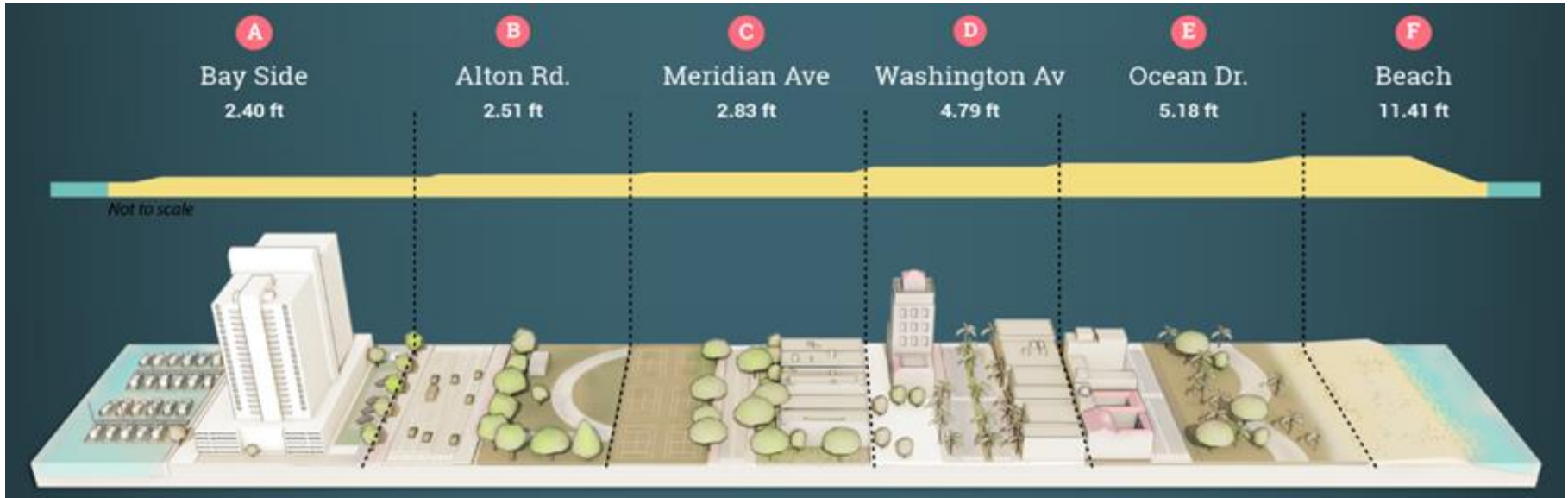


MIAMI BEACH

- Area: 7m²
- Low and relatively flat terrain
 - Manmade islands
 - Coastal ridge/dune
 - Mangrove swamp
- Highly pervious limestone layer
- High groundwater table
- Population: 90,000



TOPOGRAPHIC DATA



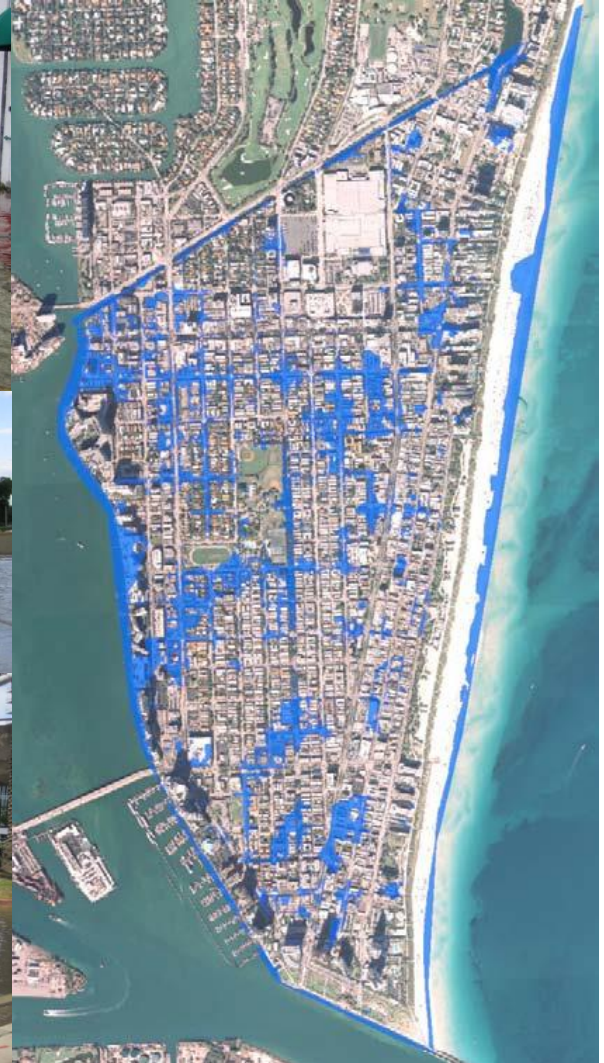
Fusion 2015, <http://interactive.fusion.net/pumpit/>



