

Town and County of Nantucket Select Board • County Commissioners

Dawn E. Hill Holdgate, Chair
Thomas M. Dixon
Matt Fee
Malcolm W. MacNab
Brooke Mohr



16 Broad Street
Nantucket, Massachusetts 02554

Telephone (508) 228-7255
Facsimile (508) 228-7272
www.nantucket-ma.gov

C. Elizabeth Gibson
Town & County Manager

***AGENDA FOR THE MEETING OF THE
SELECT BOARD
AUGUST 7, 2023 - 4:00 PM
PSF COMMUNITY ROOM, 4 FAIRGROUNDS ROAD
AND REMOTE PARTICIPATION VIA ZOOM WEBINAR
NANTUCKET, MASSACHUSETTS***

***YOU TUBE LINK FOR VIEWING ONLY:
<https://youtube.com/live/VGRZTmB7pzM>***

***ZOOM WEBINAR REGISTRATION LINK TO VIRTUALLY ATTEND MEETING:
https://us06web.zoom.us/webinar/register/WN_QF8n4_VHSEeA10II7DIAng***

- I. CALL TO ORDER***
- II. WORKSHOP WITH NANTUCKET LAND BANK COMMISSION TO DISCUSS
CONCEPTUAL LONG-RANGE PLANNING FOR WASHINGTON STREET COASTAL
RESILIENCY***
- III. ADJOURNMENT***

WASHINGTON STREET RESILIENCE FRAMEWORK AND CONCEPT DESIGN

NANTUCKET ISLANDS LAND BANK
AND TOWN OF NANTUCKET DISCUSSION

AUGUST 2023



SCAPE

PURPOSE OF TODAY

- Review work to date on the Washington Street Resilience Framework and Concept Design
- Confirm project alignment with Nantucket Coastal Resilience Plan (CRP) and Town priorities
- Identify next steps:
 - Define Town/Land Bank Roles and responsibilities (cost share, project management, etc.)
 - Identify a joint Town/Land Bank steering committee for future phases of the project
 - Confirm geographic scope of project (Salt Marsh Center)

GOALS AND PLANNING CONTEXT

WASHINGTON STREET: A KEY LINK FOR NANTUCKET



TOWN BENEFITS:



WATER

- Town stormwater improvements and backflow prevention



HABITAT

- Alignment with Coastal Resilience Plan Recommendations



PEOPLE

- Public access to the waterfront



MOBILITY

- Maintain use of Washington Street as critical transportation infrastructure
- Washington Street bike path implementation

DESIGN GOALS

* Goals aligned with Nantucket Coastal Resilience Plan



WATER

- **Elevated coastal feature buffer water***
- **Pair elevational features with stormwater strategies to absorb, store and convey water***



HABITAT

- **Expand stormwater habitats on inland parcels at low elevations to manage stormwater runoff*** (CRP proposes rain gardens)
- **Establish salt marsh habitats and/or living shorelines north of the Town dock for habitat migration*** (CRP proposes a tidal park and stepped access to marsh at both ends of the site)



PEOPLE

- **Create accessible waterfront areas for people of all ages and abilities***
- **Establish recreational landing areas that bookend the site and integrate secondary pathways for beach access*** (CRP proposes wetland boardwalks and kayak launch areas)



MOBILITY

- **Create an accessible multi-use path along Washington Street for pedestrians and cyclists of all ages and abilities*** (CRP proposes a bikeway/greenway along Washington Street)
- **Maintain use of Washington Street** in sunny-day conditions through 2050 for public transportation and freight movement

FLOOD RISK

LEGEND

- Concept Parcels
- Master Plan Extent
- 2070 MHW
- 2050 MHW
- 2030 MHW
- Present MHW
- Land Bank Parcels
- Town Parcels

