INDIAN RIVER INLET, DELAWARE REPAIR OF COASTAL NAVIGATION STRUCTURES

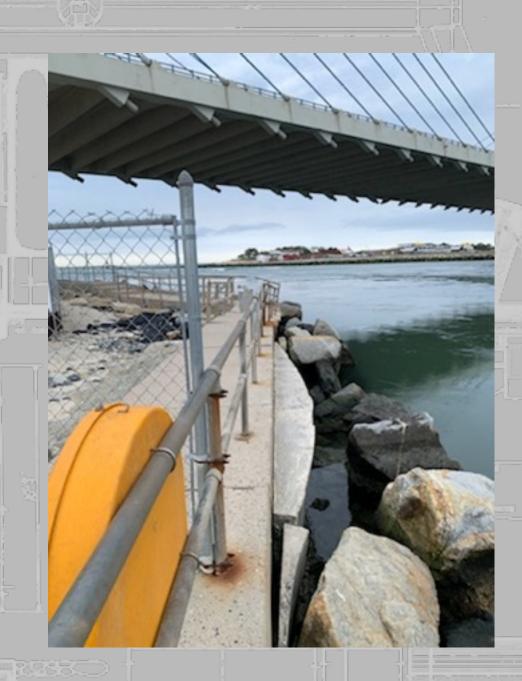
Steve Rochette
Public Affairs Officer

Monica Chasten Project Manager

Bill Nash Project Engineer







### **Meeting Agenda**



1. Public Meeting Overview and Introductions (S. Rochette)

2. Summary of Federal Navigation Project and Coastal Navigation Structure Repairs (M. Chasten)

3. Construction of North Bulkhead and South Jetty Repairs (B. Nash)

4. Questions & Discussion





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#### Indian River Inlet & Bay, DE Federal Navigation Project Repairs



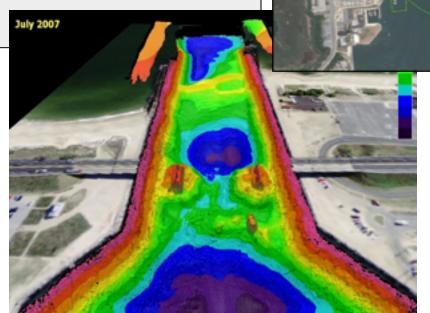
#### Background:

- The project was authorized by Congress in 1937 and modified in 1945
- The project includes maintenance of a navigation channel approximately 3 miles long and inlet stabilization with parallel jetties and bulkheads. Authorized depth through inlet is 15 ft MLLW.

#### Issues:

- A bulkhead section along the north shoreline has failed and is comprising USACE and State infrastructure near the Delaware Seashore State Park. Public access to the failed area has been restricted due to safety risk. Design and repair is complex due to the steep slope into the inlet.
- Additionally, the Indian River Inlet jetties are in poor condition with over 350 ft of loss of the north jetty seaward end since 1960
- Deep Scour Holes & Complex Hydrodynamics
- South jetty requires sand-tightening







# Indian River Inlet, DE Jetty and Bulkhead Repairs Funding



- \$43 million received in Fiscal Year 2022 Bipartisan Infrastructure Law for Major Maintenance Repairs (design & construction) of coastal navigation structures at Indian River Inlet
  - North Jetty repair (ongoing evaluation)
  - South Jetty sand tightening (under contract)
  - Failed bulkhead on interior north shoreline (under contract)
- \$150k to develop a sediment budget for the inlet system to reduce the navigation project's Operation & Maintenance costs, evaluate the impacts of climate change in the region and improve project efficiency and resilience for multiple federal projects in the region (ongoing evaluation)



# **Project Overview**







### **Indian River Inlet North Jetty Repair**



- Fiscal Year 2023 contract solicitation proceeded with North Bulkhead and South Jetty repairs since north jetty required further evaluation
- USACE's Committee on Tidal Hydraulics Participation
- CMS & GenCade Modeling underway by USACE's Engineering Research and Development Center
- Data Collection Efforts
  - Hydrodynamic data (Summer 2023)
  - Inlet bathymetry & topo surveys (periodic)
  - Geotechnical investigation (March 2024)