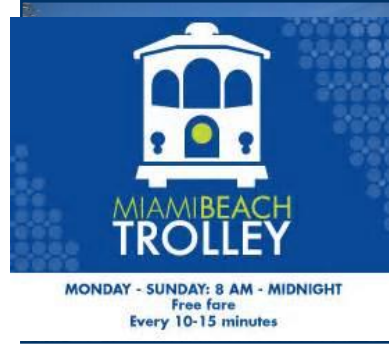
Source: Google Earth

SEA LEVEL RISE

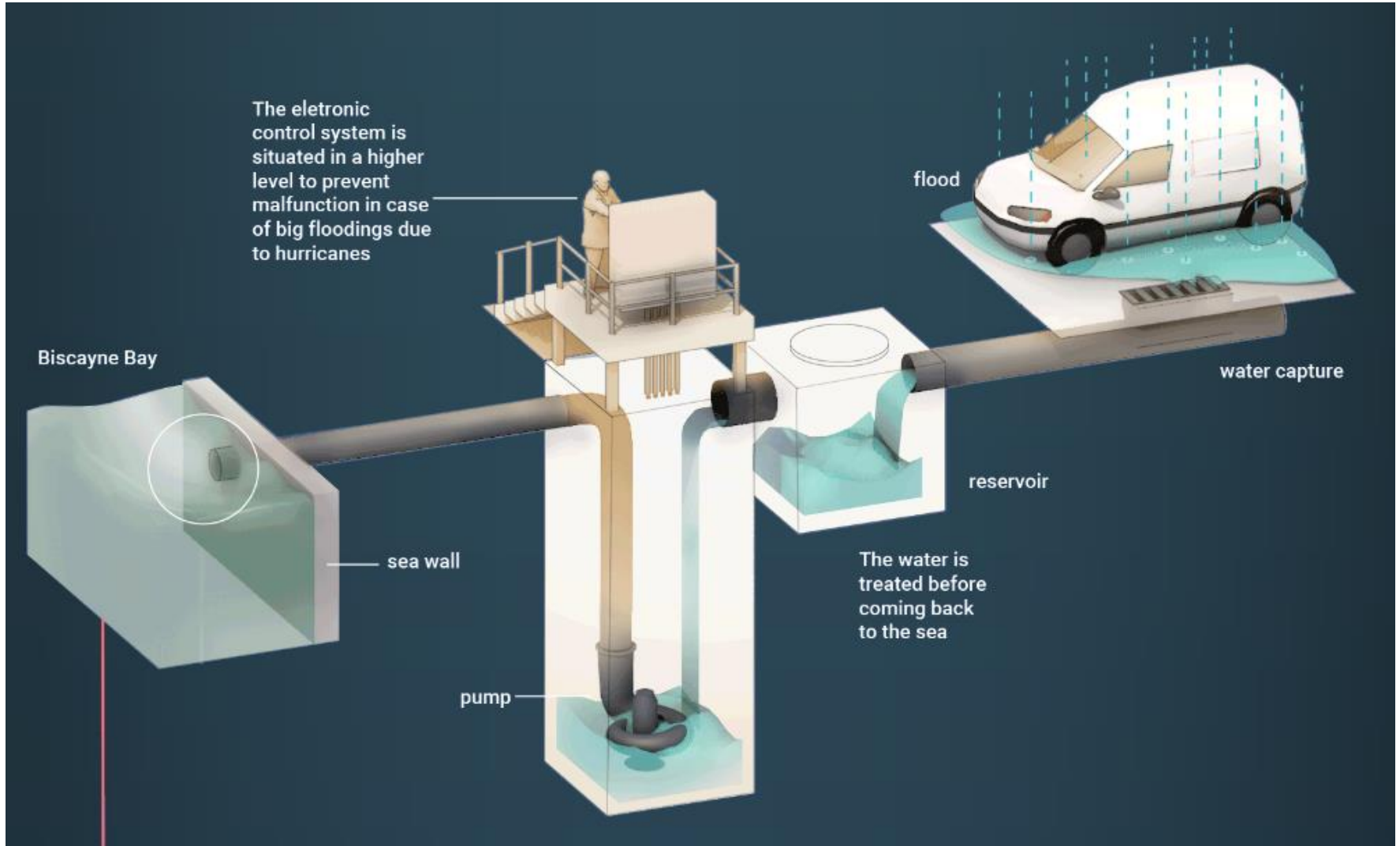
- Higher groundwater
- Higher tides
- Increased flooding (tide, ground, and storm water)
- Decreased effectiveness of the existing stormwater system



