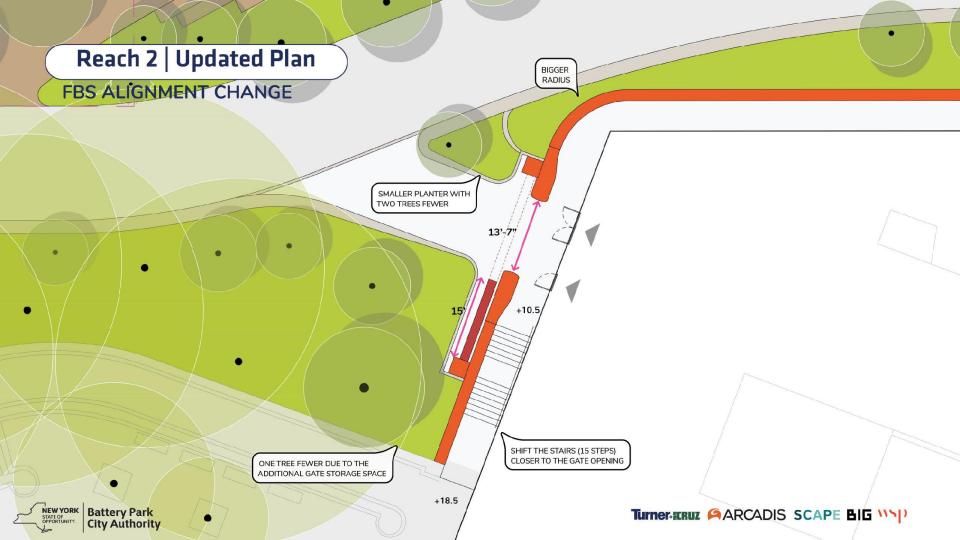




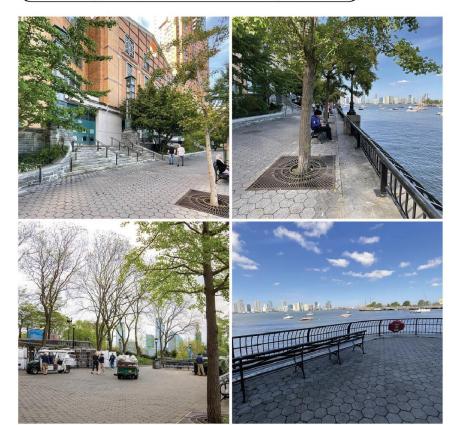
Reach 2 | CIRCULATION







Existing Palette - North Esplanade









Brick Facade



BPC Railing



Type B Light Pole



Hex Paver







New Palette - North Esplanade













Type B Light Pole

Hex Paver







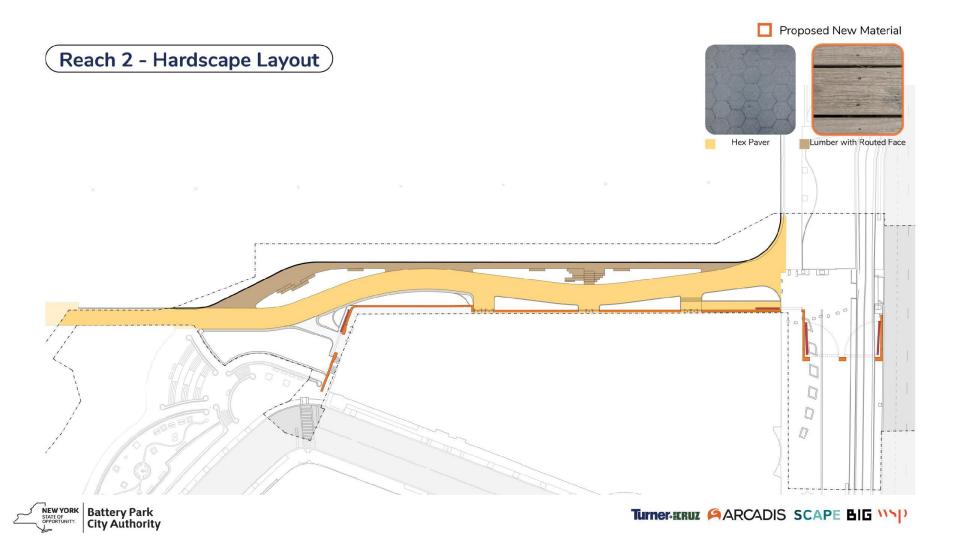
Granite Bollards

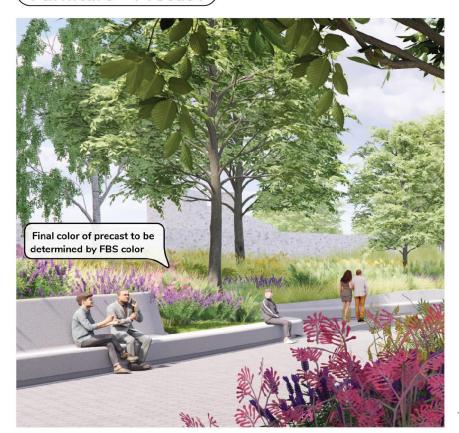


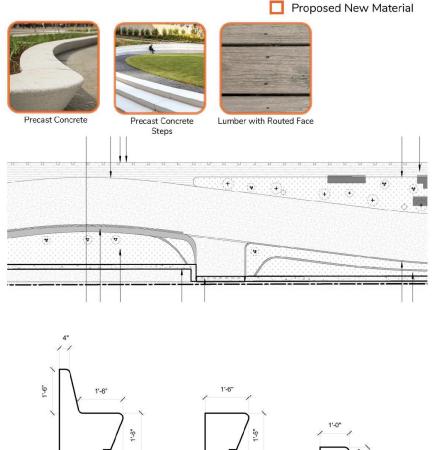




Precast Concrete Steps





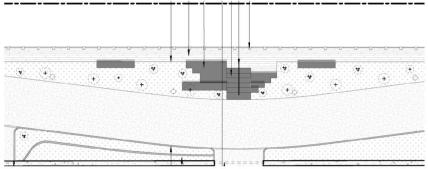


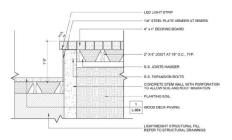
Furniture - Wood Elements





Lumber with Routed Face











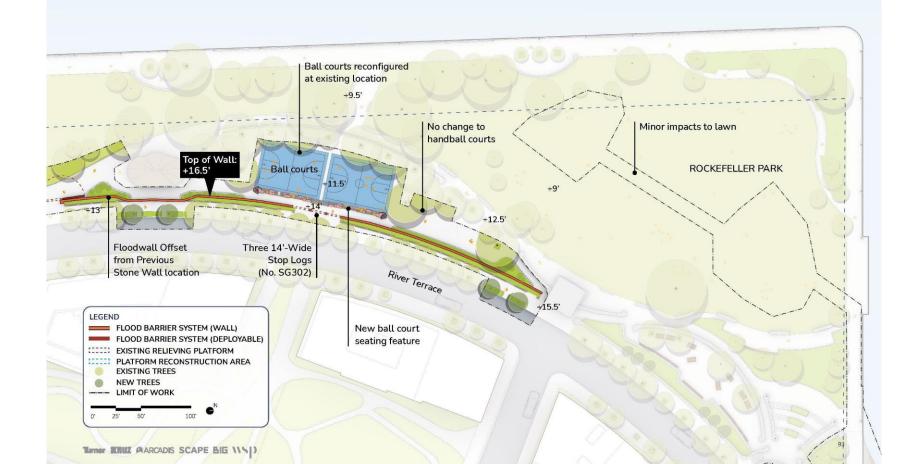


Reach 3 Updates

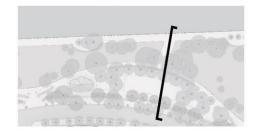


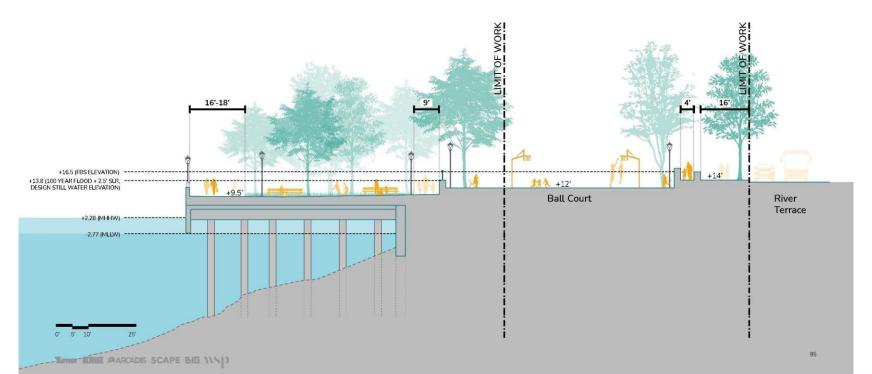


Rockefeller Park | Plan



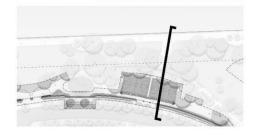
Ball Court | Section Existing

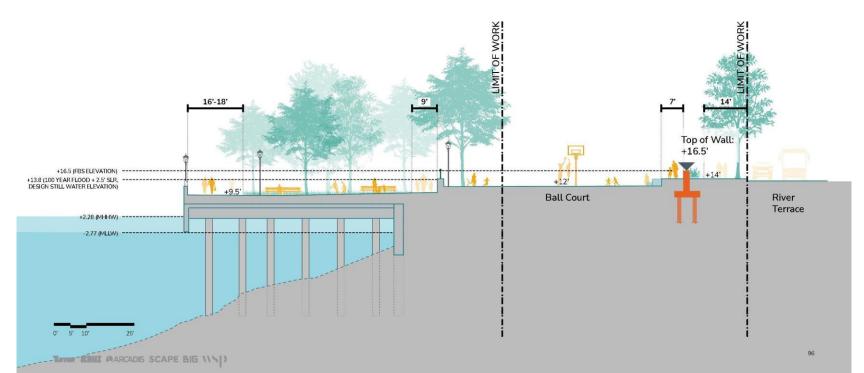




Ball Court | Section

Proposed





Existing Palette - Rockefeller Park



















Cobblestone

Stone Band

Demetri Pavilion Paver















