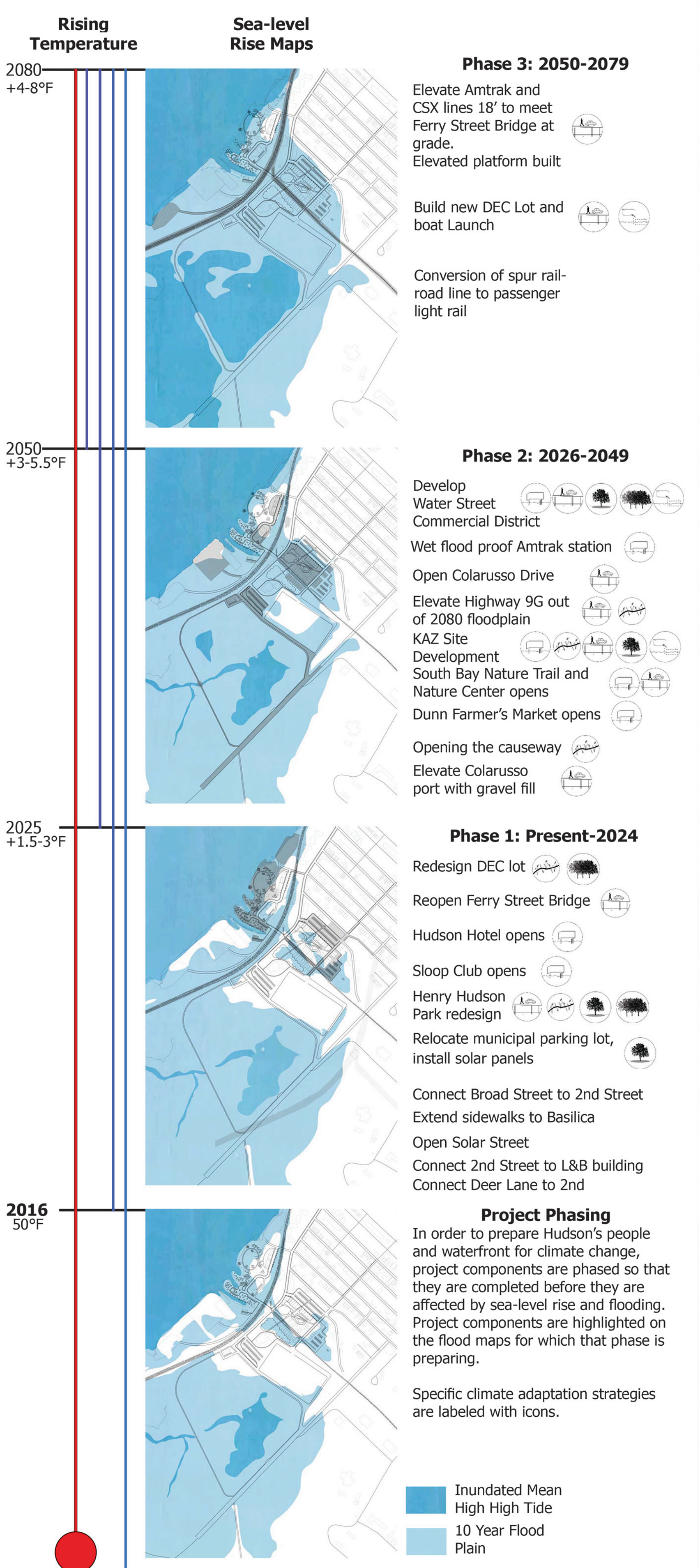


HUDSON RISING

PREPARING HUDSON'S PEOPLE AND WATERFRONT FOR CLIMATE CHANGE
Sara Hirsch, Kyle Sitzman, Alice Sturm



