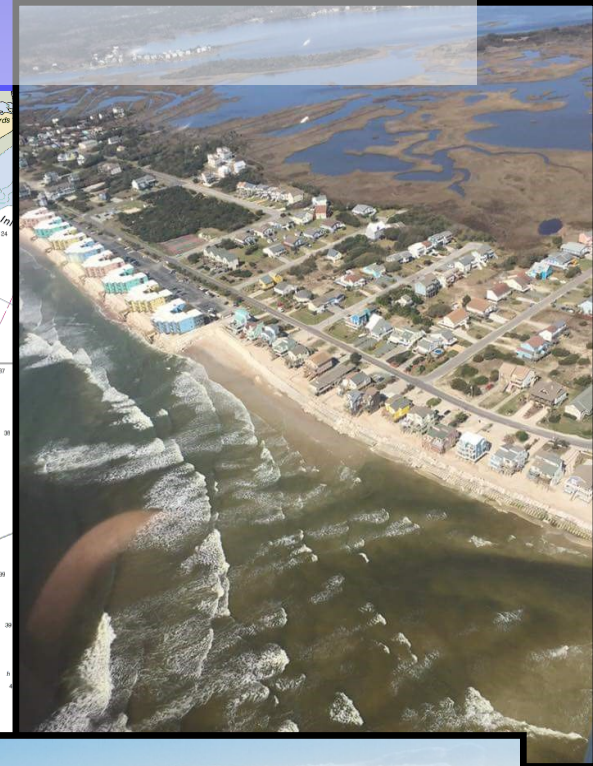
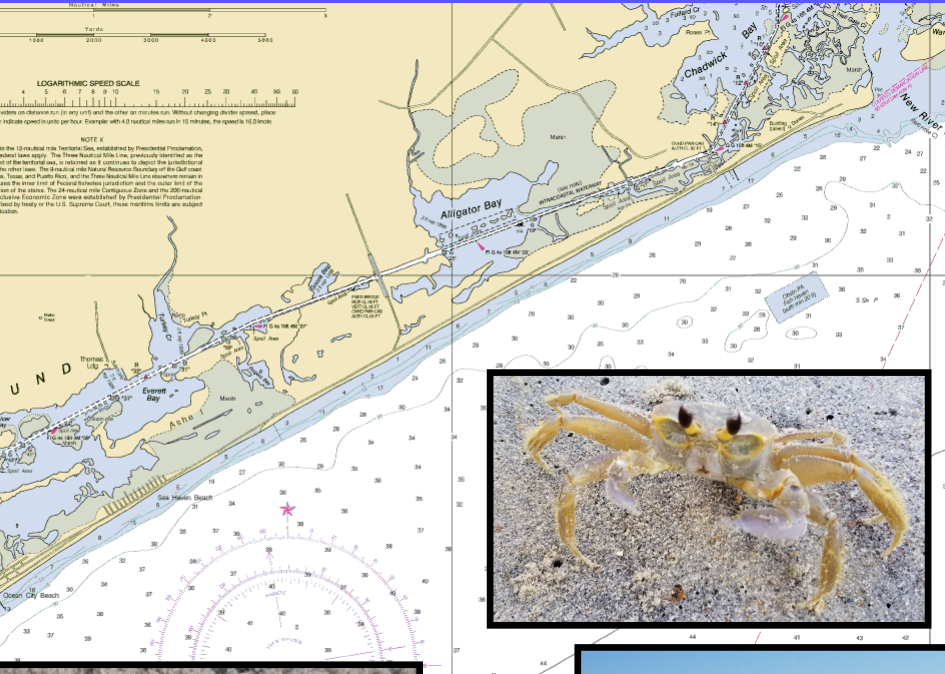