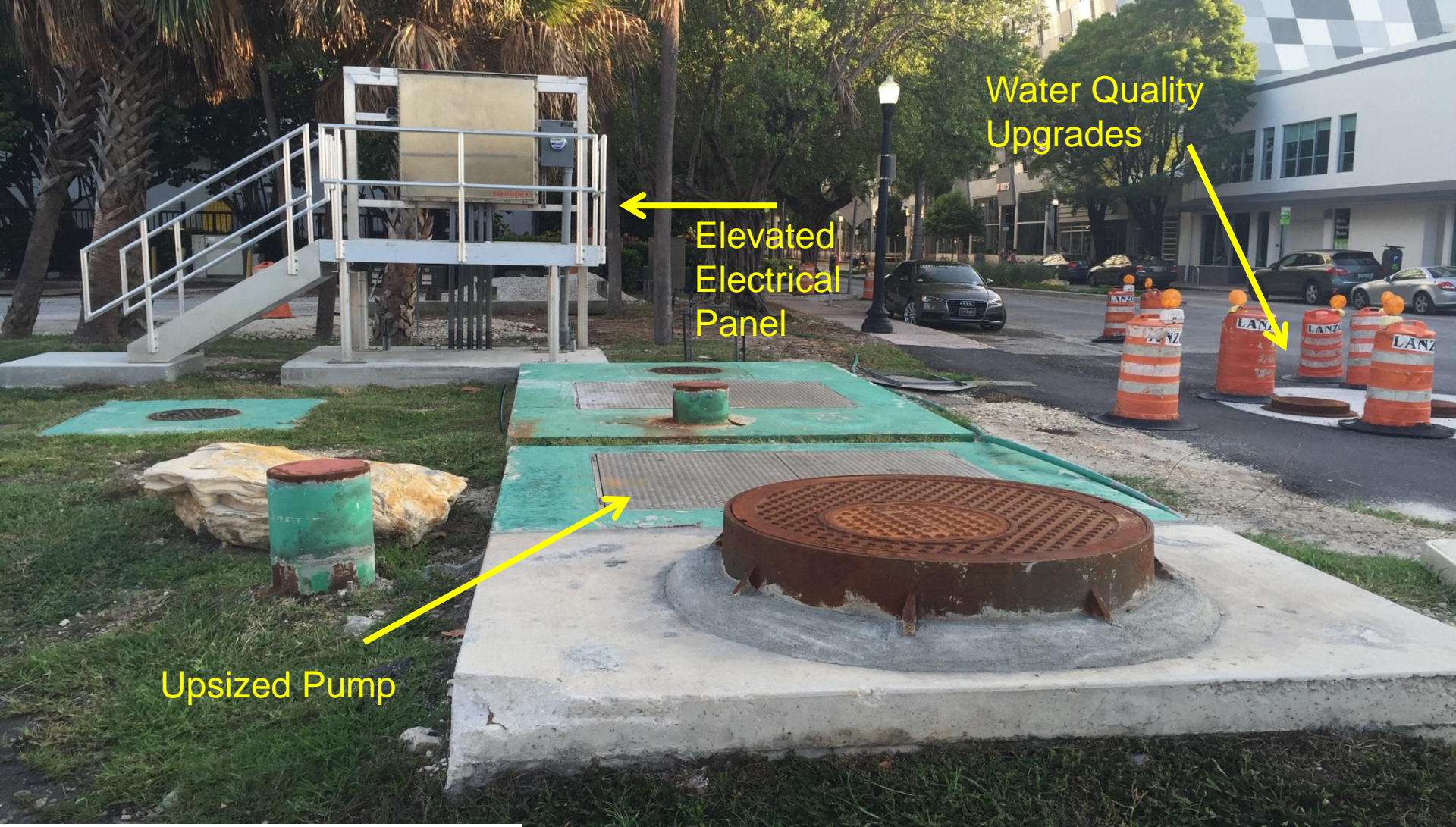
SUSTAINABILITY



STORMWATER UPGRADES



STORMWATER UPGRADES



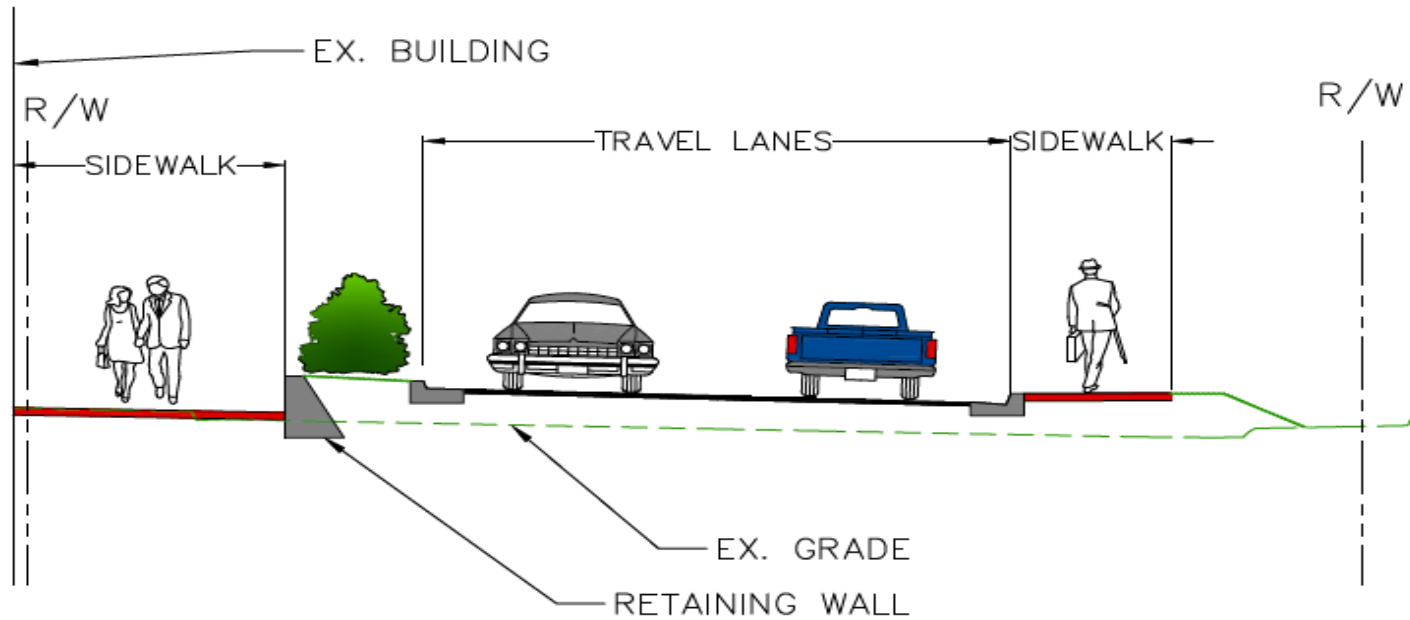
Water Quality Upgrades

Elevated Electrical Panel