HUDSON RISING



2025

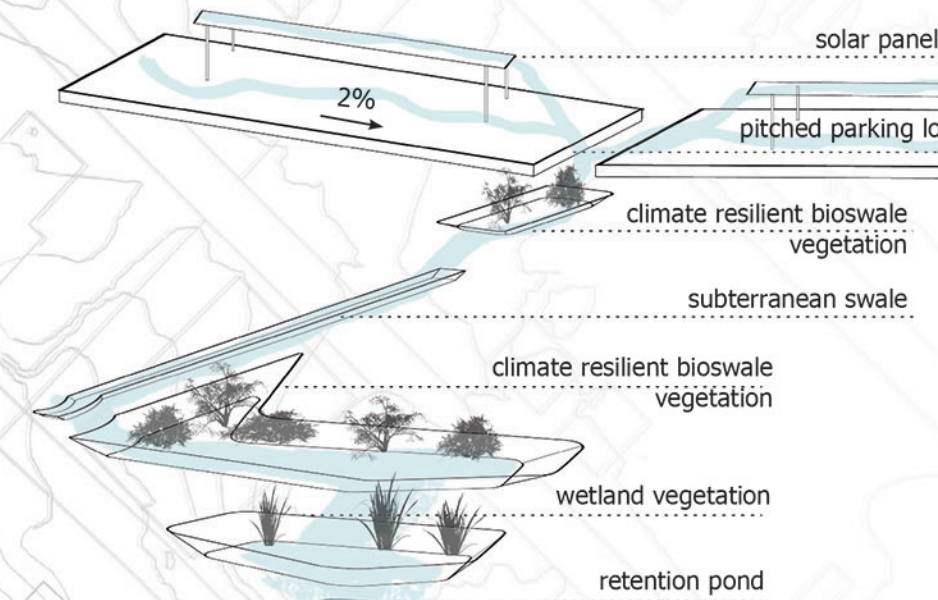


2050



2080

Rain Garden Wetland Stormwater System



Inter-park Circulation



- 1 DEC Parking Lot**
Sea level rise visualized as the parking lot becomes an example of wetland succession ecology. New DEC lot installed adjacent to Colarusso port
- 2 Shorelines Up Boardwalk**
Over time the elevated path becomes a circular pier over the water
- 3 Water Street Commercial Area**
Home to a new cafe and public deck adjacent to Henry Hudson Park and the Amtrak Station
- 4 Henry Hudson Park Terraces**
Pathway from the commercial area down to the park doubles as grass terraced seating and gathering space
- 5 Dunn Farmers Market and Community Kitchen**
The historic building is a year-round venue for celebrating Comumbia County's vibrant food and farming scene
- 6 Kayak Launch**
Public shoreline access for kayaks and other small craft vessels
- 7 Sloop Club**
New permanent home for Hudson's Sloop Club
- 8 Light Rail**
Transitioning the ADM flour mill rail line to a light rail that connects Hudson's waterfront and downtown areas
- 9 KAZ Park**
Playing field, picnic area and playground are elevated above floodplain meadow
- 10 Solar Parking Lot**
Solar panel-covered parking is pitched to drain into bioswale
- 11 Rain Garden Wetland**
Stormwater retention area for surrounding park, parking and residential area
- 12 KAZ Lot Mixed Use Development**
Park-front wetproofed residential and commercial buildings
- 13 Bioswale Forest**
Regraded low points for LB Building and Basilica stormwater runoff retention
- 14 Elevated Rail meets existing Ferry St. Bridge at grade**
The elevated railway allows for ease of pedestrian circulation throughout Hudson's waterfront district