North Topsail Beach Coastal Update

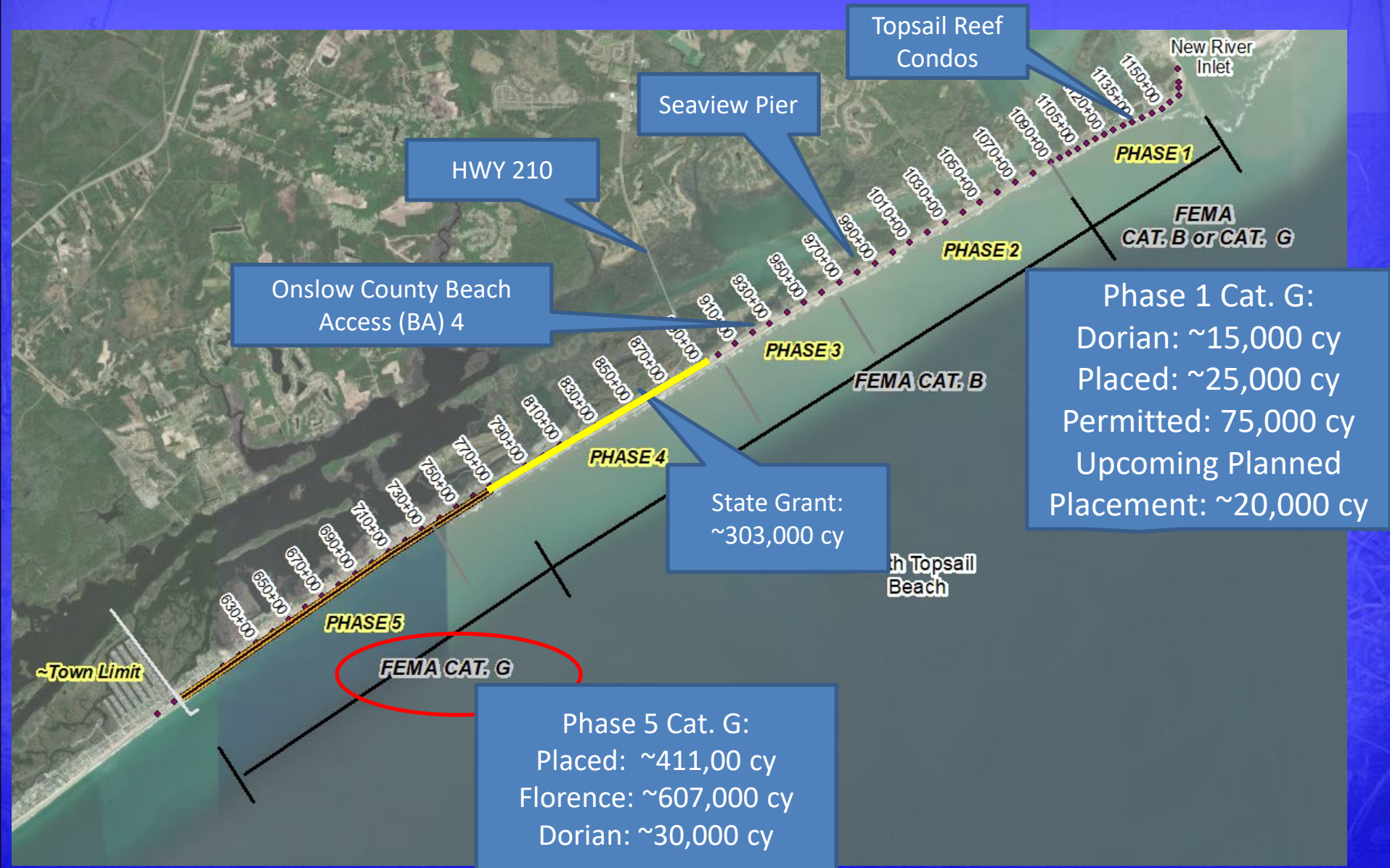
August 2023



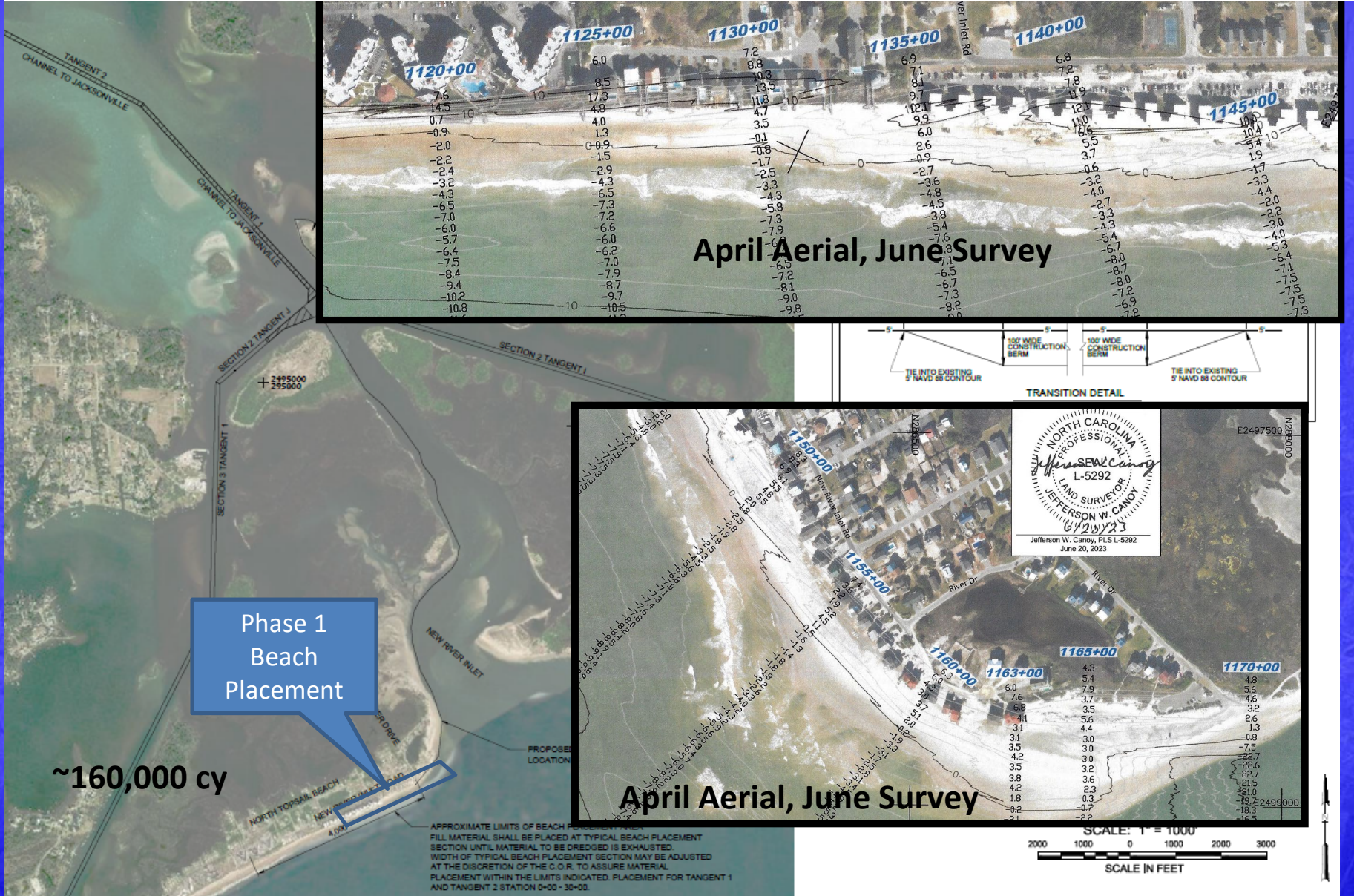
Marina, Coastal, Environmental
& Water Resources Engineers

Ongoing and Upcoming Projects Overview

State Grant, Dorian and Florence FEMA Category G



USACE (Corps) AIWW/Channel Dredging. Completed Mid March. June Survey Shows Material Still There.



Phase 1 Beach (not Dune) Truck Haul Nourishment

Phase 1 Nourishment
20,000 CY Planned for
Upcoming Placement
Environmental
Window

March 2023 Placement: ~25,000 cy

Permitted for Placement

POTENTIAL BEACH ACCESS
(TO BE COORDINATED WITH
TOPSAIL REEF VILLAS)

REEF VILLAS)

EXISTING TEMPLATE
(HATCHED)