Upsized Pump

Stormwater Pump Station

ADAPTATION

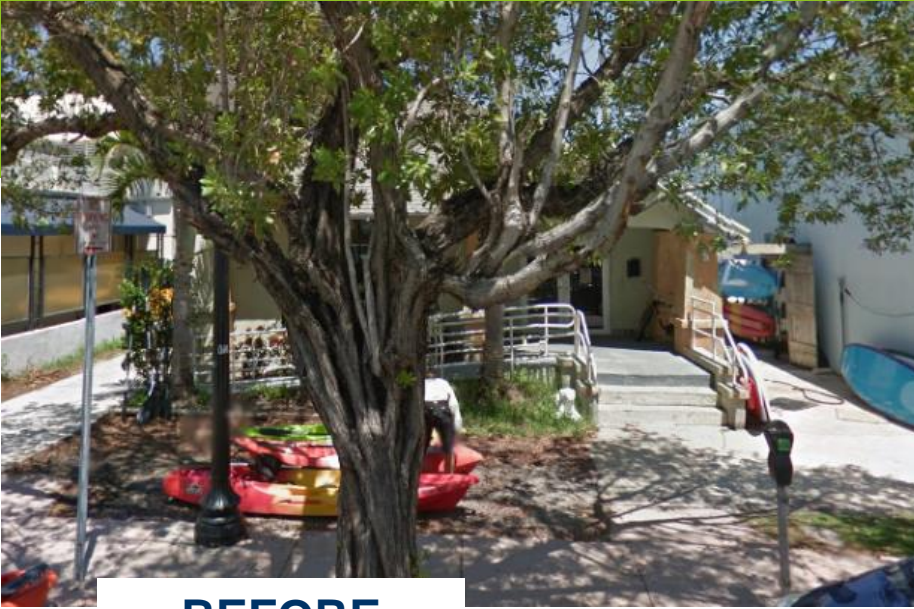


520 WEST AVENUE
(ANTHONY'S PIZZA)

New Elevated Streets

CONCEPTUAL, SUBJECT TO CHANGE