Stone Wall









Concrete Benches

1939 World's Fair Bench

Plant Rail









Stone Balustrade

Proposed Palette - Rockefeller Park



















Cobblestone

Stone Band

Demetri Pavilion Paver















Stone Wall









1939 World's Fair Bench

Plant Rail









Precast Seating

Stone Edge



Proposed Paving

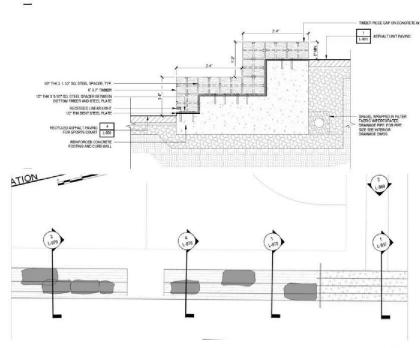






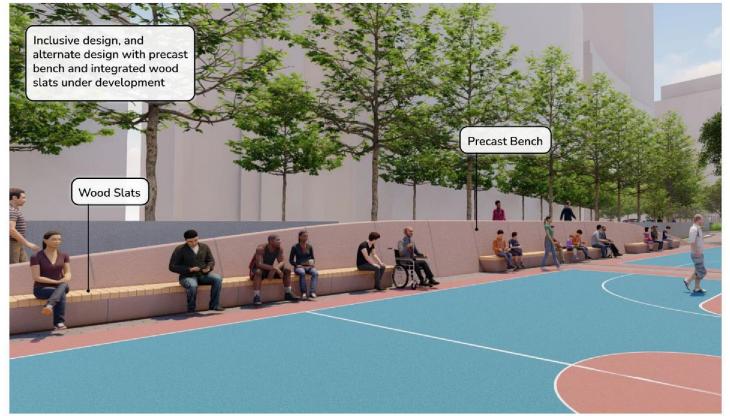
Ball Court Seating - 40% Design







Ball Court Seating - Design Development



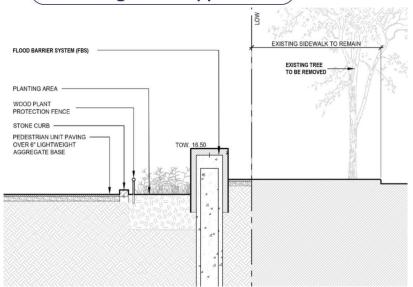


Precast Bench

RIVER TERRACE: OFFSET WALL APPROACH



FBS Alignment Approaches



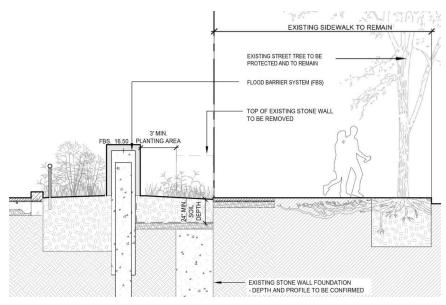
FBS wall follows existing wall footprint

Pros:

 No encroachment into park area

Cons:

- · Street trees will be removed
- Proximity to FBS will not allow for new trees to be planted
- Utilities in sidewalk will need to be relocated
- Removal of existing wall footing adds construction complexity



FBS wall shifted into the park

Pros:

- Minimizes tree impact to street trees (approx. 20 trees protected)