EXISTING BEACH
ACCESS AT
JENKINS WAY
MAY BE UTILIZED

1120+00

1130+00

1135+00

LANDWARD EDGE OF FILL

MODIFIED
TOE OF FILL

LANDWARD EDGE OF FILL

MODIFIED
EDGE OF BERM

10+00

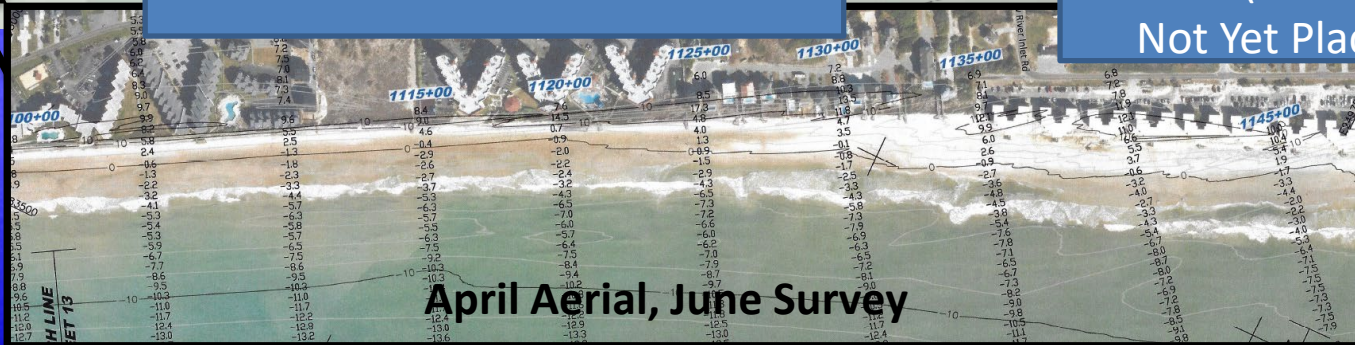
MHW:
+1.1' NAVD88

MLW:
-1.7' NAVD88

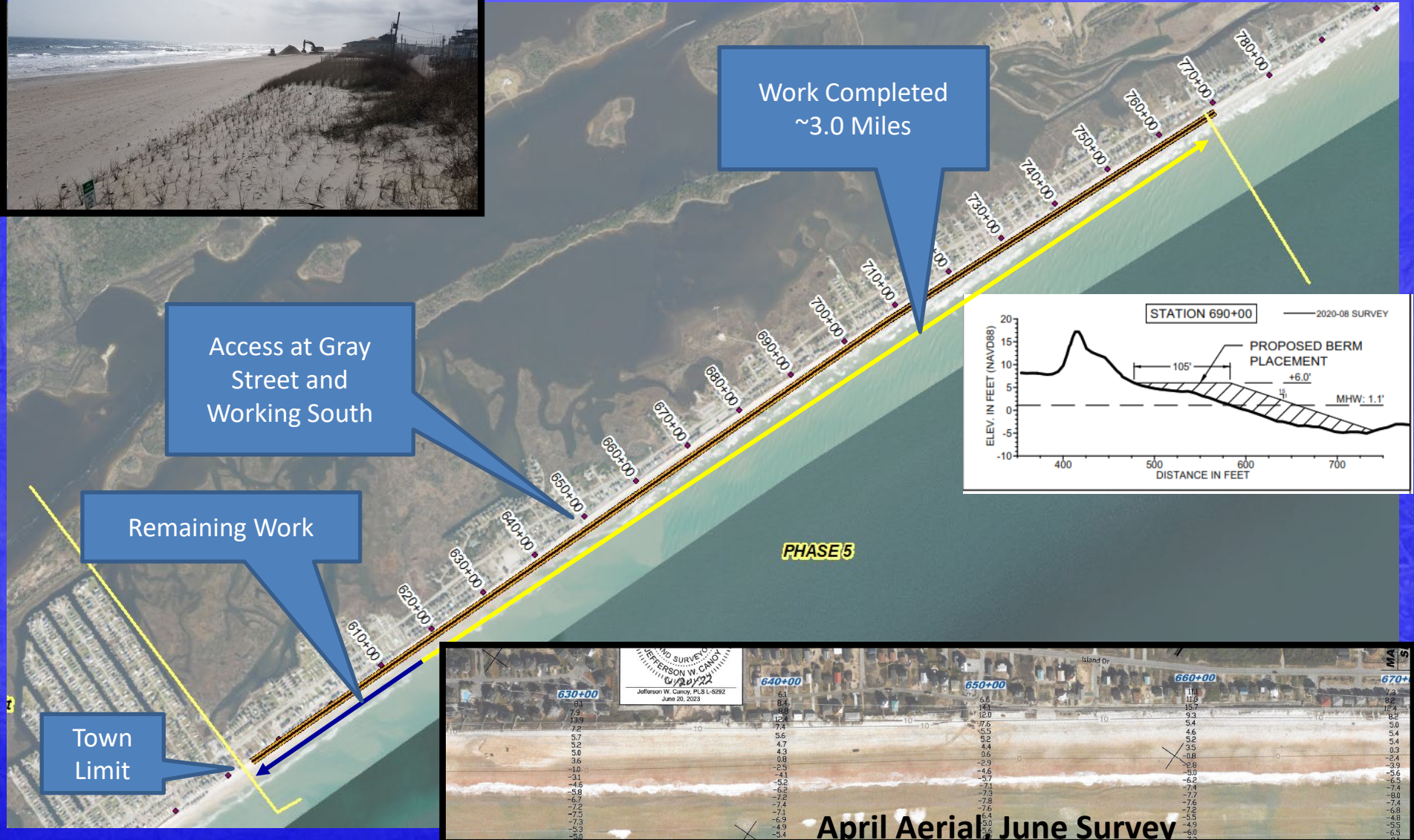
PROPOSED
SOUTHERN
TEMPLATE
EXTENSION

Phase 1
Nourishment
Full 75,000 CY
Permitted Template
Shown (Placed and
Not Yet Placed)

Permitted Extension Past St. Regis



Ongoing Florence & Dorian Nourishment in Phase 5 Beach (not Dune) Nourishment. ~3.0 Miles of New Beach