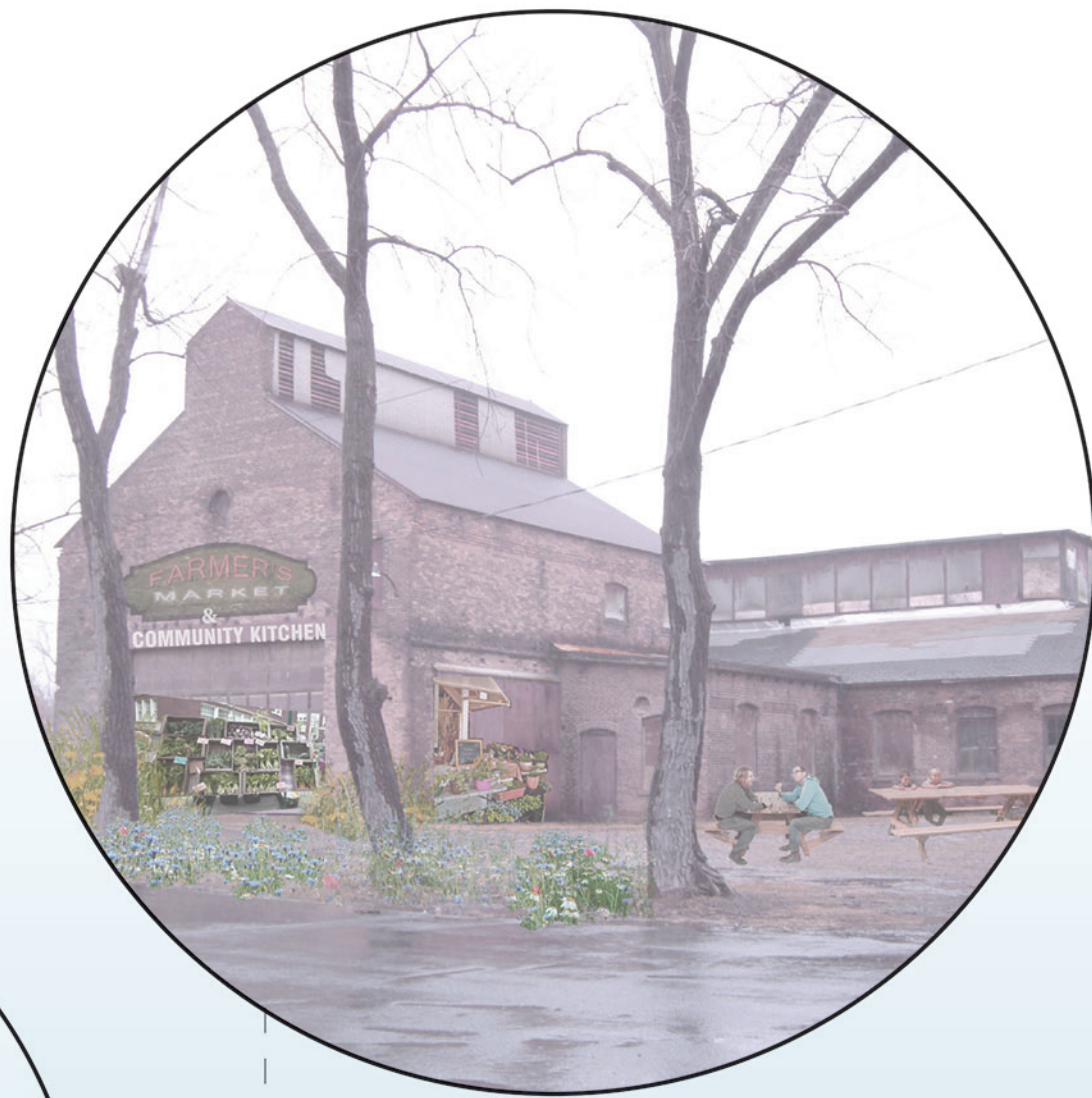
HUDSON RISING

Connected Waterfront



Railway elevated 18 feet

Raise the railway to 18' to allow traffic to pass under bridge, and meet the current Ferry Street Bridge at grade.



Dunn Farmer's Market

Retrofit the historic Dunn Warehouse as a wet-floodproofed community kitchen and year-round farmer's market to activate the waterfront.



Public Kayak Launch

Create a public launch for small craft in slip two, with shoreline stabilized with interplanted riprap.