Data Source: MC-FRM



TRANSPORTATION, RECREATION, & ACCESS

LEGEND

Concept Parcels

Master Plan Extent

Shoreline Bulkhead

Sandbags

Marina

Boat Access

Beach Access

Regional Transit/ Bus Stop

Long Term Parking

Pedestrian Crossing

Sidewalk

Bike Route

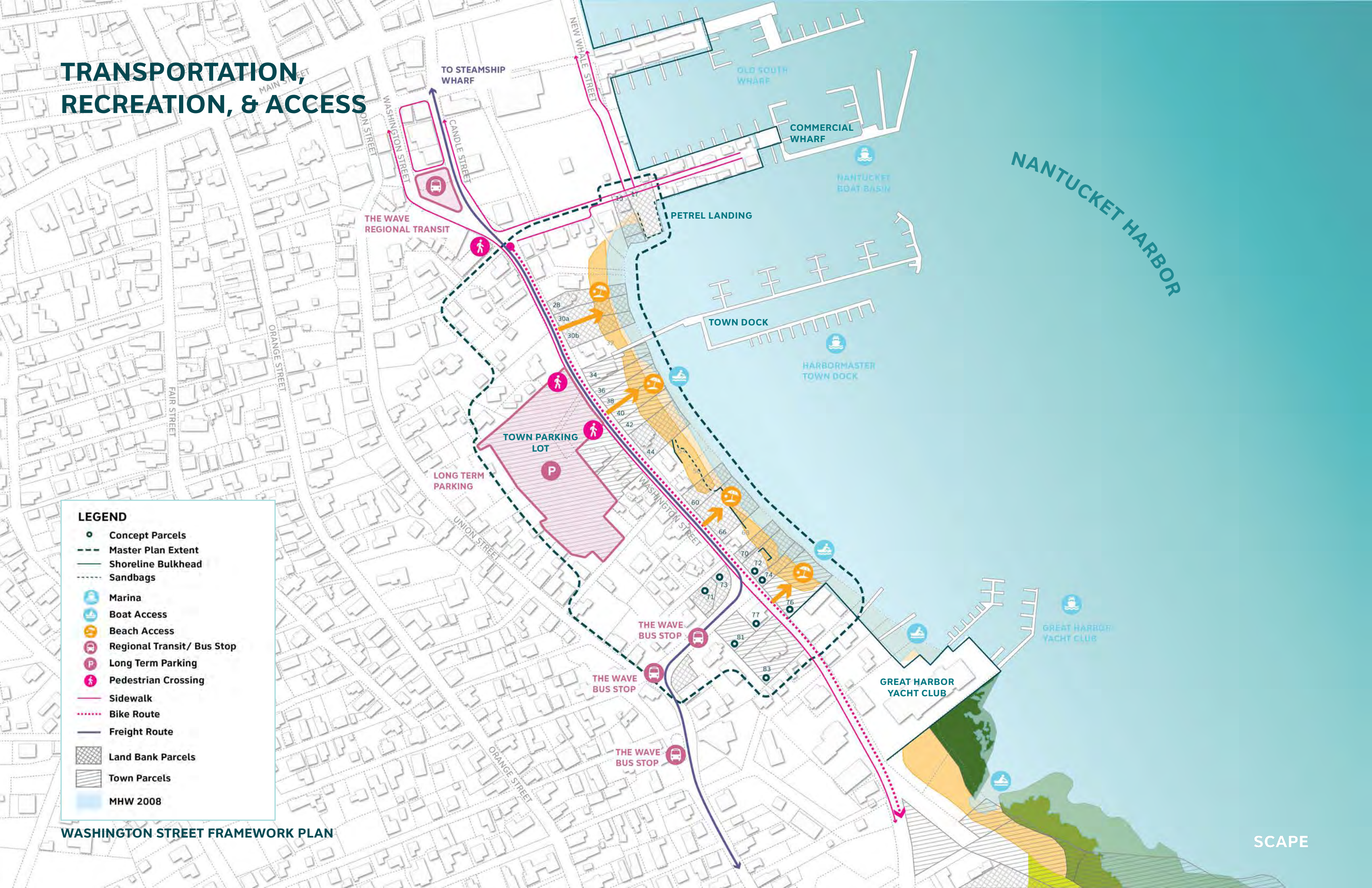
Freight Route

Land Bank Parcels

Town Parcels

MHW 2008

WASHINGTON STREET FRAMEWORK PLAN





Francis Street Beach offers downtown beach and water access



The Town Dock provides public boating infrastructure

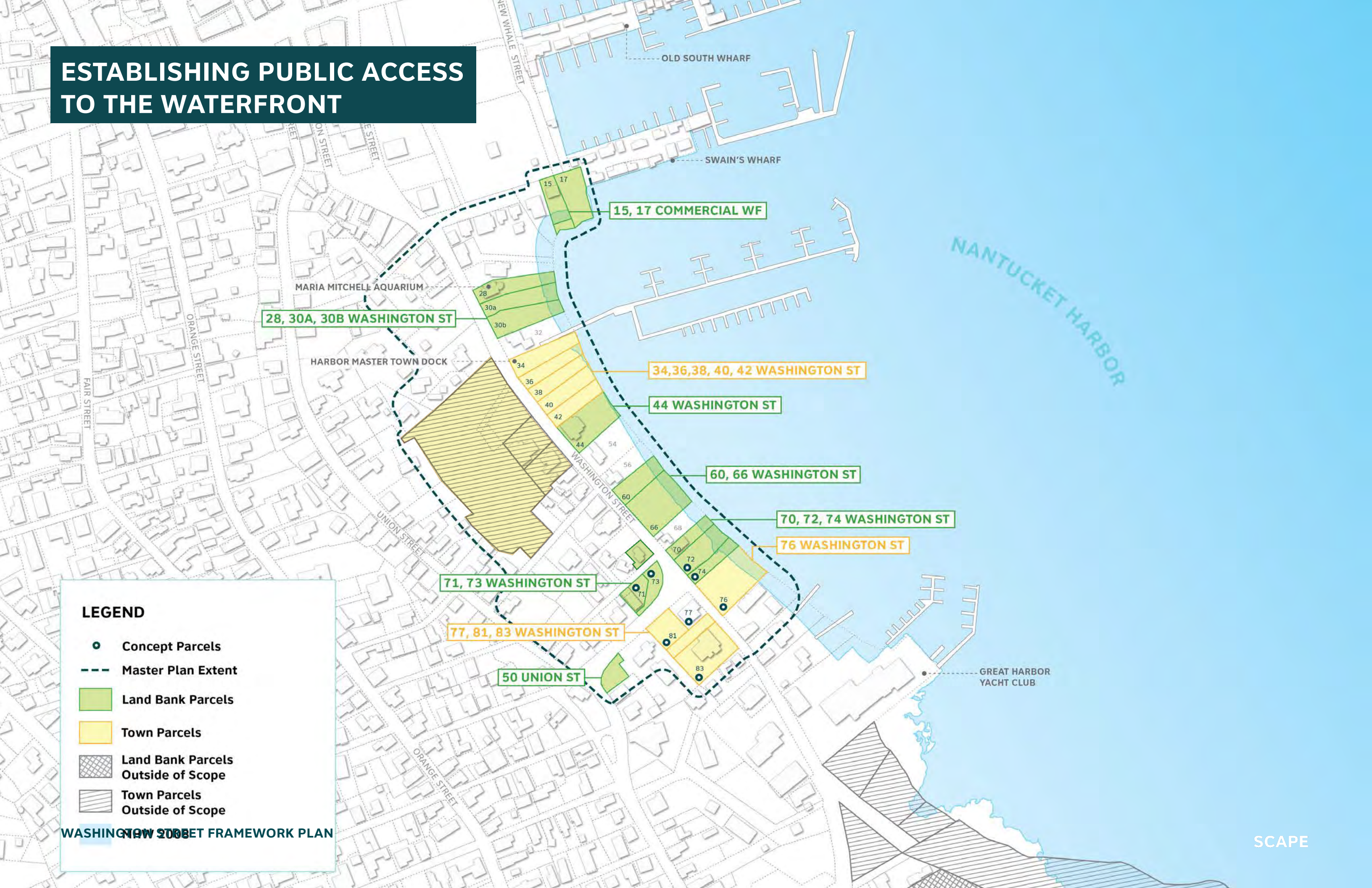


Public Access is increasing along the waterfront



Washington Street is a critical transportation corridor for Nantucket

ESTABLISHING PUBLIC ACCESS TO THE WATERFRONT



LEGEND

- Concept Parcels
- Master Plan Extent
- Land Bank Parcels
- Town Parcels
- Land Bank Parcels Outside of Scope
- Town Parcels Outside of Scope