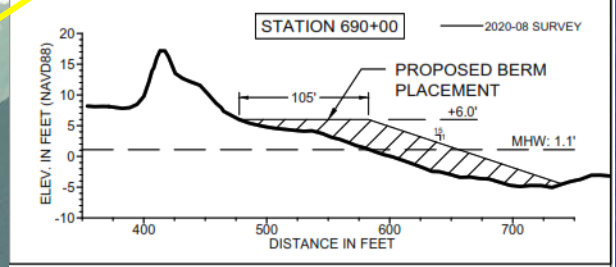


Work Completed
~3.0 Miles

Access at Gray
Street and
Working South

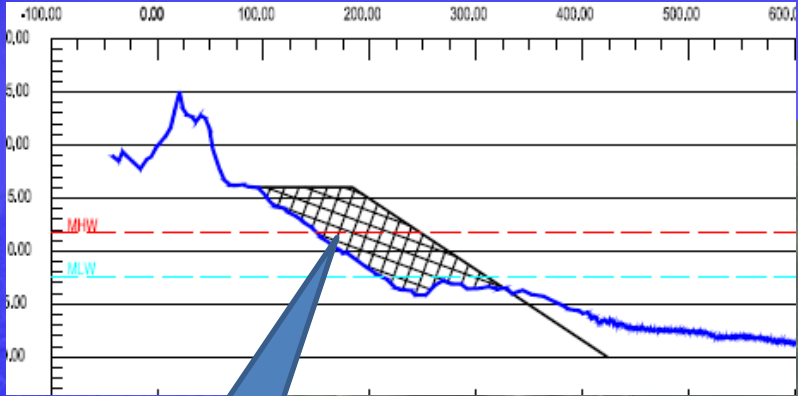
Remaining Work

Town
Limit

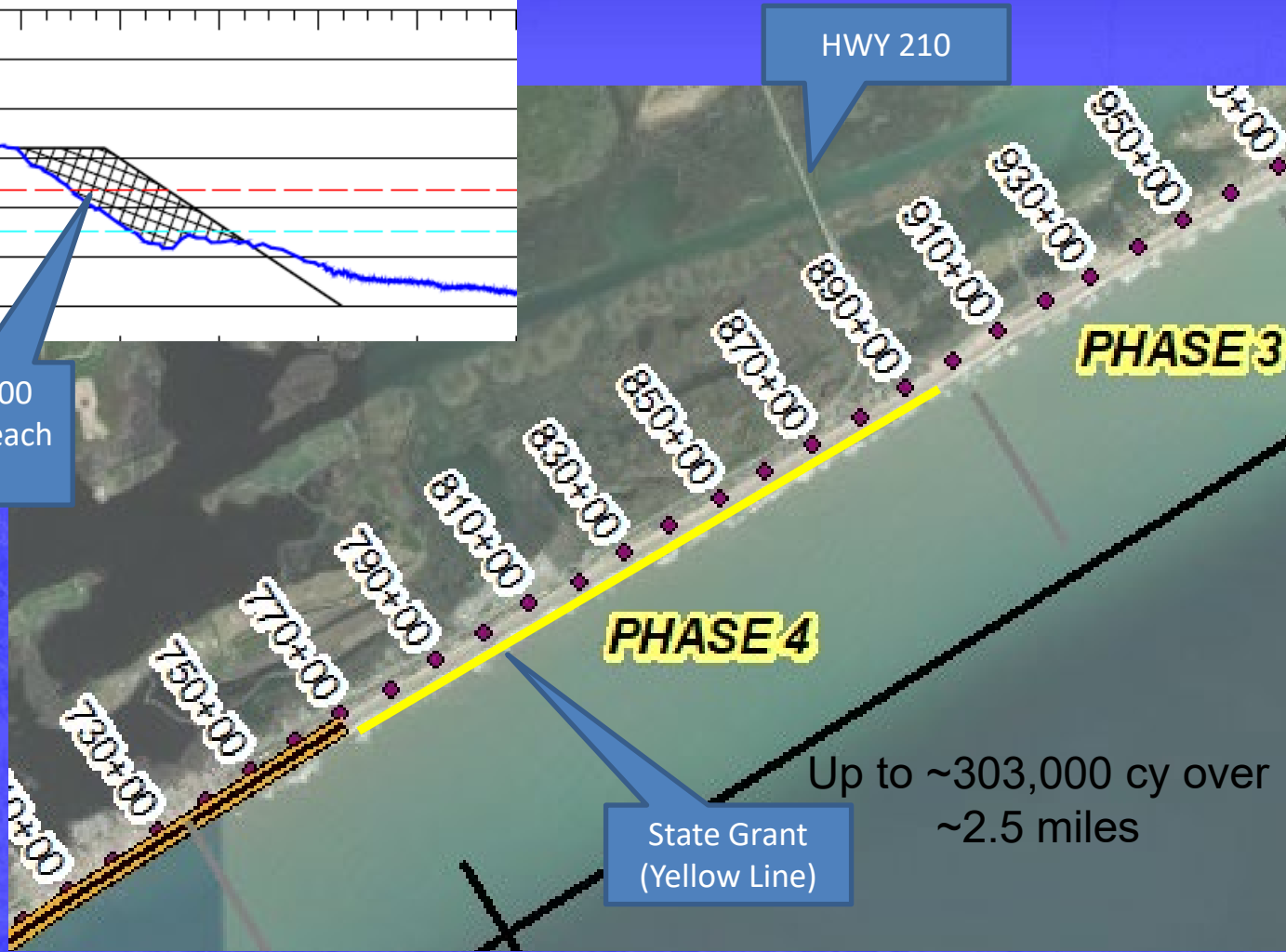


April Aerial June Survey

Successful State Grant in Phase 4. Beach (not Dune) Nourishment



~80 to 100 Feet of Beach Width



State Grant (Yellow Line)

Project Timing vs Project Production

County Beach Access Dune Rehabilitation - Completed

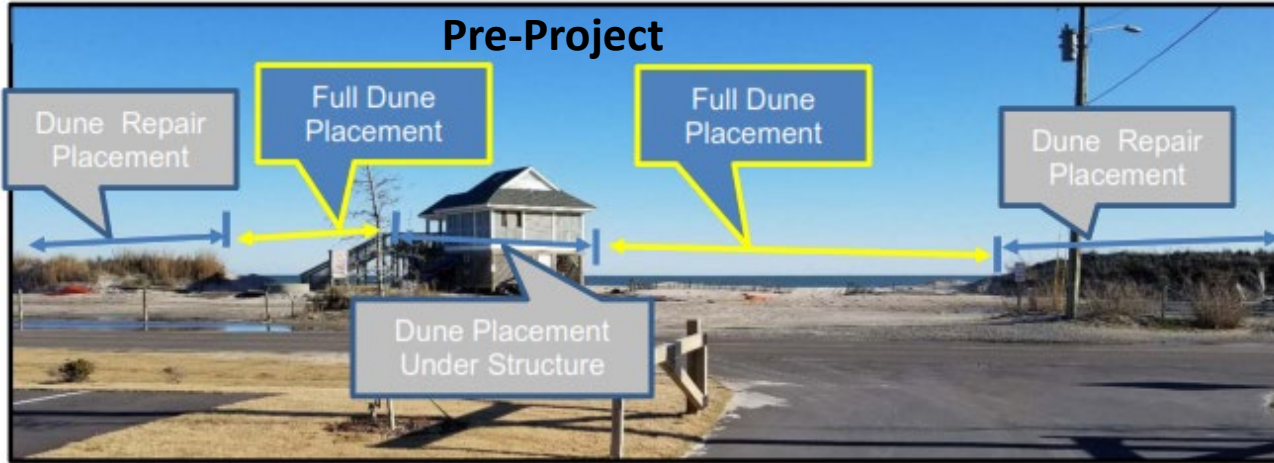
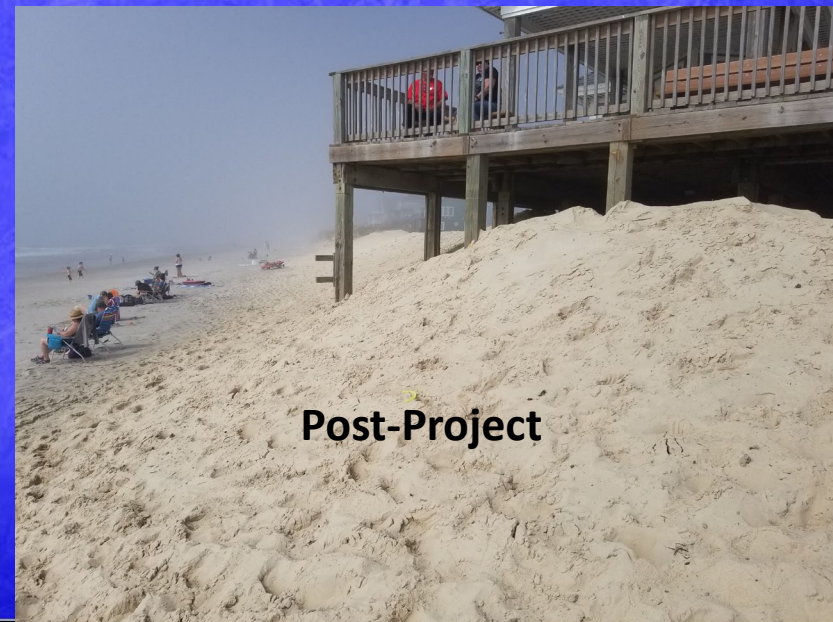