Sunset Harbour Purdy Avenue



BEFORE



AFTER



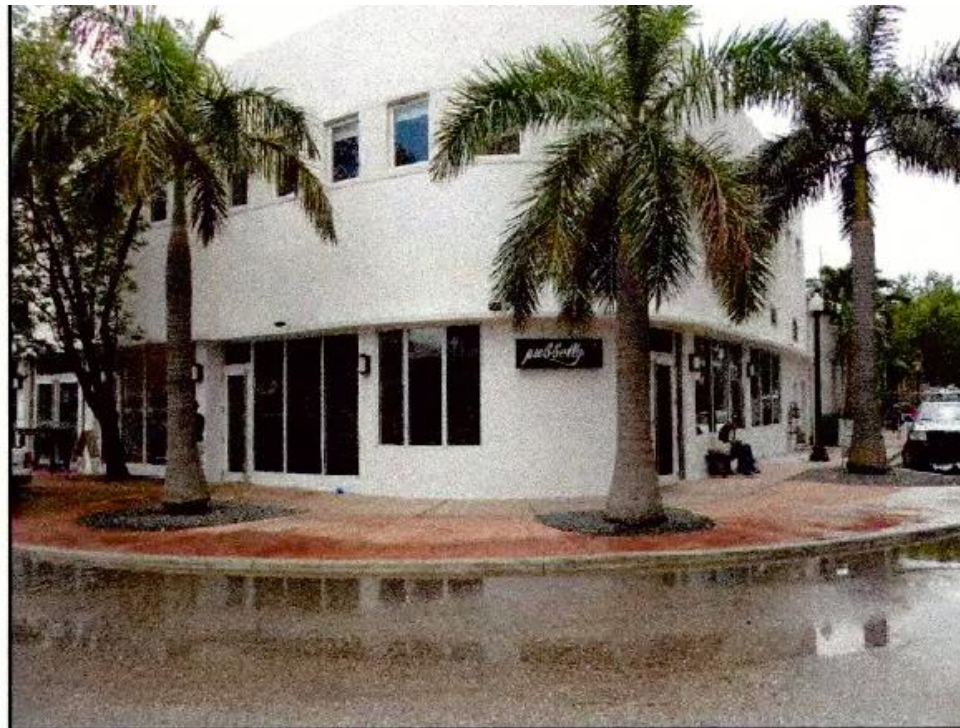
Sunset Harbour 18 Street & Purdy Avenue



Sunset Harbour 18 Street & Purdy Avenue