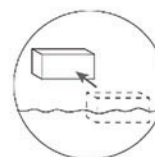
RipRap

Joint planting RipRap with native wetland plants increases ecological quality without sacrificing shoreline stabilization.



Soft Shoreline

Where maintaining the shoreline in place is not necessary for function, riprap can be removed to create a natural wetland shoreline.



Water Street Commercial District

Commercial Development with wide deck overlooking the Hudson.



Floodable Henry Hudson Park

Park maintains current uses in the short-run while new elevated paths will ensure continued access as sea levels rise.

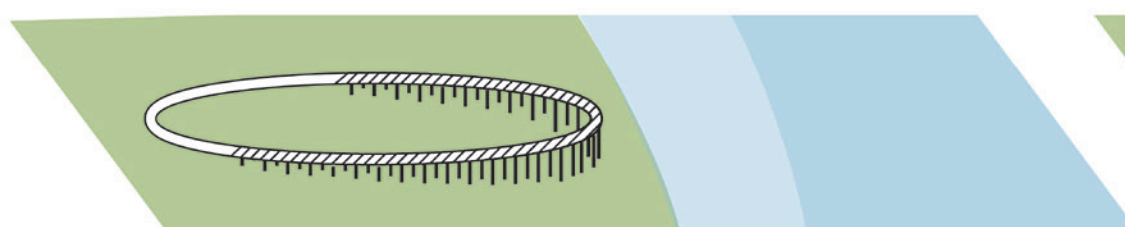
Ecologically Enhanced Shoreline

Existing: 1,444 feet
Proposed: 2,733 feet

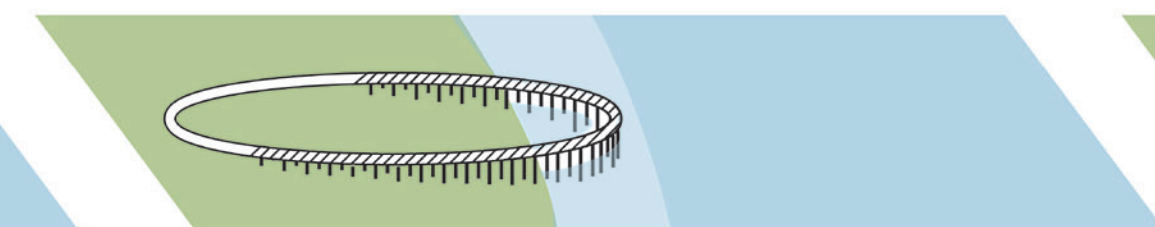
Commercial Space

Existing: 325,776 square feet
Proposed: 432,194 square feet

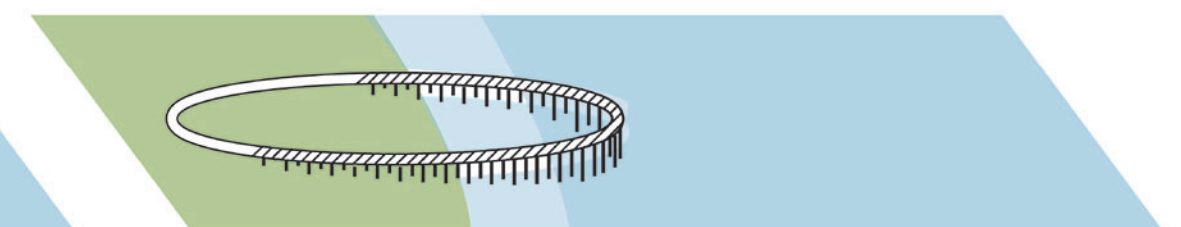
2025 : Current Uses



2050: Intertidal Zone Boardwalk

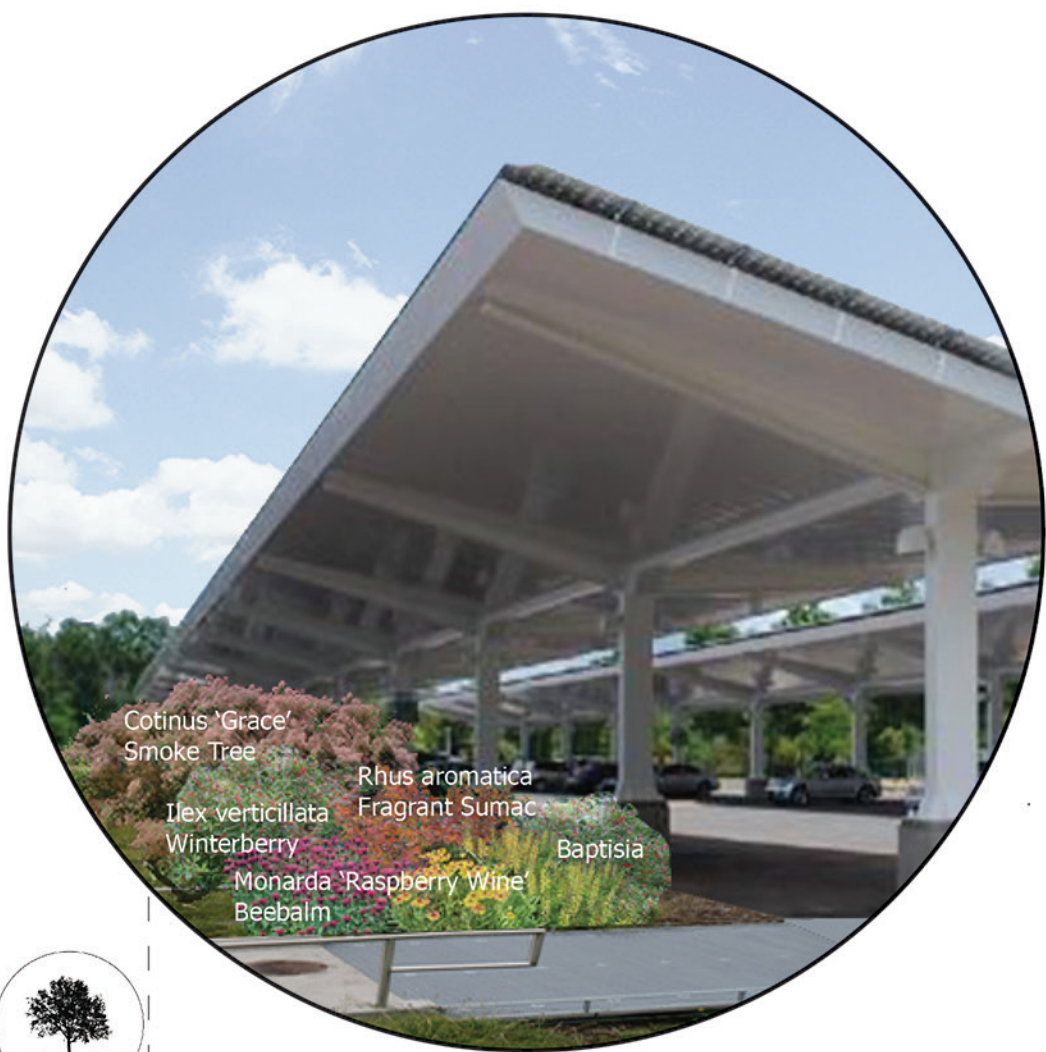


2080: Wetland Boardwalk



HUDSON RISING

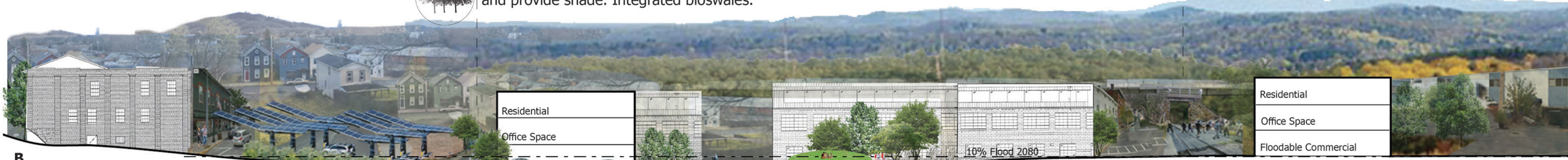
Resilient Grid



Solar Parking Lot
Solar Panels generate energy for surrounding buildings and provide shade. Integrated bioswales.