WASHINGTON STREET FRAMEWORK PLAN

SCAPE

ALIGNMENT WITH THE NANTUCKET COASTAL RESILIENCE PLAN



From Nantucket Coastal Resilience Plan Final Report, November 2021
Arcadis Team

ALIGNMENT WITH THE NANTUCKET COASTAL RESILIENCE PLAN



From Nantucket Coastal Resilience Plan Final Report, November 2021
Arcadis Team

ALIGNMENT WITH THE NANTUCKET COASTAL RESILIENCE PLAN



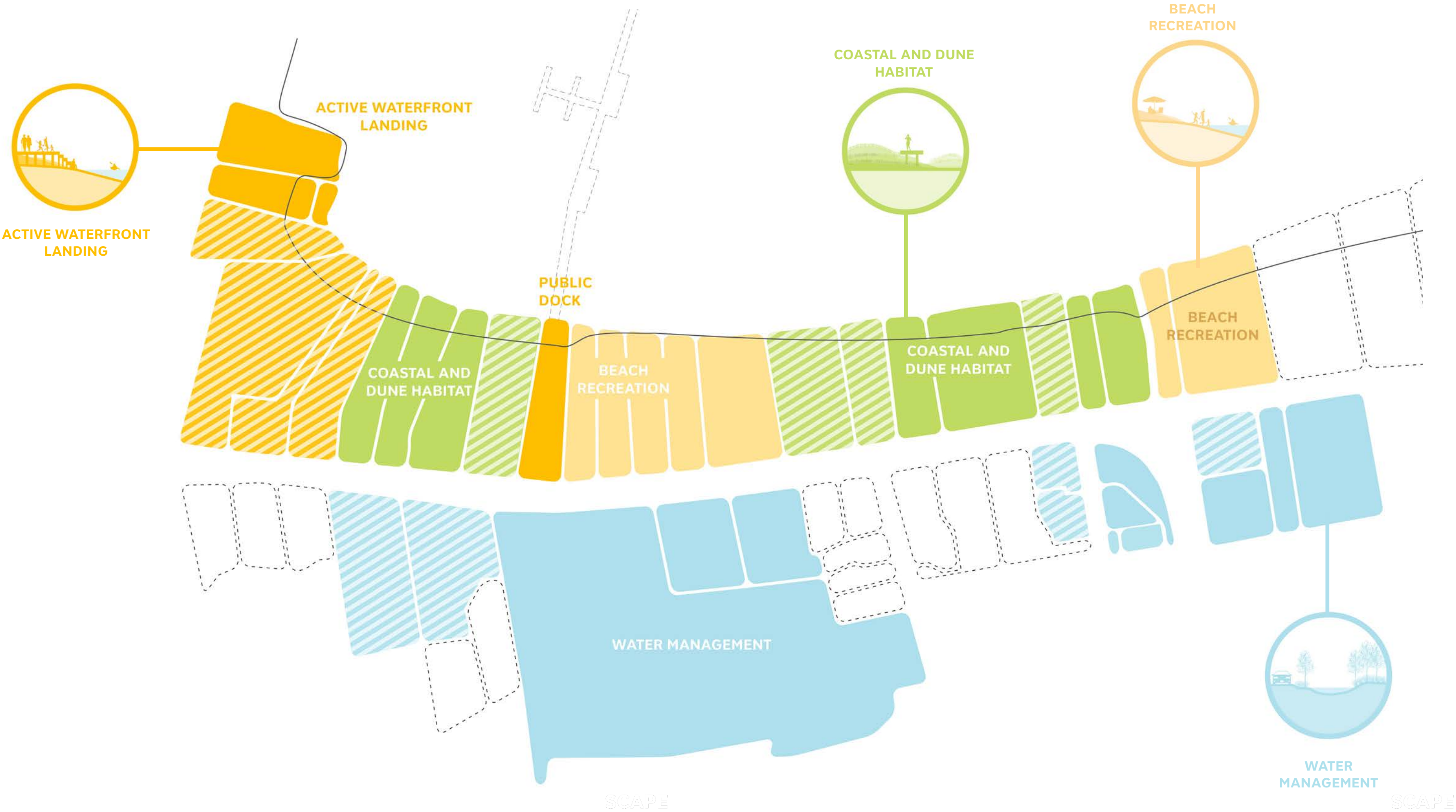
Conceptual design of the Downtown Neighborhood Flood Barrier intended to reduce risk from future high tide flooding. This example shows a typical street condition, similar to Washington Street in Downtown. This is one way that a road elevation could serve as a barrier to flooding and be integrated within the character and experience of the Downtown streetscape.