- If trees are impacted during construction, distance from FBS allows for new trees to be planted
- Avoids utility conflict
- Avoids removal of existing wall footing (reduced construction complexity)

Cons:

 Limited encroachment into Rockefeller Park

Flood Barrier System Follows Existing Wall Footprint: Tree Impact

Previously Propsed

LEGEND

--- LIMIT OF WORK

PROPOSED FLOOD BARRIER SYSTEM

IMPACTED TREE

TREES RECENTLY REMOVED

PROTECTED TREE



Flood Barrier System Shifted into the Park: Tree Impact

Updated Proposed Approach

LEGEND

--- LIMIT OF WORK

PROPOSED FLOOD BARRIER SYSTEM

IMPACTED TREE

NEW PROPOSED TREES

PROTECTED TREE

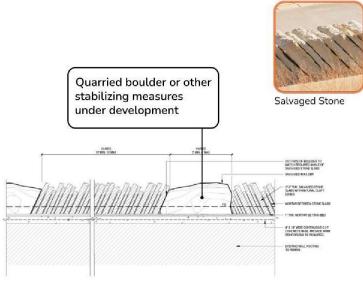


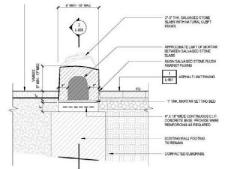




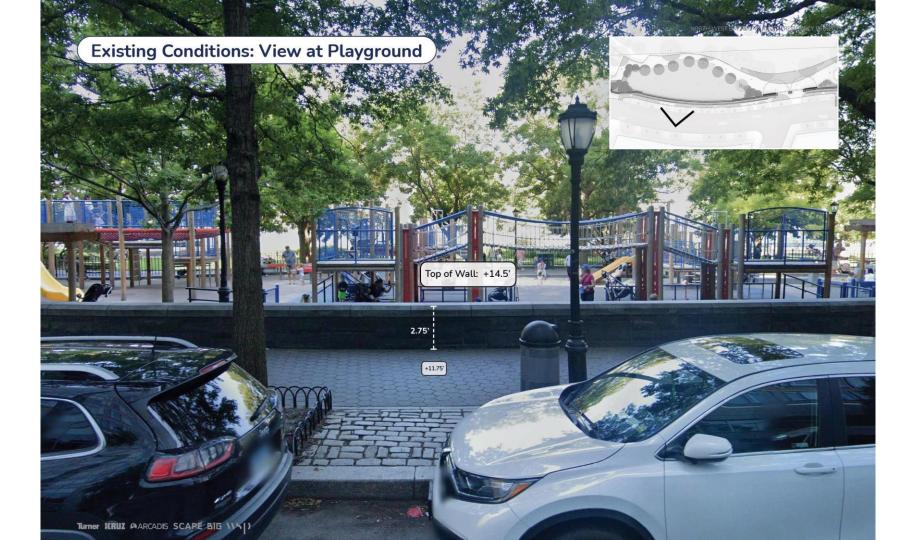
Salvaged Stone Edge







Proposed New Material

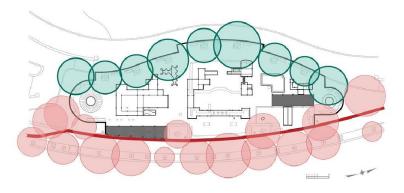






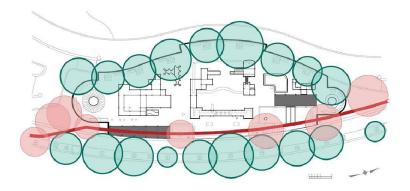
Comparison: Tree Impact

Non-Offset Wall



- 27 existing trees within playground vicinity
- 18 trees in total impacted by FBS:
 - 11 street trees
 - 7 playground trees