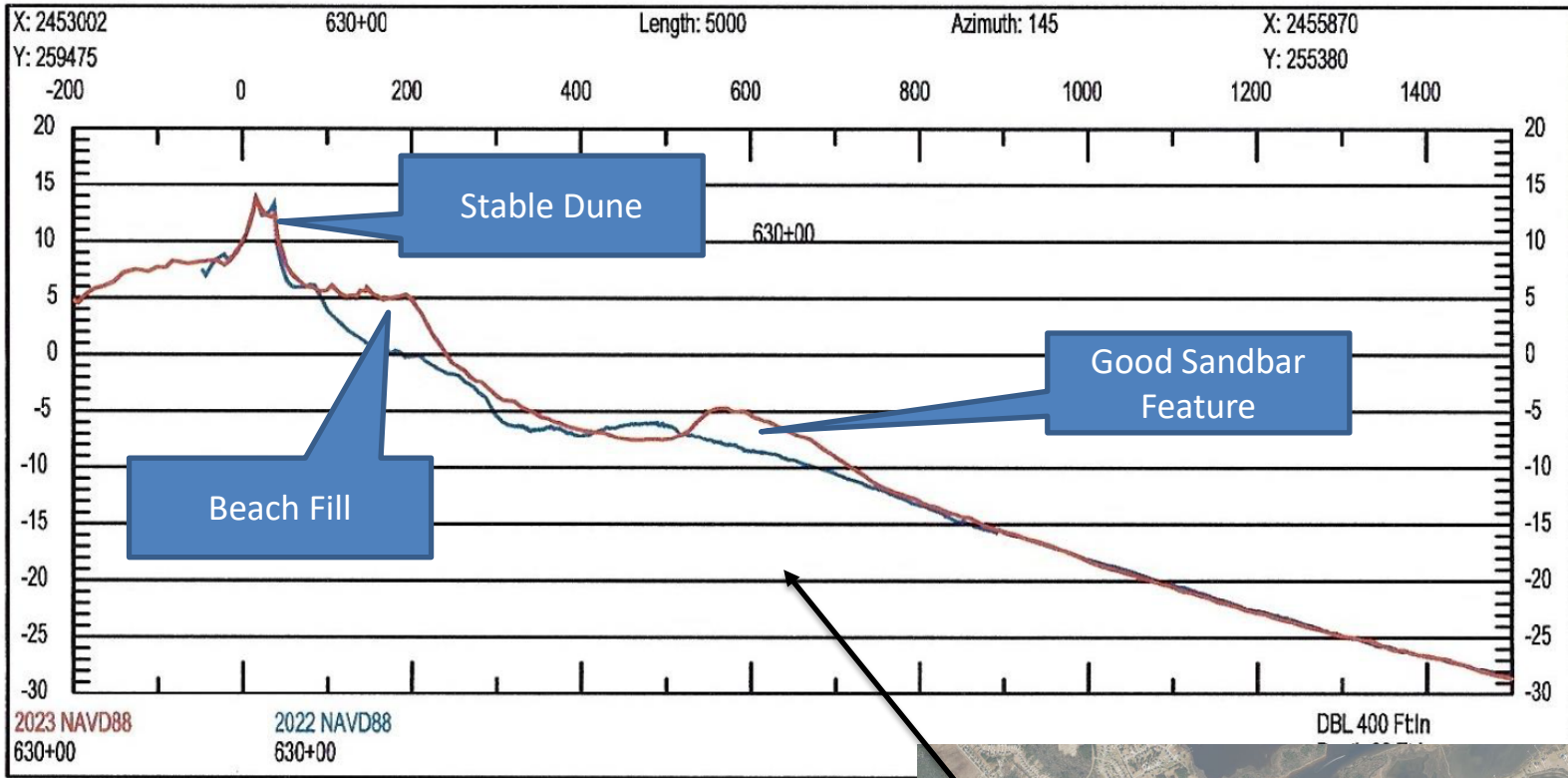
Figure 1: Dune Material Placement (photo taken February 3, 2021).



Vegetation Sprigging Occurred last week of May (Sea Oats and Bitter Panicum)