# North Bulkhead & South Jetty Repairs Milestone Schedule (Subject To Change)

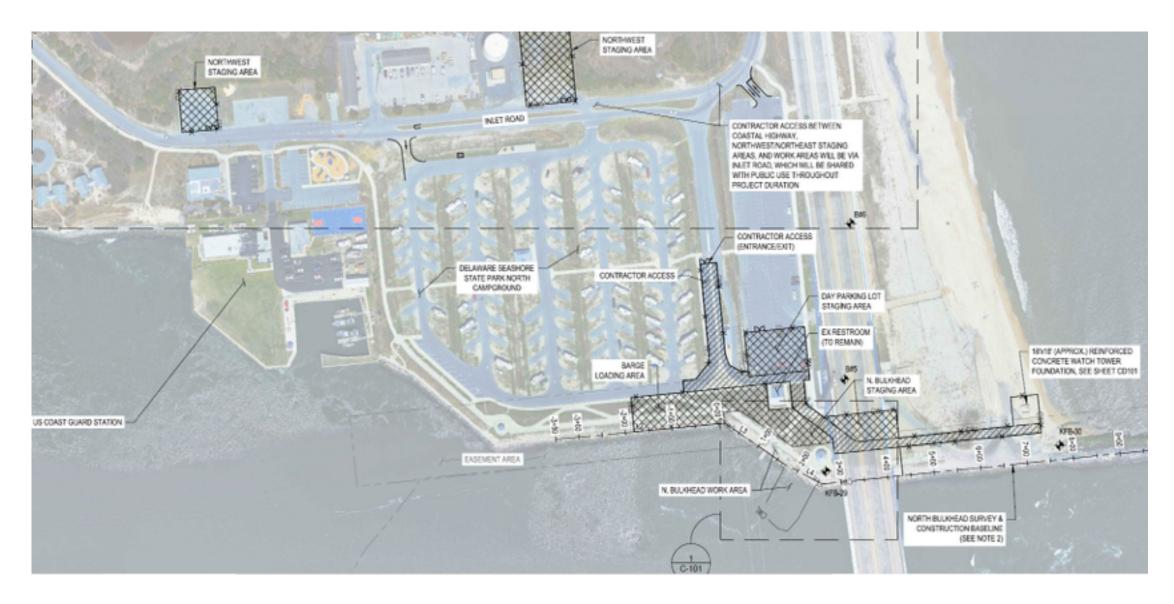


- Contract Award: September 22<sup>nd</sup> 2023 to Agate Construction
- Notice to Proceed: October 12<sup>th</sup> 2023
- Mobilization: April 3<sup>rd</sup> 2024
- North Jetty Start: May 17<sup>th</sup> 2024
- South Jetty Start: October 11<sup>th</sup> 2024
- Contract Required Completion: April 4<sup>th</sup> 2025



## **Limits of Construction - North Jetty**

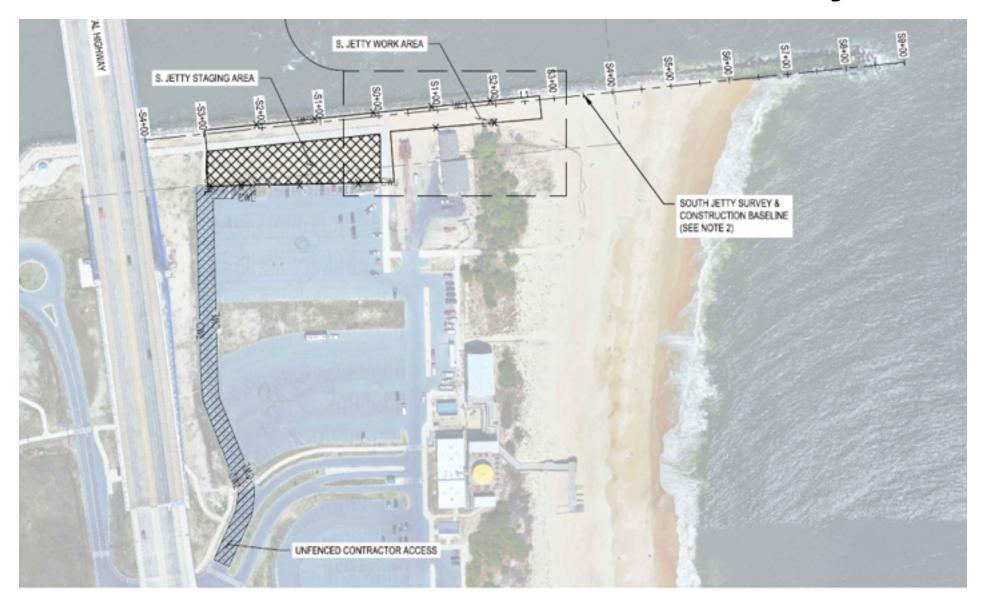








# **Limits Of Construction - South Jetty**





# Parking Lot Access Plan





# **Discussion**