Sunset Harbour 20 Street & Purdy Avenue



Sunset Harbour 20 Street & Purdy Avenue



Sunset Harbour 20 Street & Purdy Avenue



SEAWALL UPGRADES



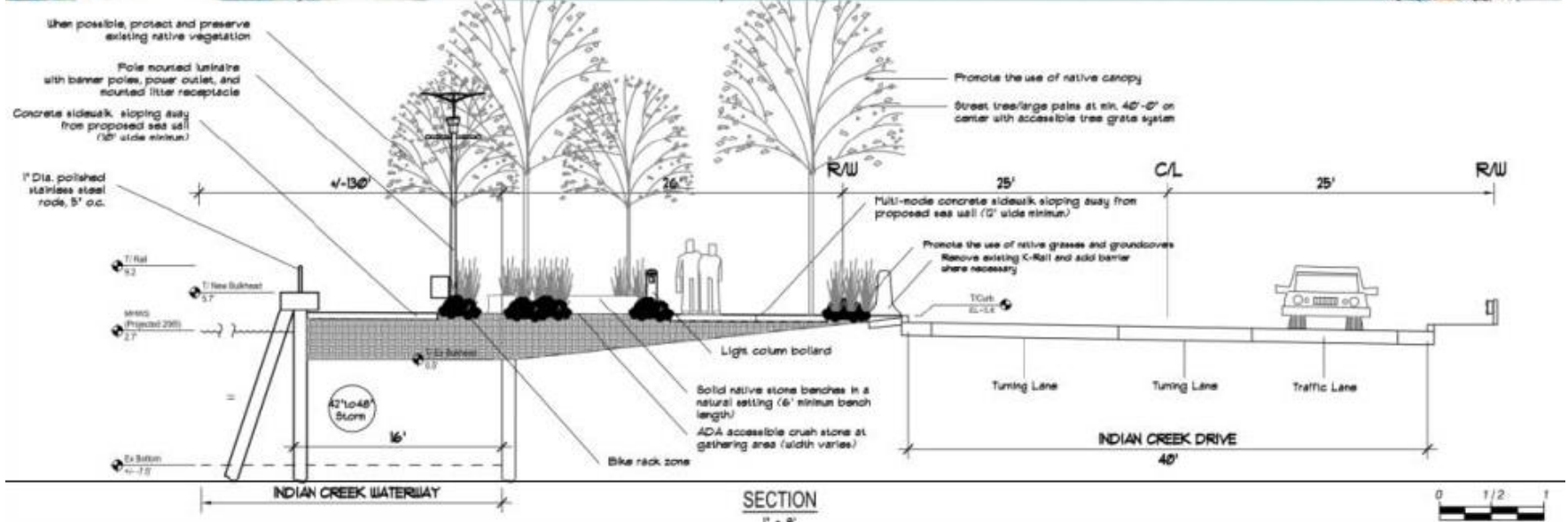
Raised Public Seawall