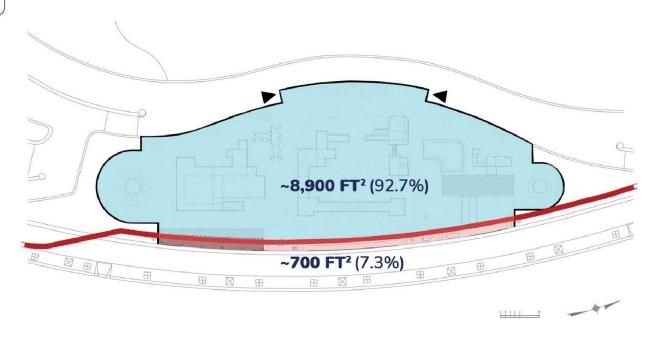
Offset Wall



- 27 existing trees within playground vicinity
- 8 trees in total impacted by FBS:
 - 1 street tree
 - 7 playground trees

Impact of Offset Alignment on Playground Footprint

LEGEND PROPOSED FBS AT OFFSET LOCATION USABLE AREA AREA LOST TO FBS



Offset Alignment with Expanded Footprint

LEGEND

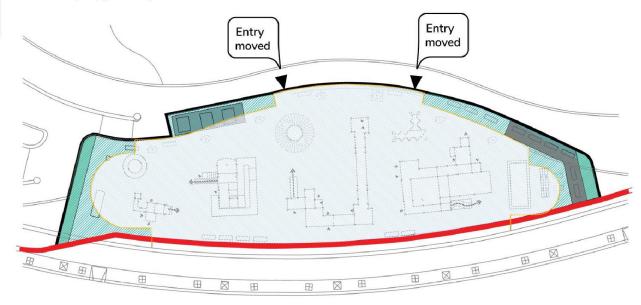
PROPOSED FBS OFFSET LOCATION

CURRENT PLAYGROUND FOOTPRINT

EXPANDED PLAYGROUND FOOTPRINT

AREAS	SQ. FT
Existing Total	~9,600 ft²
Removed for FBS	~700 ft²
Added	~1,700 ft²
New Total	~10,600 ft²

Note: additional area is conducive to seating, stroller space and play features with reduction of planted buffers at playground perimeter



