<table>
<thead>
<tr>
<th>Contract</th>
<th>Description</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-S.A</td>
<td>Dredge Fire Island Inlet &amp; Shoals; Place sand on Gilgo Beach &amp; Robert Moses State Park; 9 Nov 2021 start</td>
<td>Structural</td>
</tr>
<tr>
<td>2-S.B</td>
<td>Dredging Moriches &amp; Shinnecock Inlets and Shoals with CPF Sand Placement</td>
<td>Structural</td>
</tr>
<tr>
<td>3-S.C</td>
<td>Dredging Offshore Borrow Sites and Sand Placement Tiana and Montauk Beaches (Cost Justified for Mob/Demob)</td>
<td>Structural</td>
</tr>
<tr>
<td>S.D</td>
<td>Dredging Offshore Borrow Sites and Sand Placement</td>
<td>Structural</td>
</tr>
<tr>
<td>S.E</td>
<td>Groin Modification at Ocean Beach – Remove Groins after Well Relocation is functional</td>
<td>Structural</td>
</tr>
<tr>
<td>S.F</td>
<td>Initial Coastal Process Features when Renourished (Not Cost Justified as Stand-Alone Project (CPFs 4,5 and 6))</td>
<td>Structural</td>
</tr>
<tr>
<td>NS.A</td>
<td>Year 1 - Non-Structural Measures (Data Verification, Homeowner Apps, Phase 2 Surveys, Real Estate, Contracts)</td>
<td>NonStructural</td>
</tr>
<tr>
<td>NS.B</td>
<td>Year 2 - Non-Structural Measures (Approx. 1,000 Structures)</td>
<td>NonStructural</td>
</tr>
<tr>
<td>NS.C</td>
<td>Year 3 - Non-Structural Measures (Approx. 1,250 Structures)</td>
<td>NonStructural</td>
</tr>
<tr>
<td>NS.D</td>
<td>Year 4 - Non-Structural Measures (Approx. 1,250 Structures)</td>
<td>NonStructural</td>
</tr>
<tr>
<td>NS.E</td>
<td>Year 5 - Non-Structural Measures (Approx. 430 Structures)</td>
<td>NonStructural</td>
</tr>
</tbody>
</table>
### Project First Cost

- **Summary**
  - Project First Cost: $1,541,981,000
  - Fully Funded First Cost: $1,759,459,000
  - Benefit to Cost Ratio (BCR): 2.2
  - Annual Non-Fed OMRR&R Costs: $677,000

### Project Schedule

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPA Execution (Initial Construction Phase)</td>
<td>06-Aug-2021 (A)</td>
</tr>
<tr>
<td>Contract 1 (Fire Island Inlet sand bypassing) Award</td>
<td>27-Aug-2021 (A)</td>
</tr>
<tr>
<td>Contract 1 Construction Completion</td>
<td>Mar-2022 (S)</td>
</tr>
<tr>
<td>Contract 2 (Moriches/Shinnecock Inlet bypassing) Award</td>
<td>Jul-2022 (S)</td>
</tr>
</tbody>
</table>

Initial Construction is 100% Federal per Hurricane Sandy PL 113-2 (FY20 Prices)

Future nourishment efforts are cost-shared 50% Federal, 50% Non-Federal

Source of Non-Federal Funds: State of New York (NYSDEC)

### Feasible
- Plan is technically feasible
- Plan is Mutually Acceptable to ASA(CW) & Department of Interior
- Fully executable upon approval
- Federally funded through P.L. 113-2
- 100% Federal for initial construction

### Acceptable
- Plan is environmentally acceptable; NEPA compliance on schedule
- ATR and IEPR complete
- ASA Policy Waiver received for Recommended Plan
- Public meetings/comments indicate public support
- New York State and Department of Interior support the Recommended Plan

### Sustainable
- Federal long-term requirement reduced with 30 year commitment
- Sponsor has capability to fulfill requirements

### Suitable
- Resiliency - provides ability to withstand or recover from storm impacts with a systems approach
- Reliability - based on proven managed risk engineering solutions
- Adaptability - project features can be modified to address increase in sea level rise, if required

### Plan Features

**Sand bypassing at Inlets:**
- Fire Island Inlet, Moriches Inlet, and Shinnecock Inlet
- Placement of dredged material on downdrift beach in quantities needed to supplement O&M dredging
- Bypassing to restore littoral transport of sediment across inlets for 50 years

**Mainland nonstructural plan:**
- Provides for coastal storm risk management for approximately 4,400 structures
- Breach responses on barrier islands: Proactive, Reactive, Conditional, and Wilderness

**Barrier island components:**
- Including dunes, periodic renourishment every 4 years for a 30 year period following construction, proactive breach response for years 31 to 50, initial placement of sand along 6,000 feet of shoreline on Montauk Beach, as feeder beach every 4 years for 30 years
- Removal of existing Ocean Beach groins to enable sand transport

**Coastal Process Features (CPFs):**
- 12 barrier island locations and 2 mainland locations
- Placement of approximately 4.2 million cubic yards of sediment along barrier island bayside shoreline over 50 years

### Study Team, Sponsor & Stakeholders

- U.S. Army Corps of Engineers, New York District
- New York State Department of Environmental Conservation
- U.S Department of the Interior
- U.S Fish & Wildlife Service
- U.S National Park Service, Fire Island National Seashore
- U.S Geological Service

US Army Corps of Engineers Project Website:

Mastic Beach, NY (2012)