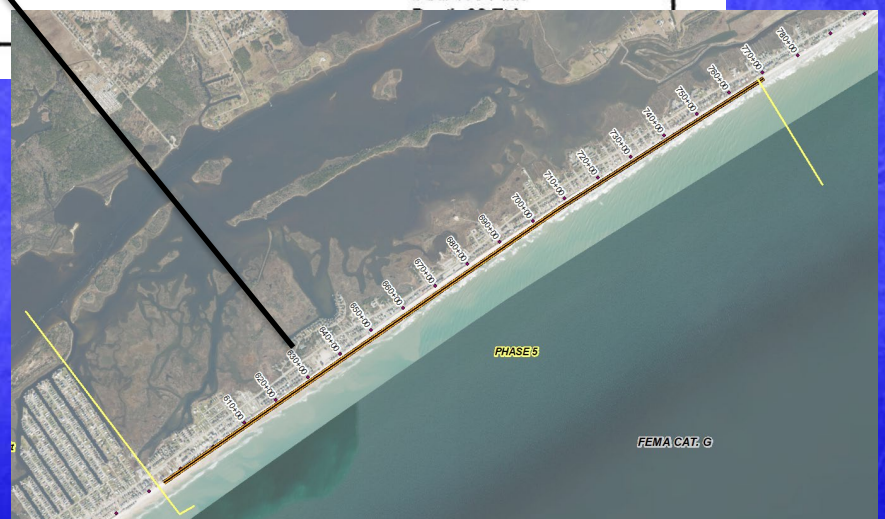


Phase 5 Example Annual Monitoring Profile

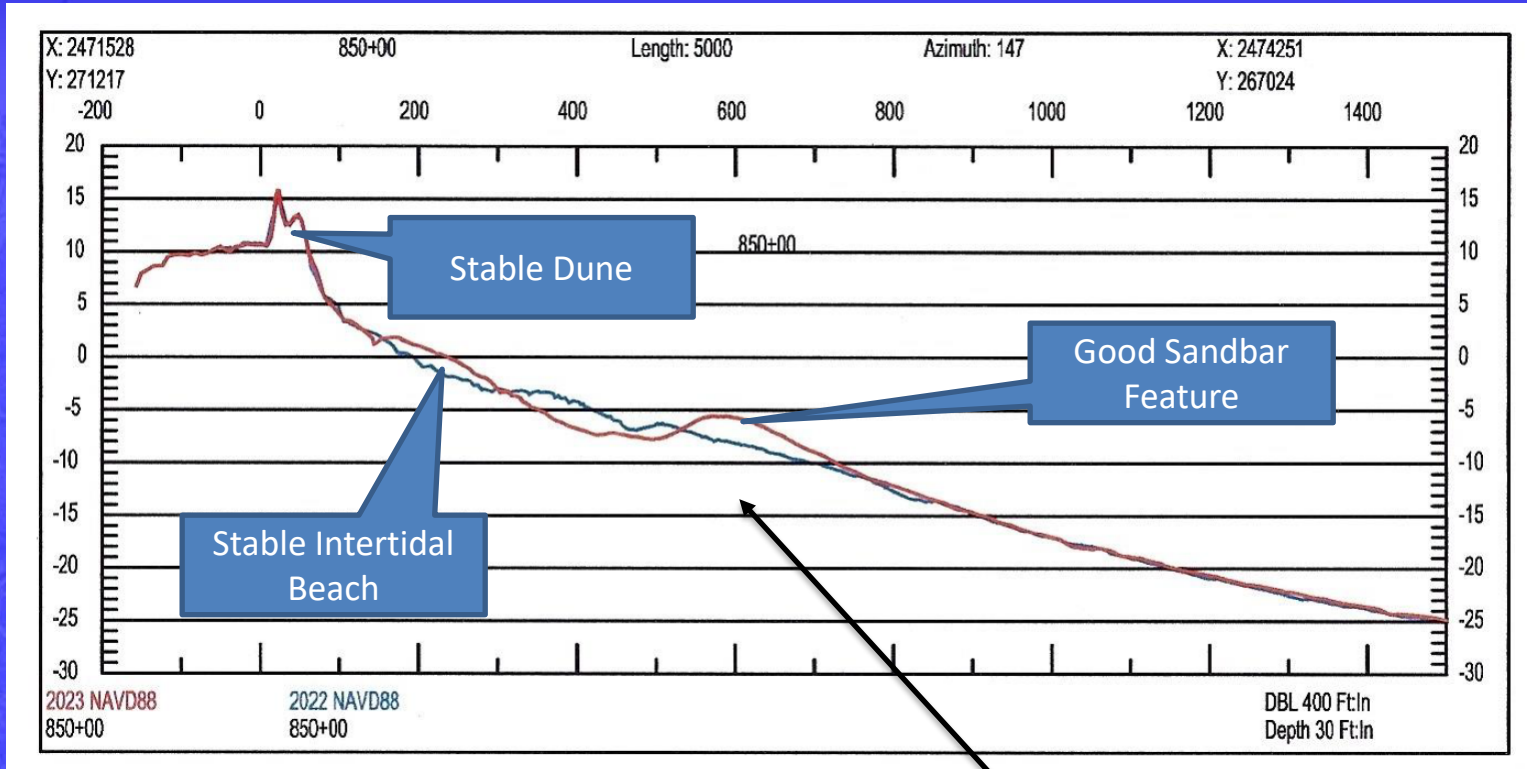


Vertical Datum Conversions

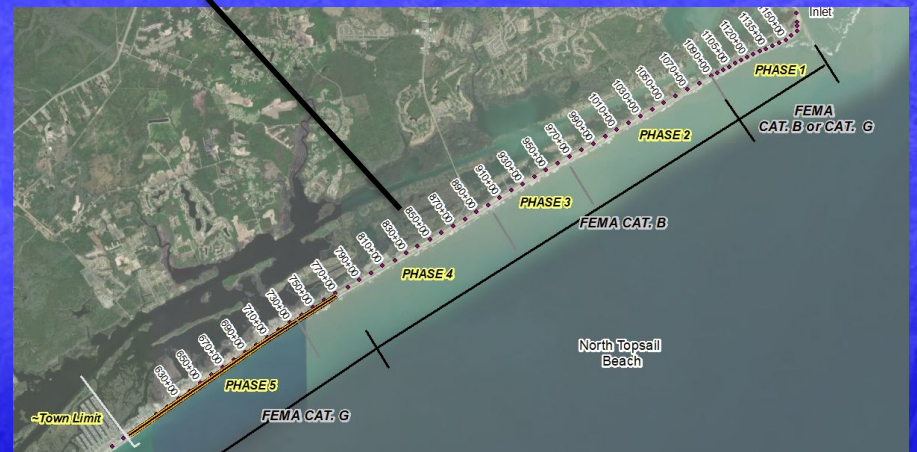
Mean High Water	1.40'
NAVD88	2.81'
Mean Low Water	



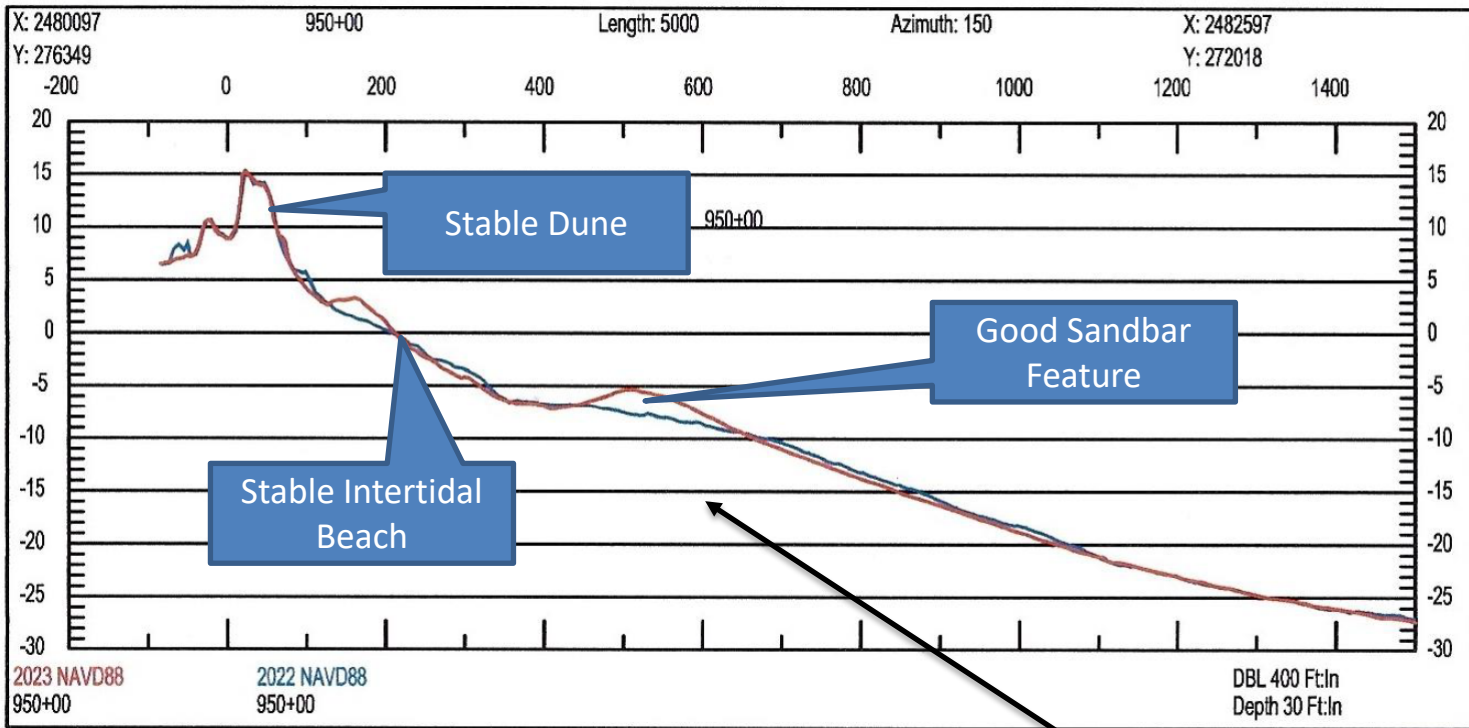
Phase 4 Example Annual Monitoring Profile



Vertical Datum Conversions	
Mean High Water	
1.40'	↓
NAVD88	
2.81'	↓
Mean Low Water	