Reach 4 Updates

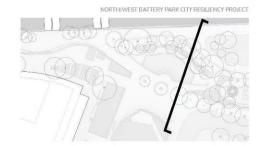


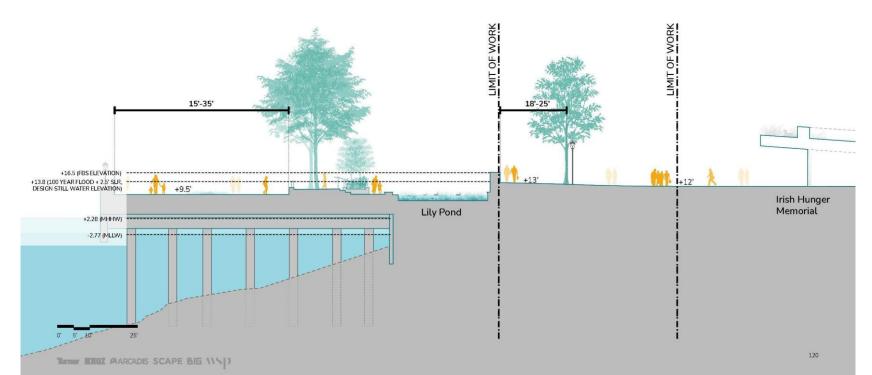




Lily Pond | Section

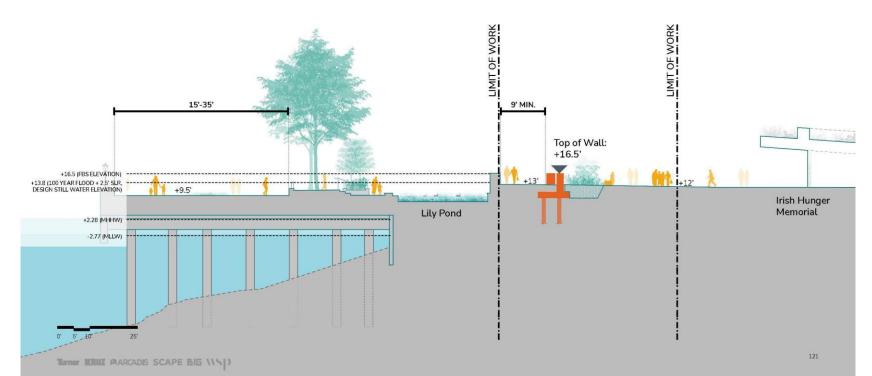
Existing

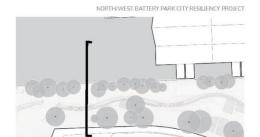


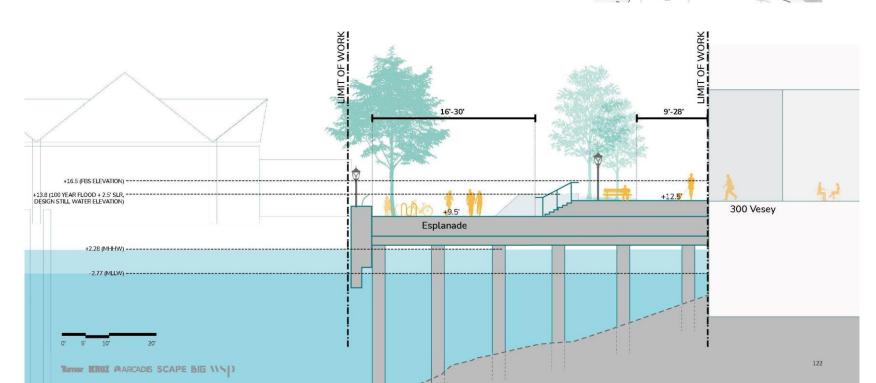


Lily Pond | Section
Proposed

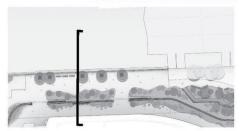


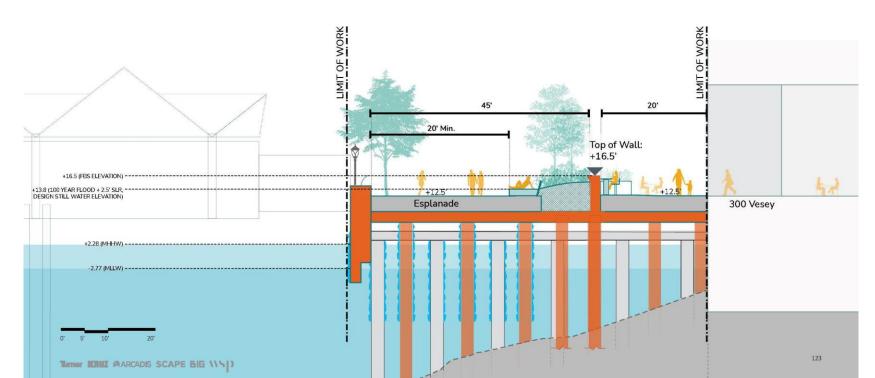






Esplanade | Section Proposed





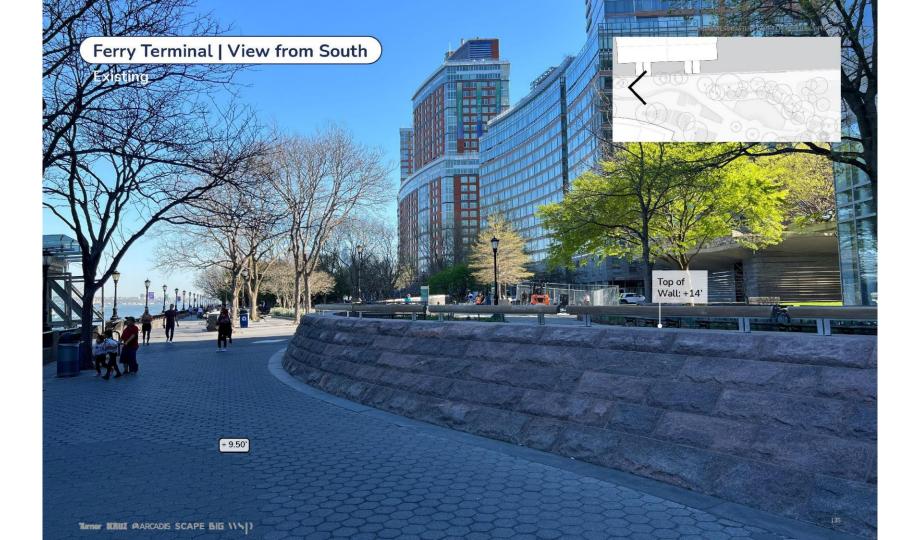




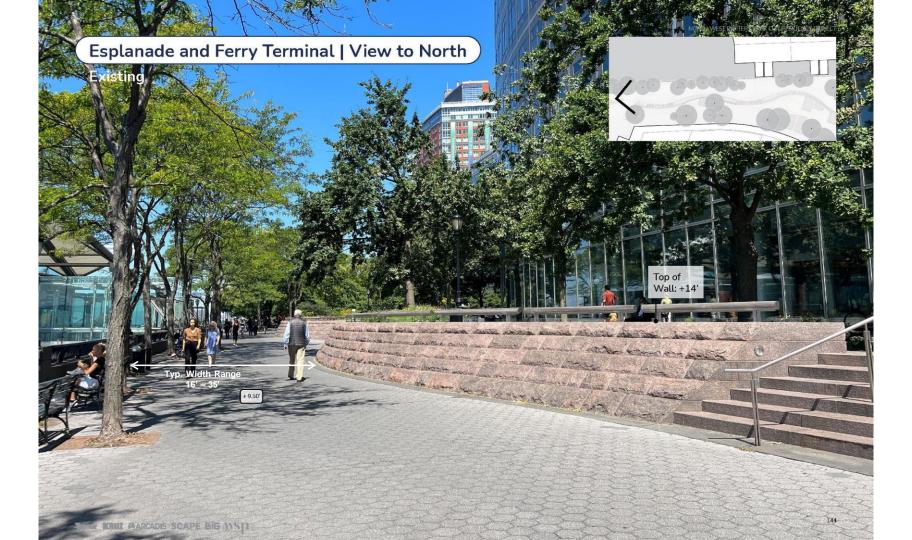














Existing Palette - Ferry & Lily Pond













Stone Band



Railing



Plant Rail



Irish Hunger Memorial Paver



Typical Light Pole



Drain Covers



Bollards



Lily Pond Stone



1939 World's Fair Bench



Glass Benches



Natural Cleft Pink Granite w/ Wood Handrail



Cobblestone



Bluestone Paver



Flamed Granite Paver







Proposed Palette - Ferry & Lily Pond









Hex Paver



Stone Band



Railing



Irish Hunger Memorial



Typical Light Pole



Drain Covers



Bollards



Lily Pond Stone



1939 World's Fair Bench



Glass Benches



Timber Loungers



Bar and Stools



Precast Plank Pavers



Wood-Clad Planter Wall



Movable Table and Chairs



Proposed Paving



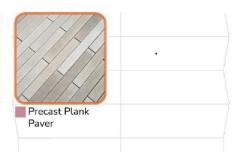
Non-permeable Hex Asphalt Paver

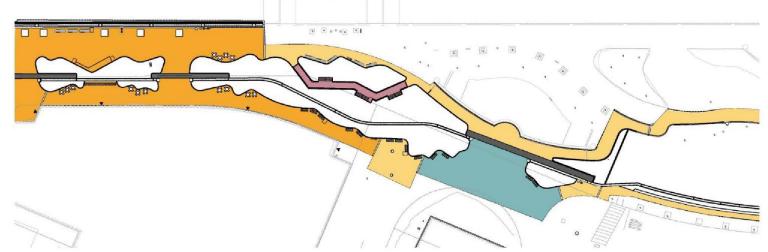


Irish Hunger Memorial special paver



Permeable Hex Asphalt Paver (Romex)