SEAWALL UPGRADES

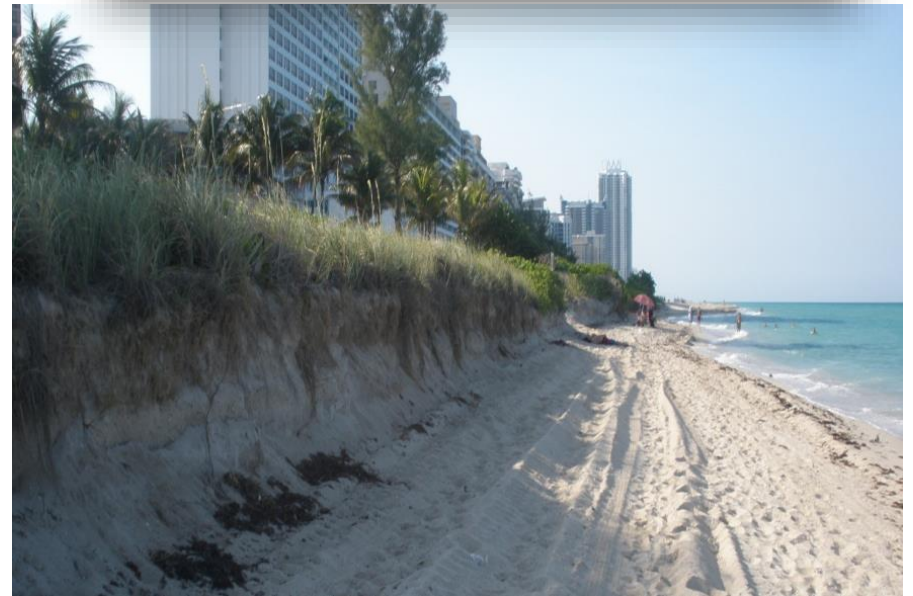
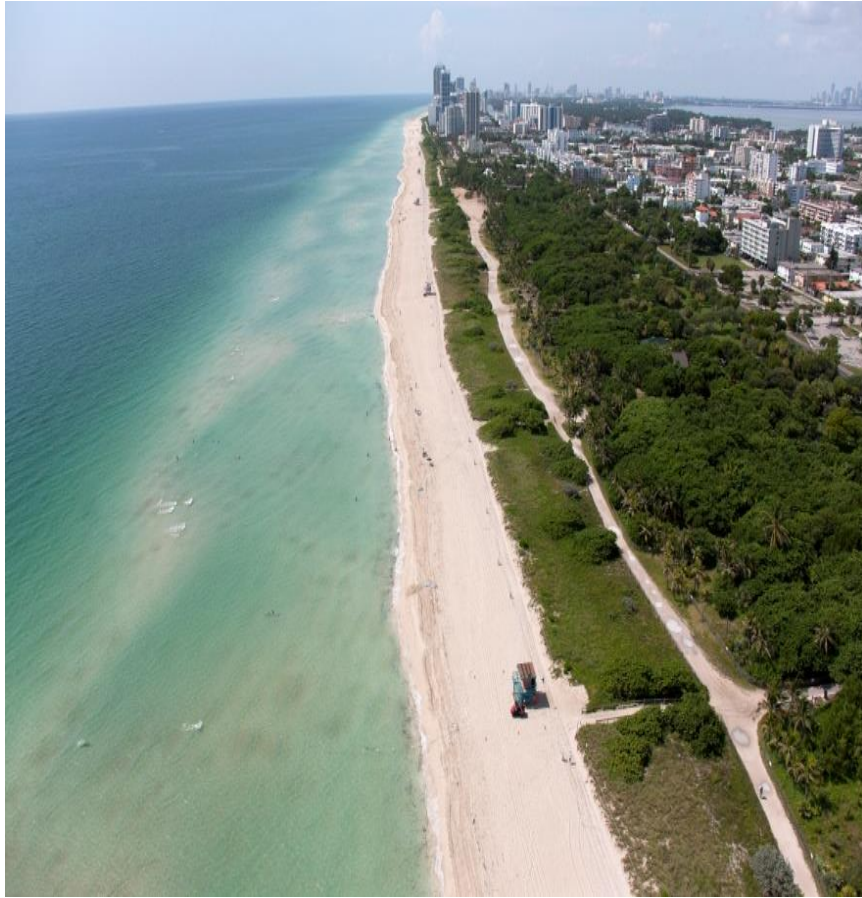


Living Shorelines

SEAWALL UPGRADES



BEACH & DUNE



The Future. . . ?