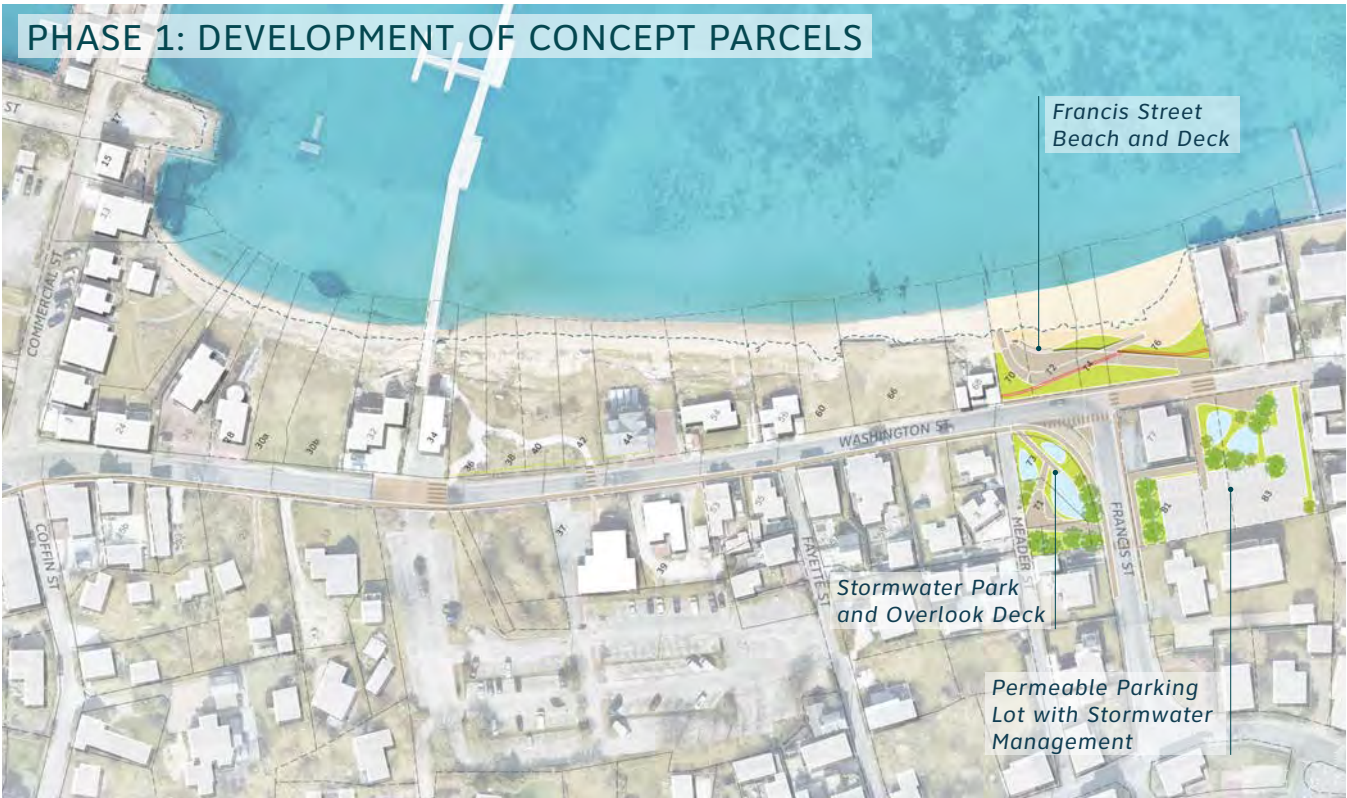
Conceptual design of the Downtown Neighborhood Flood barrier during a flood event. The barrier is designed to protect against future flooding up to 7.5' NAVD88.