Lounge Seat and Wood-Clad Planter Wall



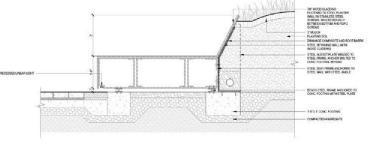


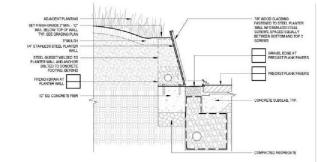




Lounge Seat

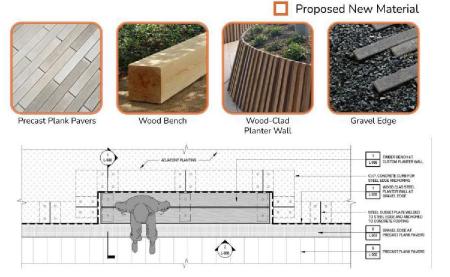
Wood-Clad Planter Wall

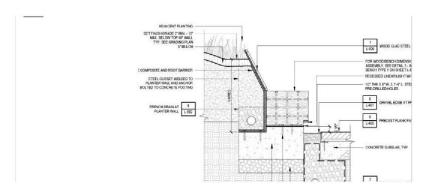




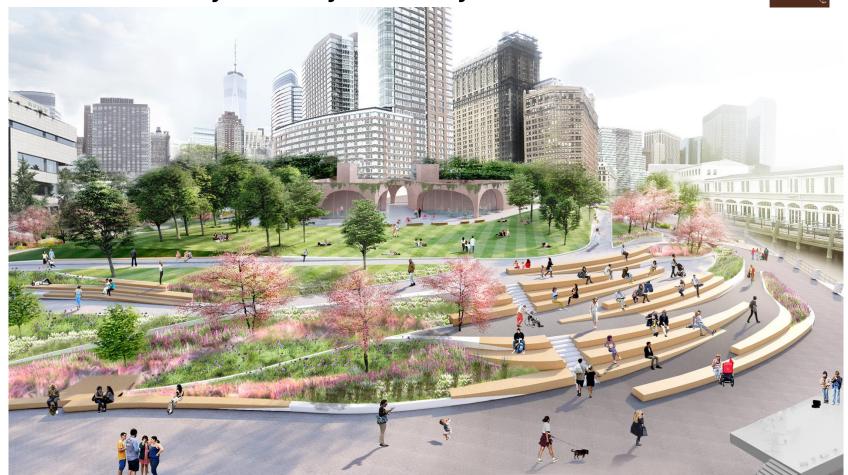
Secondary Landscape Path







South Battery Park City Resiliency



Battery Park City Authority

South Battery Park City Resiliency- Construction Schedule



South Battery Park City Resiliency- Construction Updates

- Architectural Concrete foundation wall has been poured (below left)
- Pavilion Cellar Slab has been poured
- Soil anchor testing ongoing along Flood Barrier System
- Retaining wall at esplanade being installed
- Geofoam installation in progress (below right)
- Micropiles being installed along First Place





South Battery Park City Resiliency- Contact Information



Battery Coastal Resilience

LMCR - The Battery

EDC Managing Project on Behalf of Parks

Design

- 100% Design complete June 2023
- Seeking Envision Certification (program to lower carbon footprint for large infrastructure projects)

Construction Updates

- NPS West Security Tent Demolition Complete March 2024
- Phase 1 salvage work Complete March 2024
- Marine Mobilization March 2024
- Community Liaison Karp Strategies

Conceptual Rendering



Upcoming Milestones

- Existing wharf demolition to begin March 2024
- Sheet Pile installation to begin April 2024
- Anticipate start of pile driving for new wharf Spring 2024.

LMCR - The Battery

Community Construction Liaison – Karp Strategies

- Will be working with the construction team to address community questions / concerns.
- Will provide regular updates to the Community Board.
- Community Board Site Walk held Wednesday March 13, 2024
- Contact: Lily Zaballos, Karp (347) 201-1596

For more information visit us at:

https://www.nyc.gov/site/lmcr/progress/battery-coastal-resilience.page

Or email us at:

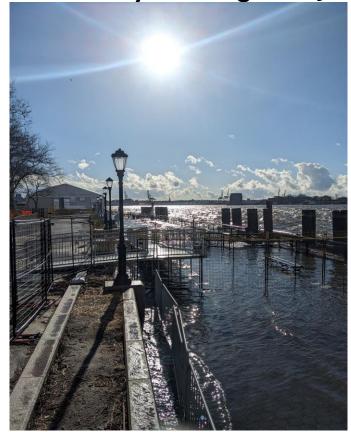
info@batterycoastalresilience.com

Conceptual Rendering



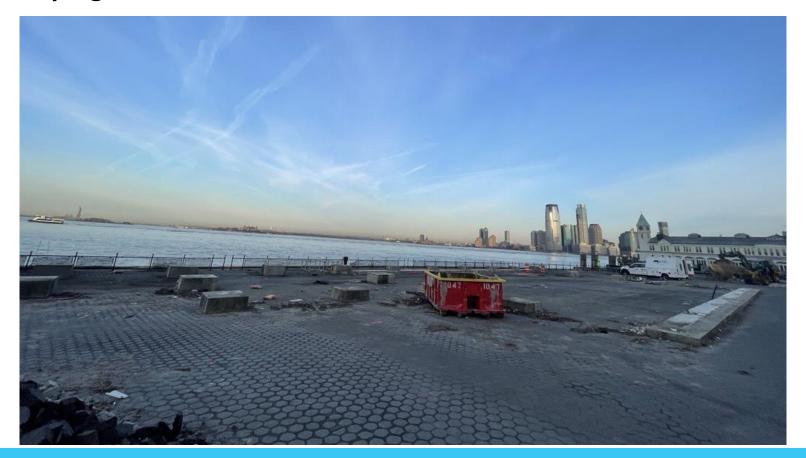


The Battery Flooding from January 13th Storm





Current progress: National Park Service West Tent Demolished



Current Progress: Hardscape Salvage





Current Progress: Marine Mobilization





Current Status of the Battery





Site Visit with CBI | March 13





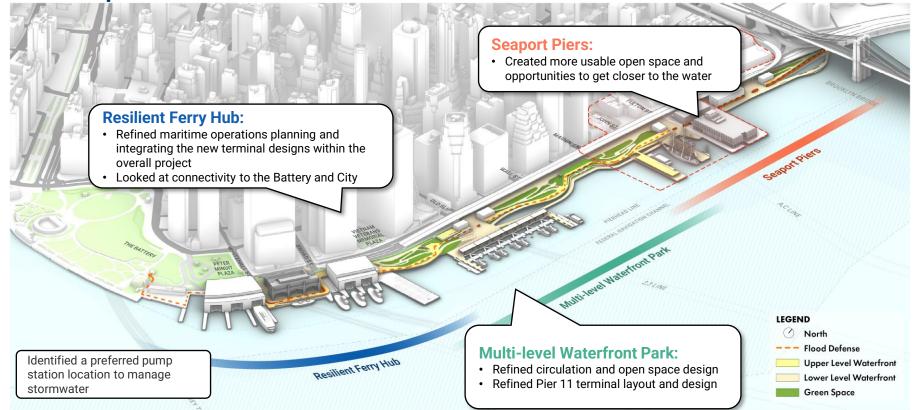


Agenda

- Phase V Recap
- Upcoming Milestones



In Phase V, we refined the design to integrate Resilience+ infrastructure into three distinct destinations along the waterfront, each with shared flood defense solutions & user experiences.



The FiDi & Seaport Climate Resilience Plan is committed to advancing city and statewide sustainability targets, including reducing carbon emissions 80% by 2050.

Goals of the Plan:

- The plan should strive to be as carbon neutral as possible through both the construction and operations phases.
- 2. The plan should incubate new and emerging sustainability and energy practices and technologies for wider deployment elsewhere in the city.
- 3. The plan should showcase its sustainability features.





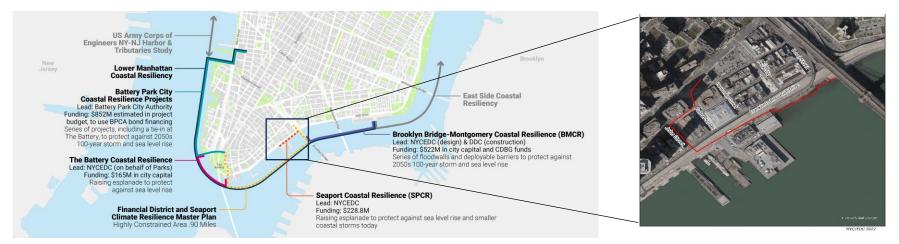
Upcoming Milestones

- March 28: Energy & Sustainability Workshop
- Summer 2024: Schematic design (15-20%) for base infrastructure
- End of 2025: Preliminary design (30%) for base infrastructure
- Advancing implementation strategy, including phasing and financing plan
- Continuing in-person tabling and engagement with community stakeholders to spread awareness of project



SEAPORT COASTAL RESILIENCY (SPCR)

Seaport Coastal Resiliency vs. FiDi-Seaport Master Plan



- FiDi-Seaport Master Plan long-term coastal resiliency project between BPCA and BMCR addressing BOTH coastal storms and sea level rise through 2100
- The Seaport identified as a low-lying vulnerable area during the FiDi-Seaport Master Planning process
- Seaport Coastal Resiliency is a near-term project to provide critical Sea-Level Rise Protection for The Seaport
- FiDi-Seaport Master Plan will coordinate with the near-term Seaport Coastal Resiliency project



What is the Seaport Coastal Resiliency Project?

Creating a more resilient Seaport by addressing sea level rise, drainage risks, and continued waterfront access

- This project proposes raising the shoreline 3-5 feet in the area from the Brooklyn Bridge to Imagination Playground
- Scope includes potential esplanade improvements, ecological enhancements, and green infrastructure to address stormwater management
- AECOM has been procured as a design consultant, has just recently been mobilized.
- Details and a refined plan will be provided as we progress through the design process.





The Team – AECOM and FHI



PROJECT MANAGER Elizabeth Thompson PE, ENV SP

- Experience delivering complex projects with tight schedules
- Ability to navigate reviews/approval processes with city agencies
- Work in downtown area after Sandy provides understanding of complex below grade utilities
- Thrives on improving New Yorkers' lives & revitalizing communities

COMMUNITY ENGAGEMENT TEAM



Ryan Walsh
AICP PP



Maura Fitzpatrick



In the first 100 days, the team will begin:

- Technical surveys and data gathering
- Environmental review process
- Community engagement outreach plan
- Initiating conceptual designs
- Initiating public art process





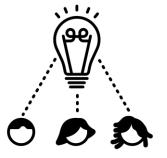
How will we approach engagement?



The engagement team believes in:

- A flexible, open-ended approach
- Starting early and connecting often
- Tailoring engagement to the Seaport community

Please share ideas for the best way to engage the Seaport community!





