Borough of Seaside Park

Bay-Front Wave Dissipation Project

Prepared by
Pamela Hilla
P.E., C.F.M.
Borough Engineer

March 9, 2018
Project Limits

Extends from 1 Street to Brighton Avenue along North Bayview Avenue.

Why was this area targeted?
- Area is Designated as VE 9 ft
- Low-Lying Roadway Elevation = 0.75’
- Tidal Flooding
- High Energy Waves
- Erosion of the Shoreline
Existing Conditions Plan
Summary of Project Meetings

❑ First Informational Meeting was held June 23, 2017
   plan entailed the following:
   ✓ Construction of uplands Bulkhead to Elev of 5 ft.
   ✓ Rip-Rap Breakwater and beach replenishment proposed
   ✓ Drainage System to tie into NJDOT Pump Station

❑ Second Informational Meeting was held March 9, 2018
   plan entailed the following:
   ✓ Construction of uplands Bulkhead to Elev of 5 ft.
   ✓ Articulated Concrete Matting to stabilize shoreline
   ✓ Reconstruction of drainage outfalls and installation of Tide Valves.
Impacts on the Design

NJDOT’s denial to utilize existing pump stations.

Limitations to proposing breakwater due to mapped Submerged Aquatic Vegetation

Lack of real-estate due to location of the 1977 Shoreline
Proposed Conditions
Proposed Conditions

Barnegat Bay

750 L.F. OF PROPOSED WAVE DISSIPATION STRUCTURE TO END AT EXISTING CURB-REVENTMENT TO EXTEND 10' PAST WALL

PROPOSED WAVE DISSIPATION STRUCTURE TO END AT EXISTING CURB-REVENTMENT TO EXTEND 10' PAST WALL

EXISTING SEAWALL/BULKHEAD TO REMAIN

PROPOSED PUBLIC ACCESS

PROPOSED PUBLIC ACCESS

EXISTING BEACH AREA

EXISTING BEACH AREA

PROPOSED 50' ROADWAY WIDTH

PROPOSED 50' ROADWAY WIDTH

EXISTING DRAINAGE INLETS TO BE REMOVED AND EXISTING OUTFALLS TO REMAIN (TYP.)

PROPOSED BEACH REPLENISHMENT TO 1977 SHORE LINE WITH ARMORMENT

PROPOSED BEACH REPLENISHMENT TO 1977 SHORE LINE WITH ARMORMENT

N. Bayview Avenue

Barnegat Bay

GRAPHIC SCALE

1 inch = 100 feet

CROSS SECTION II-I
Structural Components

Concrete Articulated Matting

Composite Sheet Piling
Outfall Reconstruction

Drainage Improvements:

- Water tight catch basins will be installed adjacent to new bulkhead
- 6 Outfalls with be reconstructed and secured with piles and bracing.
- In-line Tide Flow Prevention Valves to be installed at the outfalls
Goal of the Project

❖ Protect against wave action, by constructing an elevated seawall landward of the existing County bulkhead.

❖ Replenish the beach area and create a sustainable vegetated shoreline.

❖ Maintain public access to Bay. Proposed accesses will be at G Street and E Street
Status of Permits and Funding

- CAFRA Individual Permit was issued 6/6/2019
- Ocean County Soils Permit is substantially complete and anticipate a permit issued in July.
- USACE Permit is under final processing and anticipate permit issued in July.
- The Borough was awarded Phase 1 of a Hazard Mitigation Grant in the amount of $95,000 and received reimbursement in the amount of $83,011.05.
- Request for Phase 2 Approval in the Amount of $1,205,000 is under final review by FEMA
- The County has agreed to contribute 50% of the Total Local Share
- Pursuing FEMA Flood Mitigation Assistance funding for Phase 2
Question
&
Answer