WASHINGTON STREET RESILIENCE FRAMEWORK PLAN

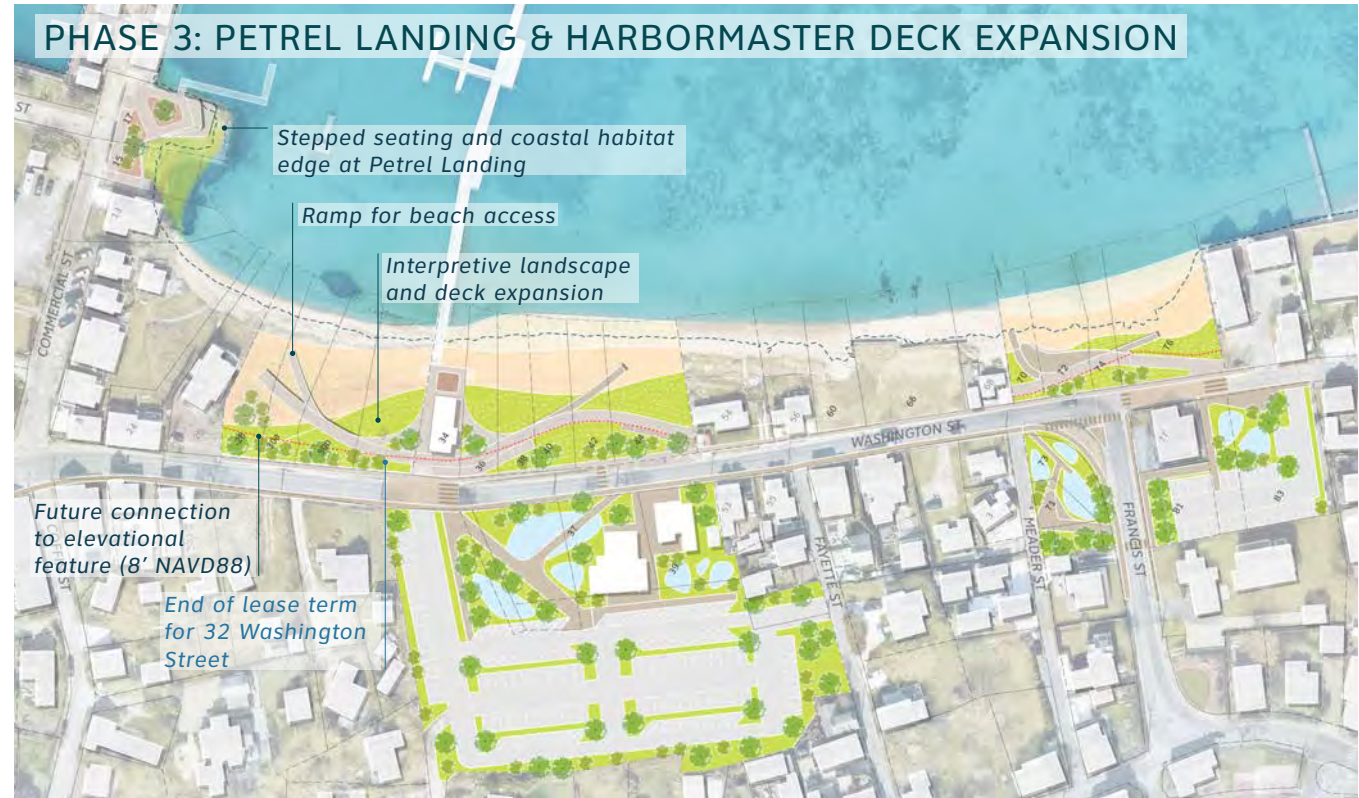
FRAMEWORK PLAN TYPOLOGIES



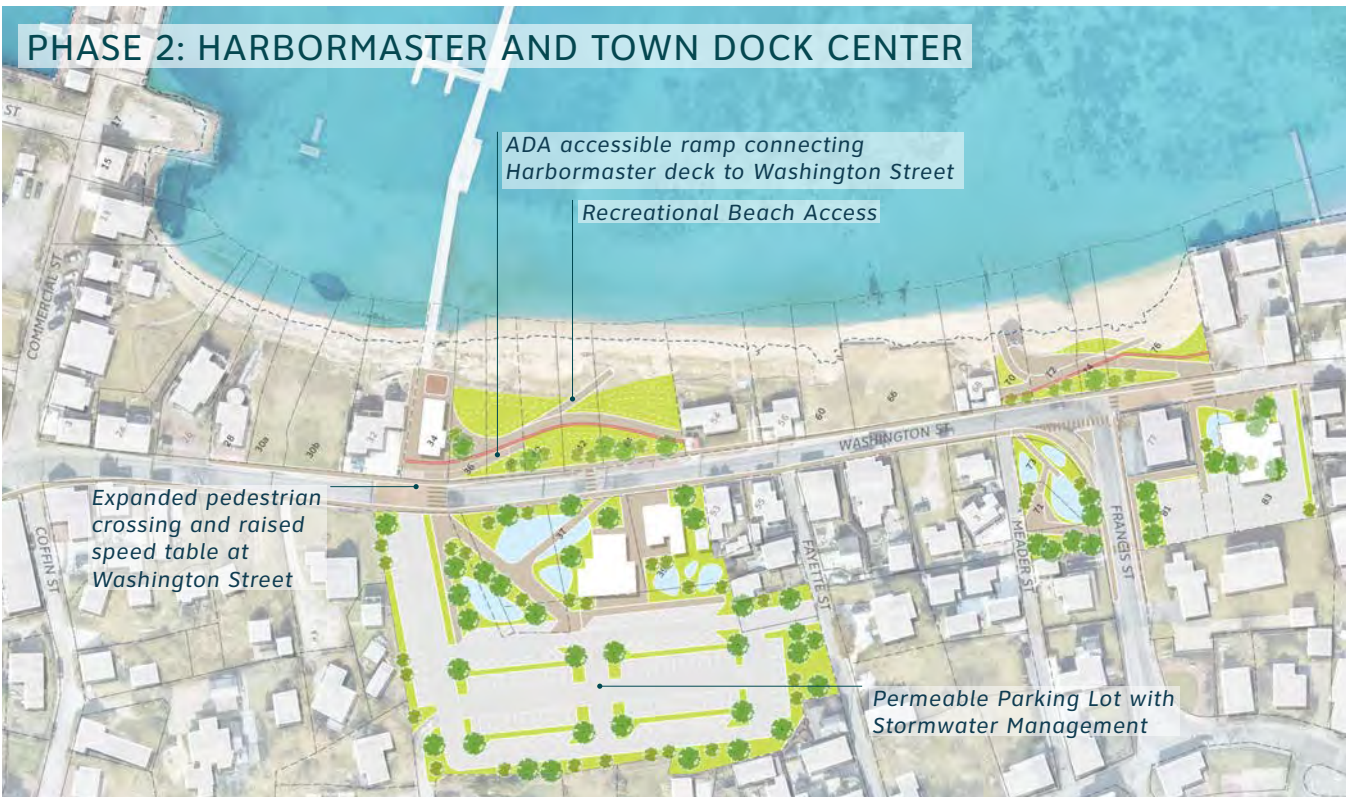
FRAMEWORK PLAN PHASING



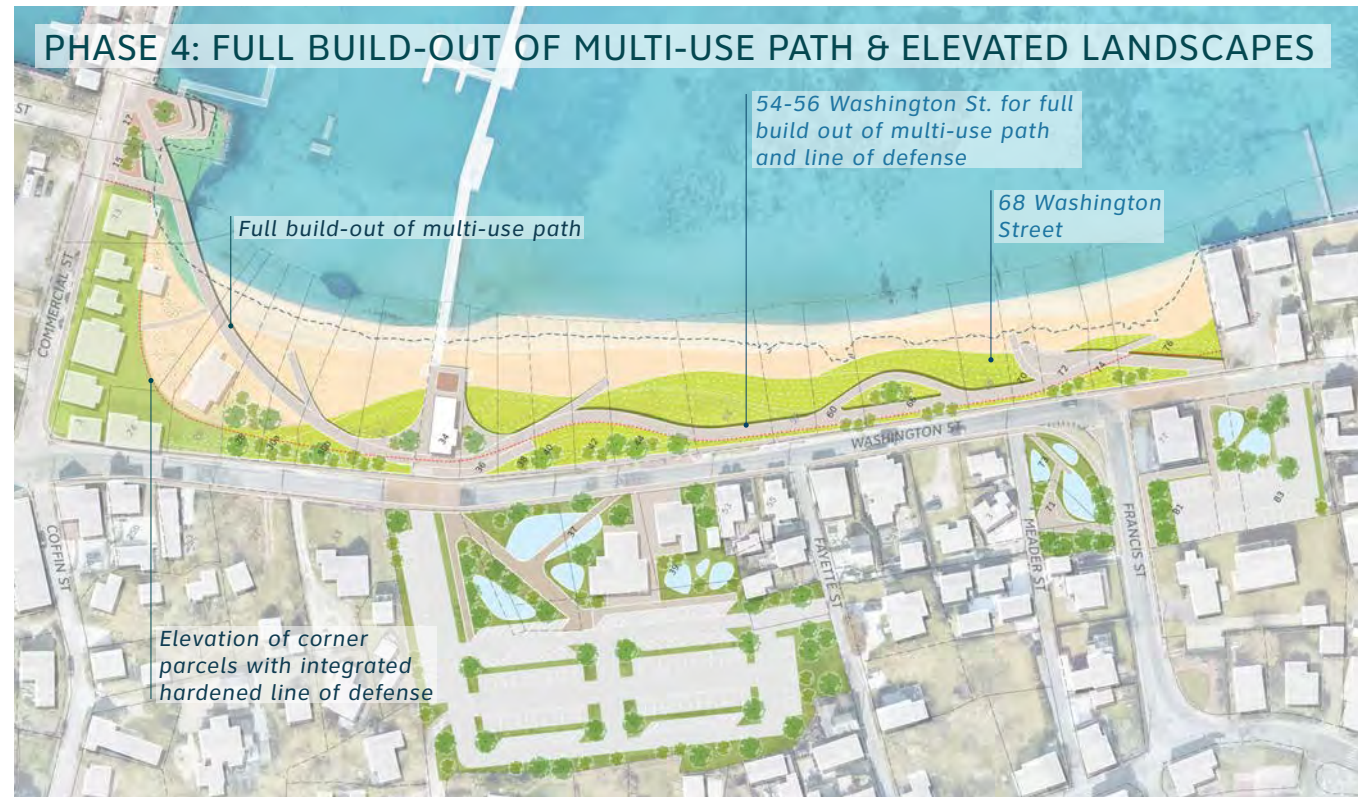
The first phase of implementation of the framework plan will encompass the Francis Street Beach parcels on the harbor side of Washington Street (70, 72, 74 and 76 Washington Street) and the adjacent inland parcels including 71, 73, 81 and 83 Washington. The first phase will include a beachfront viewing deck, stormwater gardens, and a permeable parking area.