Brooklyn Bridge-Montgomery Coastal Resilience Construction Update

CB1 Environmental Committee Meeting

1 Centre Street

March 18, 2024













Highlights

- Project Status
- Construction Photos
- Greenway Detour
- Community Resources



BMCR | Project Status

ALL WORK IS SUBJECT TO CHANGE

Current Activities

- Water main upgrades
- Utility relocation & upgrades
- Floodwall construction
- Micropile installation

 Interceptor Gate Building Construction

Upcoming Activities

 Greenway closure and bike detour between John Street and Market Slip

Coordination

- ESCR—PC and PA1 Construction, Utility Work Coordination
- Ongoing coordination with DOT to maintain safe, greenway access
- NYC EDC Brooklyn Bridge Esplanade Project, Dover St. to Catherine Slip





BMCR | Project Need

ALL WORK IS SUBJECT TO CHANGE





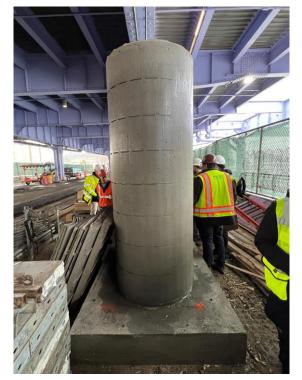
January 2024 via Catherine Hughes



January 2024 via Catherine Hughes

BMCR | Construction Photos - Floodwall Mockup

ALL WORK IS SUBJECT TO CHANGE

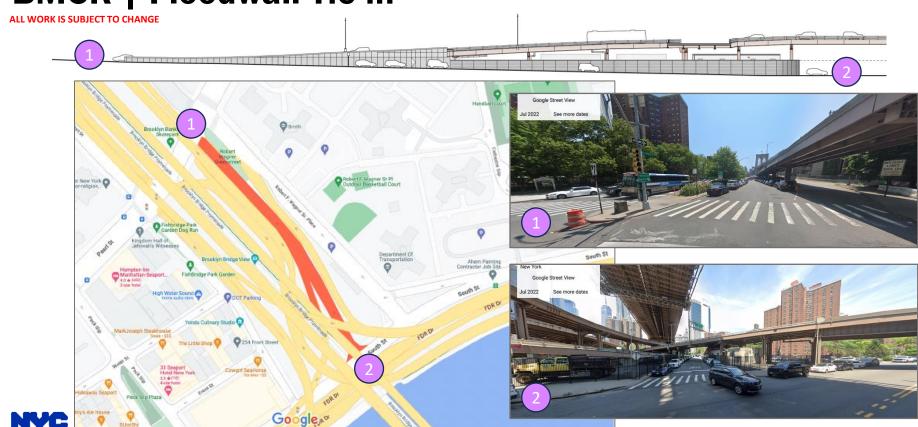








BMCR | Floodwall Tie-in



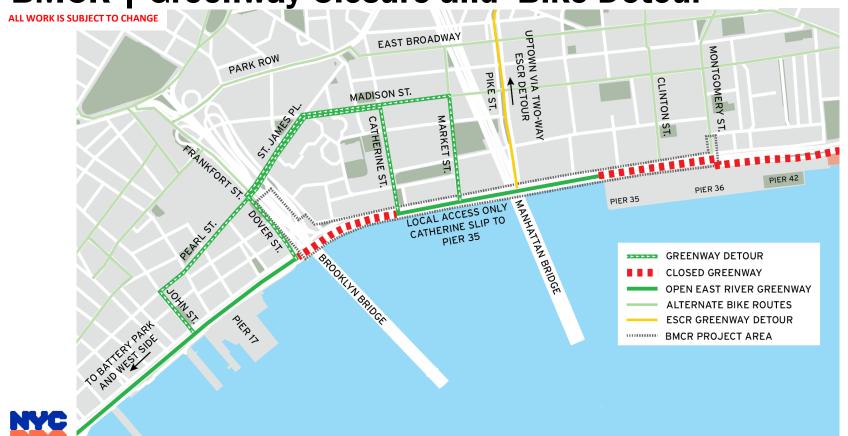


BMCR | Floodwall Tie-in





BMCR | Greenway Closure and Bike Detour



BMCR | Resources

Visit Us: https://www.nyc.gov/bmcr

Community Construction Liaison:

Marsha Guido 347-538-4266

Email: bmcr.ccl@gmail.com

- **Tabling in the Community**
- **CB 3 Parks Meetings**
- On-site signage
- Inquiry tool and email updates:

https://www.nvc.gov/site/lmcr/progress/contact.page



Tabling event - 2023



Advisories posted on-site



Brooklyn Bridge-Montgomery Coastal Resilience

The Battery Coastal

Interim Flood Protection Measure (IFPM)

Battery Park City Resilience Projects

The Financial District and Seaport Climate Resilience Master Plan

Seaport Coastal Resilience

🚼 💟 🗈 🖂 Share

This project will reduce flooding risk - from both sea level rise and storm surge - for thousands of residents, while continuing to preserve views and access to the waterfront. These deployable barriers will be permanent infrastructure, hidden until they are flipped up in the event of a storm. The location of the flood walls and posts has been designed to minimize conflict with subsurface infrastructure and to maximize integration of public space amenities such as open-air seating, fitness equipment, and athletic courts.

Brooklyn Bridge - Montgomery

Coastal Resilience

managing the construction of BMCR.

Explore the headings below for more information about BMCR and the status of construction:

In the Two Bridges neighborhood, the Department of Design and Construction (DDC) will install a combination of flood walls and deployable flip-up parriers to protect the neighborhood from a 100-year

storm surge in the 2050s, while also maintaining access

and visibility to the waterfront. New York City Economic Development Corporation (NYCEDC) led the design for

the project, which will extend along the waterfront from

the Brooklyn Bridge to Montgomery Street, EDC

completed design in fall of 2021 and DDC is now

Learn more about the NYCEDC design phase: NYCEDC LMCR





Learn More about BMCR

- Construction Notices
- Presentations
- Newsletters Gallery
- Community Engagement
- . FAOs





Are you looking for more information?

Visit Us at: https://www.nyc.gov/bmcr