CODE REVIEW

		Existing Requirements	Proposed Requirements
1.	Base Flood Elevation (BFE)	5.44 Feet NAVD (7 Feet NGVD)	6.44 Feet NAVD (8 Feet NGVD)
2.	Freeboard	0 feet above BFE	+1 to +3 feet above BFE
3.	Seawall Elevation (Private)	3.2 FT NAVD 4.76 FT NGVD	4 to 5.7 FT NAVD 5.56 to 7.26 FT NGVD
	Seawall Elevation (Public)	3.2 FT NAVD 4.76 FT NGVD	5.7 FT NAVD 7.26 FT NGVD
4.	Minimum required yard elevation	No minimum required	5.0 Feet NAVD (6.56 Feet NGVD)

SLR Impact Scenarios: 2030 SLR

King Tide + (1 ft.) SLR by 2030 = (3.95 ft. NAVD)

Typical Existing Conditions

- Lot Grade: 3.0 ft.
- Seawall: 3.0 ft.
- FFE: 3.5 ft.
- Road crown: 3.0 ft.

Proposed Codes

- Lot Grade: 5.0 ft.
- Seawall: 4-5.7 ft.
- FFE: 7.44 ft.
(includes 1-ft freeboard)
- Road crown: 3.7 ft.



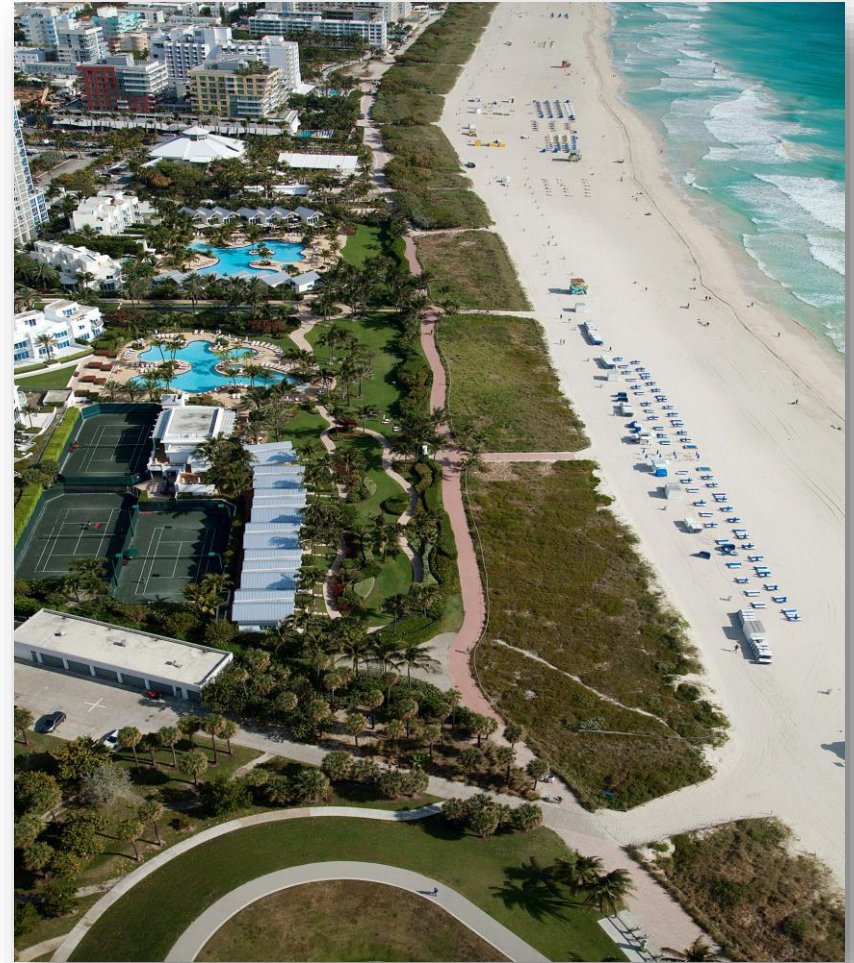
NEXT STEPS

1. Resiliency Strategy

- Risk & Vulnerability Assessment

2. Mayor's Blue Ribbon Panel on Sea Level Rise & Resiliency

- Green Infrastructure
- Historic Structures / Neighborhoods
- Building Height & Floor to Area Ratio Options



An aerial photograph of Miami Beach, Florida, showing a dense urban landscape with numerous high-rise buildings, a prominent beach, and turquoise ocean waters. A large body of water, likely a bay or inlet, is visible on the left side of the image, with several bridges and smaller buildings along its shores. The sky is clear and blue.

THANK YOU!

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