Phase 3 will expand the harbormaster deck and waterfront access to the north across 28, 30a, 30b, and 32 Washington Street. At Petrel Landing (15 and 17 Commercial Street), a new water's edge destination park will include gathering spaces, terraced seating, and a living shoreline.



Phase 2 introduces a raised deck at the harbormaster building, and a raised trail and recreational beach access along the waterside parcels from 34-44 Washington. On the inland side, the plan envisions a series of stormwater gardens surrounding the existing town facilities and a renovated permeable town parking lot.



Phase 4 assumes the need for collaboration with owners of parcels not currently controlled by the Nantucket Land Bank or Town of Nantucket. In this phase, both a 12' multi-use path and a continuous hardened elevational feature reaching at least elevation 8' NAVD88 would extend from Francis Street Beach to Petrel Landing.

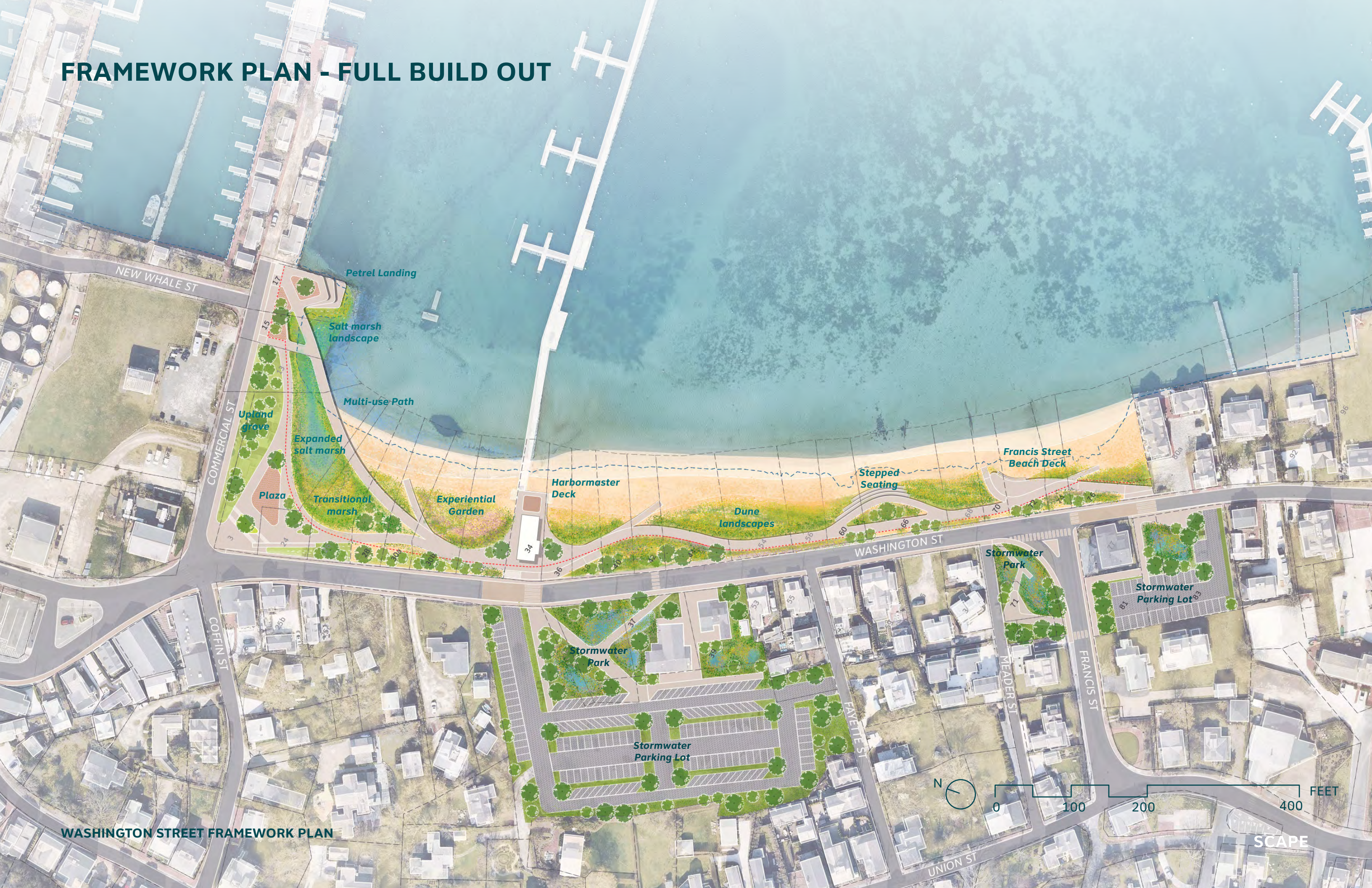
FRAMEWORK PLAN



WASHINGTON STREET FRAMEWORK PLAN

SCAPE

FRAMEWORK PLAN - FULL BUILD OUT