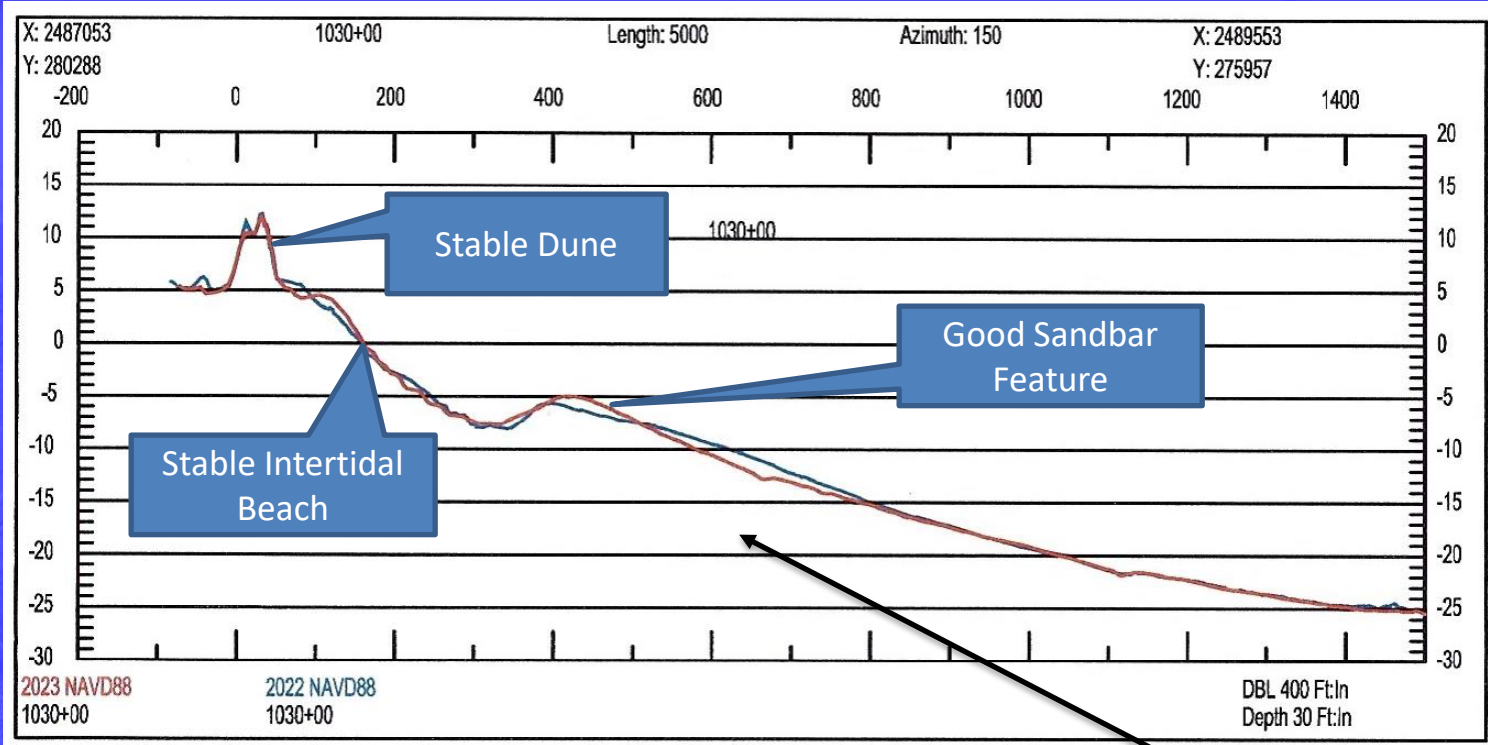
Phase 3 Example Annual Monitoring Profile



Vertical Datum Conversions	
Mean High Water	
1.40'	↓
NAVD88	
2.81'	↓
Mean Low Water	



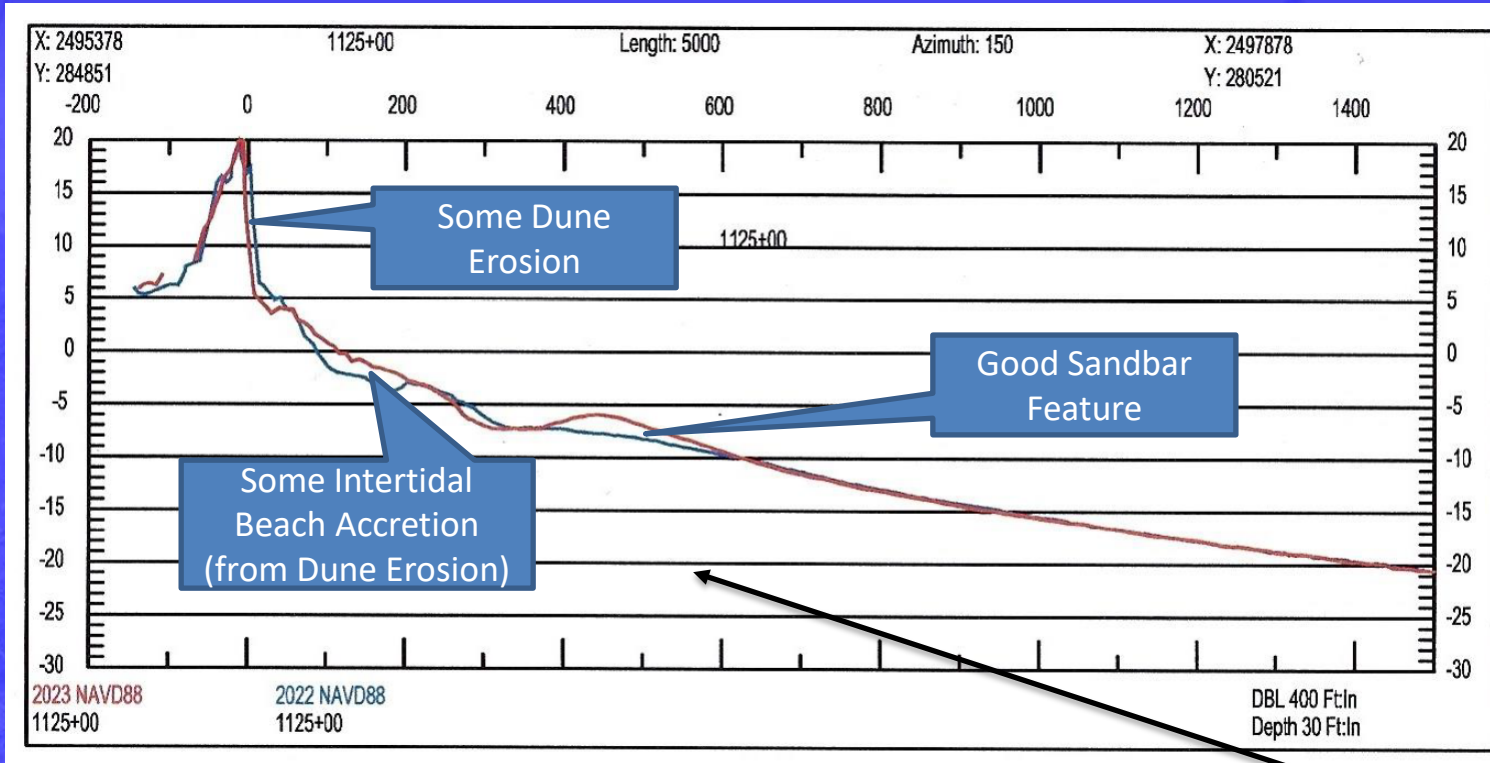
Phase 2 Example Annual Monitoring Profile