Light Rail
Extend 2nd Street the the L&G and Basili-
ca sone with integrated light rail using the
former ADM spur line.



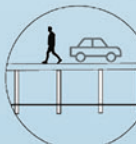
KAZ Site Development
All proposed development, residential and
commercial, will have wet-floodproofed
ground floor uses such as parking.

Storm-Water Treatment Wetland
Treating and infiltrating stormwater from
increasing rain events mitigates flood risk.

KAZ Park
Non water dependent activities such as soccer and
picnicking that can no longer take place in Henry
Hudson Park due to sea level rise.

Grid Expansion
Extend 2nd Street to L&G building, devel-
op KAZ lot and Hudson Hotel, and extend
Deer Lane to 2nd Street.

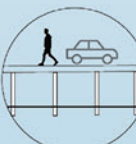
Visible Wetland



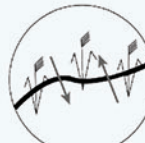
South Bay Nature Trail
Build an integrated boardwalk loop over the former
causeway and elevated 9G providing views of the
rehabilitated wetland.



Encourage Wetland Migration
Rising water levels will drown the Phrag-
mites which currently dominates South
Bay; planting wild rice and other rare spe-
cies can encourage their colonization of the
wetland.



Open Colarusso Drive
Create a formal, two-way road along the south edge of the L&B building which will allow gravel trucks to
access the deep-water port without going through downtown Hudson or using the Causeway.



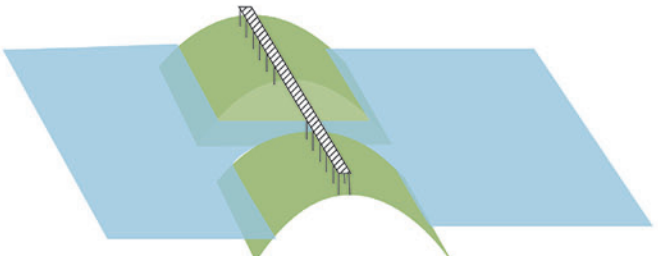
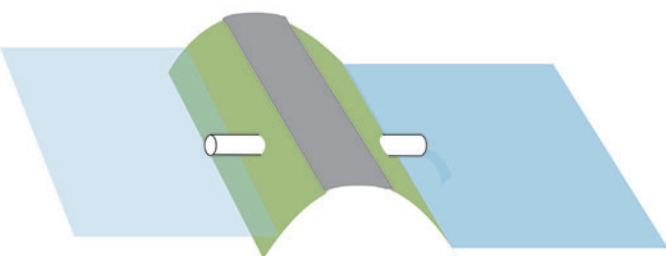
Elevate 9G out of 2080 Floodplain
Raise highway 9G/23B to 12' on piles out of the current and future flood plain and
allow wetland migration as the sea-level rises.



Open the Causeway
Create a 40' opening in the Causeway to double the area of valuable tidal marsh habitat and allow marsh migration;
gravel trucks re-routed along L&B.

Existing Condition: Gravel Access Road
No Tidal Connectivity

Proposed Opening: Boardwalk Nature Trail
Full Tidal Connectivity



Tidal Wetland
Existing: 2,307,638 square feet
Proposed: 4,055,849 square feet
Permeable Surfaces
Existing: 121,339 square feet
Proposed: 354,364 square feet
Parking
Existing: 633 spaces
Proposed: 832 spaces