WASHINGTON STREET FRAMEWORK PLAN

SCALE

WASHINGTON STREET - EXISTING CONDITIONS



2050 PROJECTED MEAN HIGH WATER WITHOUT PROJECT



2050 PROJECTED MEAN HIGH WATER WITH PROJECT

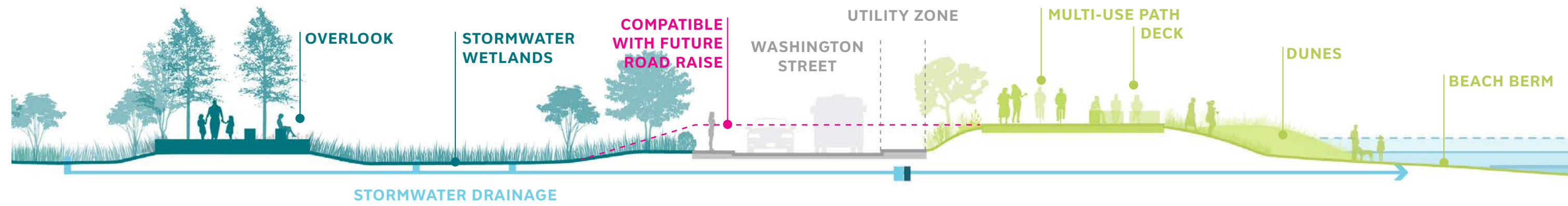


2050 PROJECTED MEAN HIGH WATER WITH PROJECT*

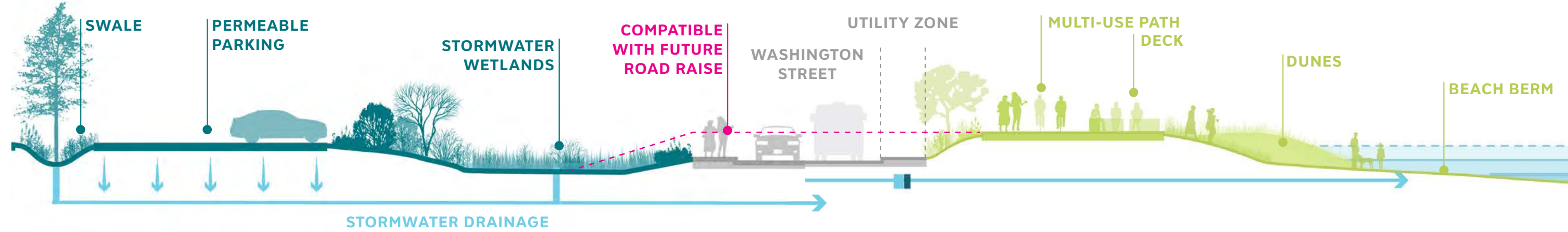
*Preventing tidal flooding on Washington Street requires similar interventions at other tidal inundation pathways.

DESIGN FOR ADAPTABILITY

STORMWATER WETLANDS & DUNES

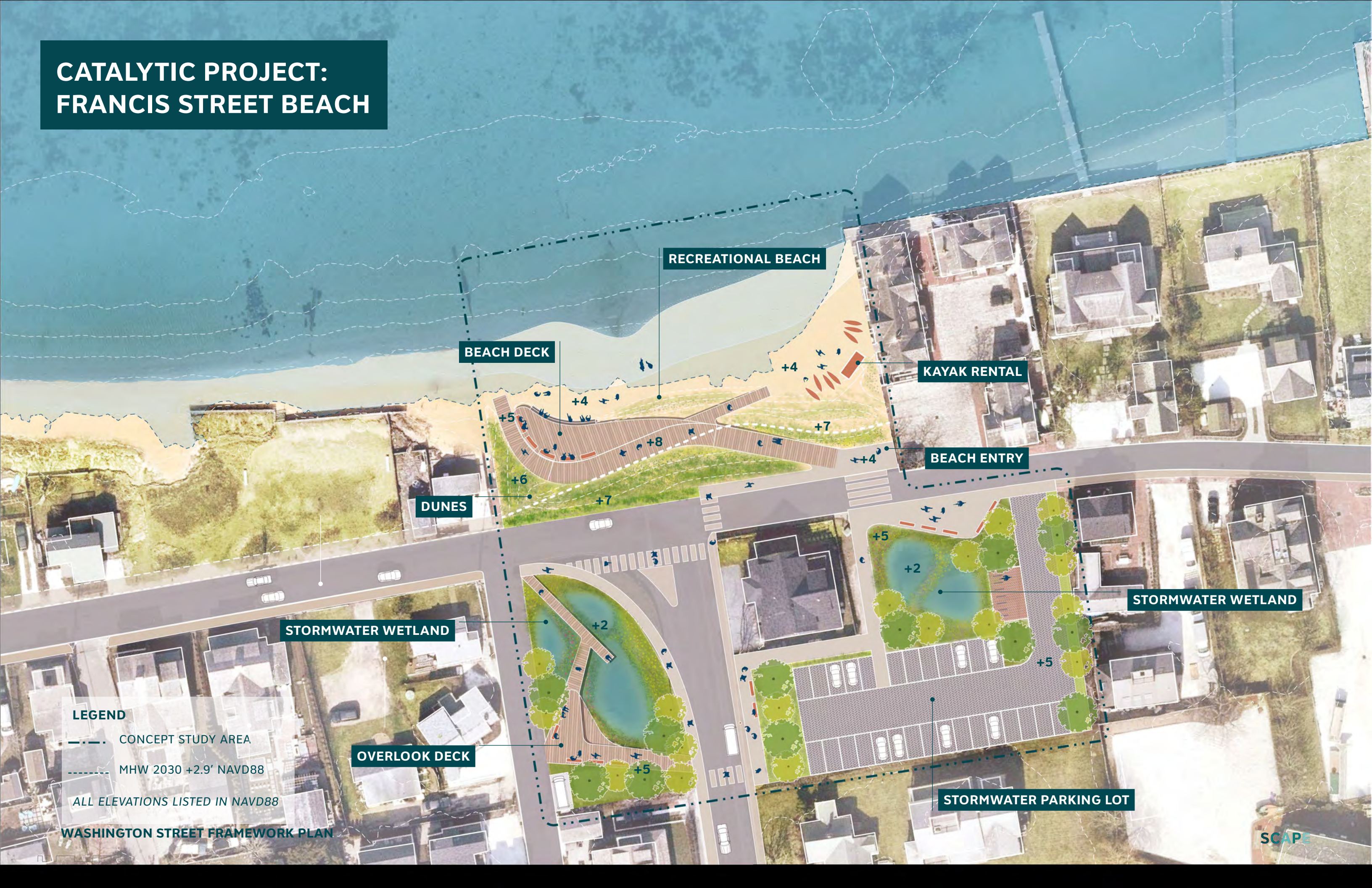


STORMWATER PARKING



CATALYTIC PROJECT: FRANCIS STREET BEACH

CATALYTIC PROJECT: FRANCIS STREET BEACH



RECREATIONAL BEACH

BEACH DECK

KAYAK RENTAL

BEACH ENTRY

DUNES

STORMWATER WETLAND

STORMWATER WETLAND

OVERLOOK DECK

STORMWATER PARKING LOT

LEGEND

--- CONCEPT STUDY AREA

..... MHW 2030 +2.9' NAVD88

ALL ELEVATIONS LISTED IN NAVD88

WASHINGTON STREET FRAMEWORK PLAN

SCAPE

FRANCIS STREET BEACH ACCESS & RECREATION



ADA ACCESSIBLE
RAMP

Rosa rugosa

Pitch pine

BEACH DECK WITH
SEATING (8' NAVD88)