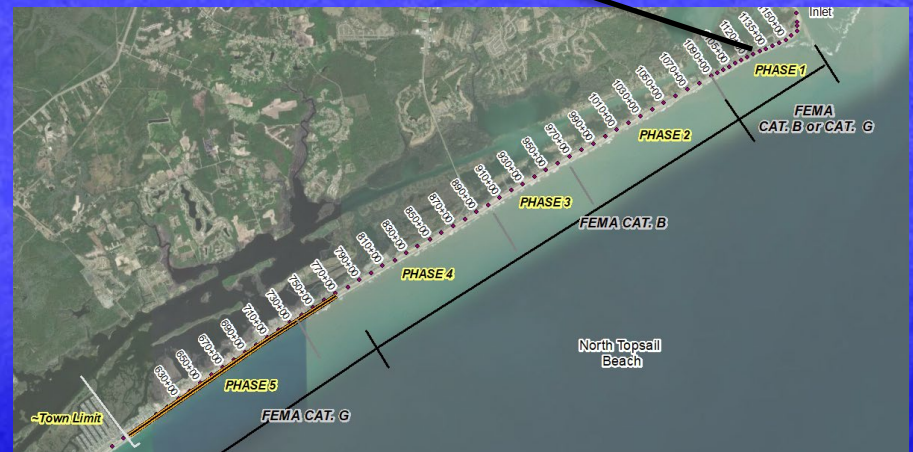
Vertical Datum Conversions	
Mean High Water	
1.40'	↓
NAVD88	
2.81'	↓
Mean Low Water	



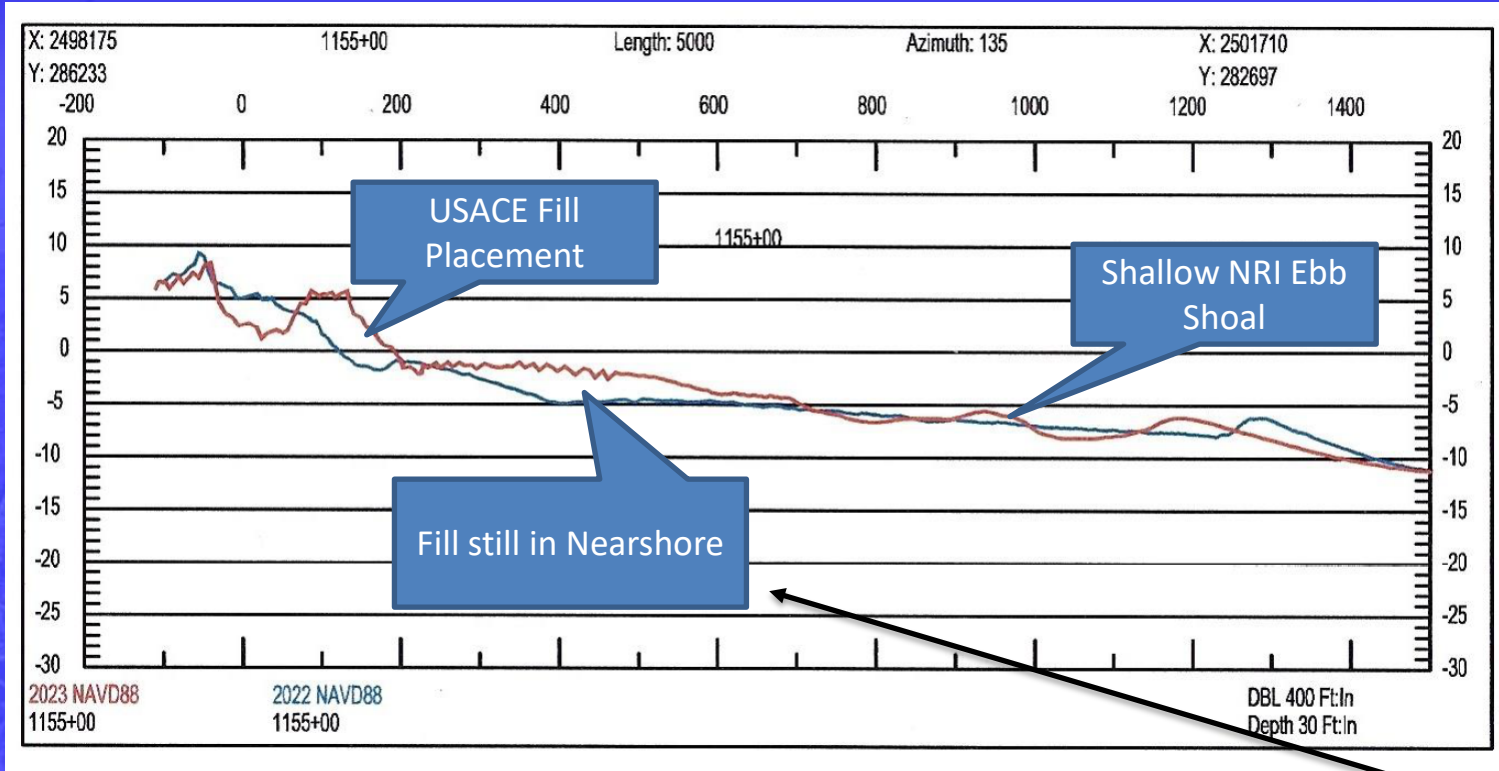
Phase 1 Example Annual Monitoring Profile



Vertical Datum Conversions	
Mean High Water	
1.40'	↓
NAVD88	
2.81'	↓
Mean Low Water	



Phase 1 Example Annual Monitoring Profile Near Inlet



Vertical Datum Conversions

Mean High Water	
1.40'	↓
NAVD88	
2.81'	↓
Mean Low Water	



Town Beach Projects Updates

- Annual Monitoring Completed in June. Beach Wide Volume Comparison with Last Year's Survey Underway.
- Hurricane Dorian Phase 1 FEMA Category G (~15,000 cy) near Topsail Reef Condos. Completed ~25,000 cy at Topsail Reef Condos (bldgs. 5, 6, 7, 8) and ~20,000 cy now planned for placement.
- New River Inlet Management Master Plan EIS: Notice of Intent (NOI) has been published and Draft EIS under development.
- County Beach Access 4 –Vegetation Sprigging Completed Late May
- State Grant Nourishment - ~303,000 cy in Phase 4 and connects with Phase 5 Truck Haul.
- Phase 5 Beach Nourishment – Placed ~411,000 cy. Remaining volume (~226,000 cy).
- Working with NTB Finance Officer and DEC Associates regarding funding for FEMA and State funded projects
- Permitting Coordination (all projects)