American Beachgrass

STORMWATER WETLANDS AND BOARDWALK



Red Maple

Sassafras

Red Maple

FRESHWATER WETLAND
PLANTING

Snowy Egret

Black Grass

ADA ACCESSIBLE
BOARDWALK

OBSERVATION DECK



STORMWATER WETLANDS
& PARKING

STORMWATER WETLANDS
& BOARDWALK

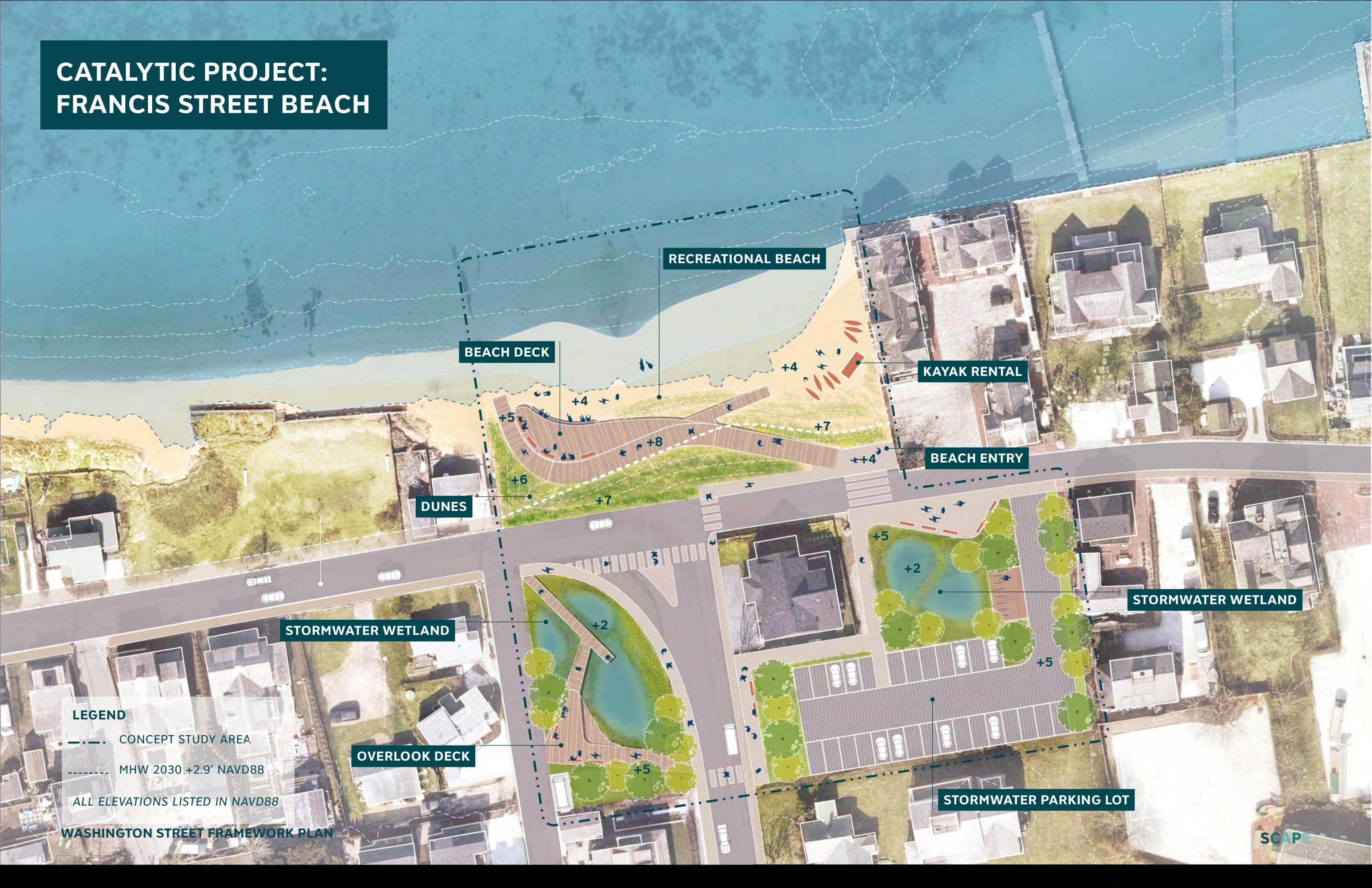
BEACH DECK
AND SEATING

ELEVATED DUNE
HABITATS

ADA ACCESSIBLE
RAMP

KAYAK LAUNCH
AREA

CATALYTIC PROJECT: FRANCIS STREET BEACH



RECREATIONAL BEACH

BEACH DECK

KAYAK RENTAL

BEACH ENTRY

DUNES

STORMWATER WETLAND

STORMWATER WETLAND

OVERLOOK DECK

STORMWATER PARKING LOT

LEGEND

--- CONCEPT STUDY AREA

..... MHW 2030 +2.9' NAVD88

ALL ELEVATIONS LISTED IN NAVD88

WASHINGTON STREET FRAMEWORK PLAN

SCAPE

CATALYTIC PROJECT: FRANCIS STREET BEACH

3

TOWN STORMWATER
INFRASTRUCTURE IMPROVEMENTS

2

FRANCIS STREET BEACH

1

1 MEADER
STREET

1

STORMWATER
WETLAND

2

STORMWATER PARKING LOT

LEGEND

--- CONCEPT STUDY AREA

----- MHW 2030 +2.9' NAVD88

ALL ELEVATIONS LISTED IN NAVD88

WASHINGTON STREET FRAMEWORK PLAN

SCAPE

NEXT STEPS/DISCUSSION

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- Confirm geographic scope of project (Salt Marsh Center)

THANK YOU!