

ST. JOHNS COUNTY, FL

Shore Protection Project (St. Augustine Beach)

Presentation for: St. Augustine Beach Commission

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PROJECT HISTORY

Initial Construction
of the Project
Completed

**Second Periodic
Renourishment**
Completed

**4th Periodic
Renourishment and
Emergency
Renourishment
Scheduled**

1999

2001-2003



2005

2012

2018

2023

2053

**Project Authorized for
Construction** in the Water
Resources Development Act
(WRDA), Public Law 106-53

**1st Periodic Renourishment
and Emergency Renourishment**
Completed due to historical
2004 hurricane season
(**Charley, Frances, Ivan and
Jeanne**)

**3rd Periodic
Renourishment**
Completed

End of Project
50-year life, new
study required

**Estimated Total
Cost \$40 million
at 100% Federal**

KEY FACTS

- **Project Non-Federal Sponsor:** St. Johns County (Board of County Commissioners)
- **Initial Construction Completed:** 2001 - 2003
- Project **remains authorized for 50 years** after completion of initial construction (2053)
- Renourishments authorized **every 5 years** (could be sooner if conditions warrant)
- Project Cost Share: **80.5% Fed – 19.5% Non-Fed**
- Project Qualifies for Emergency Renourishment Funding (Stafford Act) after named storms w/Presidential Declaration and Approved Project Information Report (PIR) – **100% Federal**
- Sponsor **required to maintain project** between construction events (check signage, tilling, vegetation, condition monitoring, environmental monitoring, etc.)

ST. AUGUSTINE INLET

EBB SHOAL BORROW AREA



Beach quality material (sand) is dredged from the St. Augustine Inlet ebb shoal for placement along St. Augustine Beach.

ANASTASIA STATE PARK

SALT RUN



The dredged material is sent to the placement area via a pipeline extended along Anastasia State Park, aided by a "booster" to help pump the sand southward.



Bulldozers distribute the sand to achieve the project design.

- Bulldozers operate on a 24-hour basis
- For safety purposes, back-up alarms are activated to run continuously during construction



AUTHORIZED PROJECT LIMITS
~ 2.5 MILES, R-137 THROUGH R-150

- R-137
- R-138
- R-139
- R-140
- R-141
- R-142
- R-143
- R-144
- R-145
- R-146
- R-147
- R-148
- R-149
- R-150

POPE ROAD STAGING AREA
COUNTY OCEAN PIER
ST. AUGUSTINE BEACH

ST. AUG OCEAN & RACQUET RESORT

S-1 OFFSHORE BORROW AREA

ENVIRONMENTAL MONITORING

- Turbidity in the water column is monitored in the Inlet and the placement area during dredging operations
- Equipment operating in the project area is routinely monitored
- Standard mandate and marine animal monitoring and protective measures are employed during construction



- Construction will avoid Anastasia beach mouse habitat and is planned to occur outside sea turtle and shorebird nesting seasons

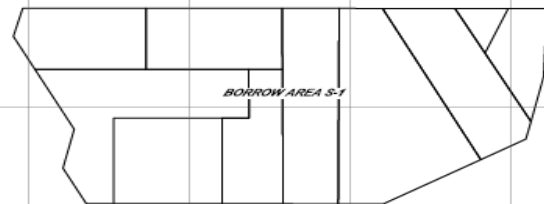
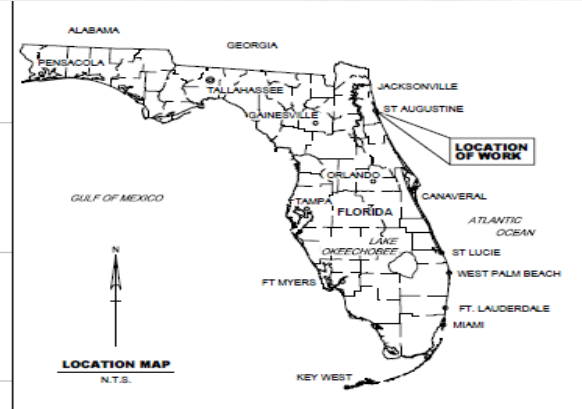
Hopper Dredge

Submerged Line

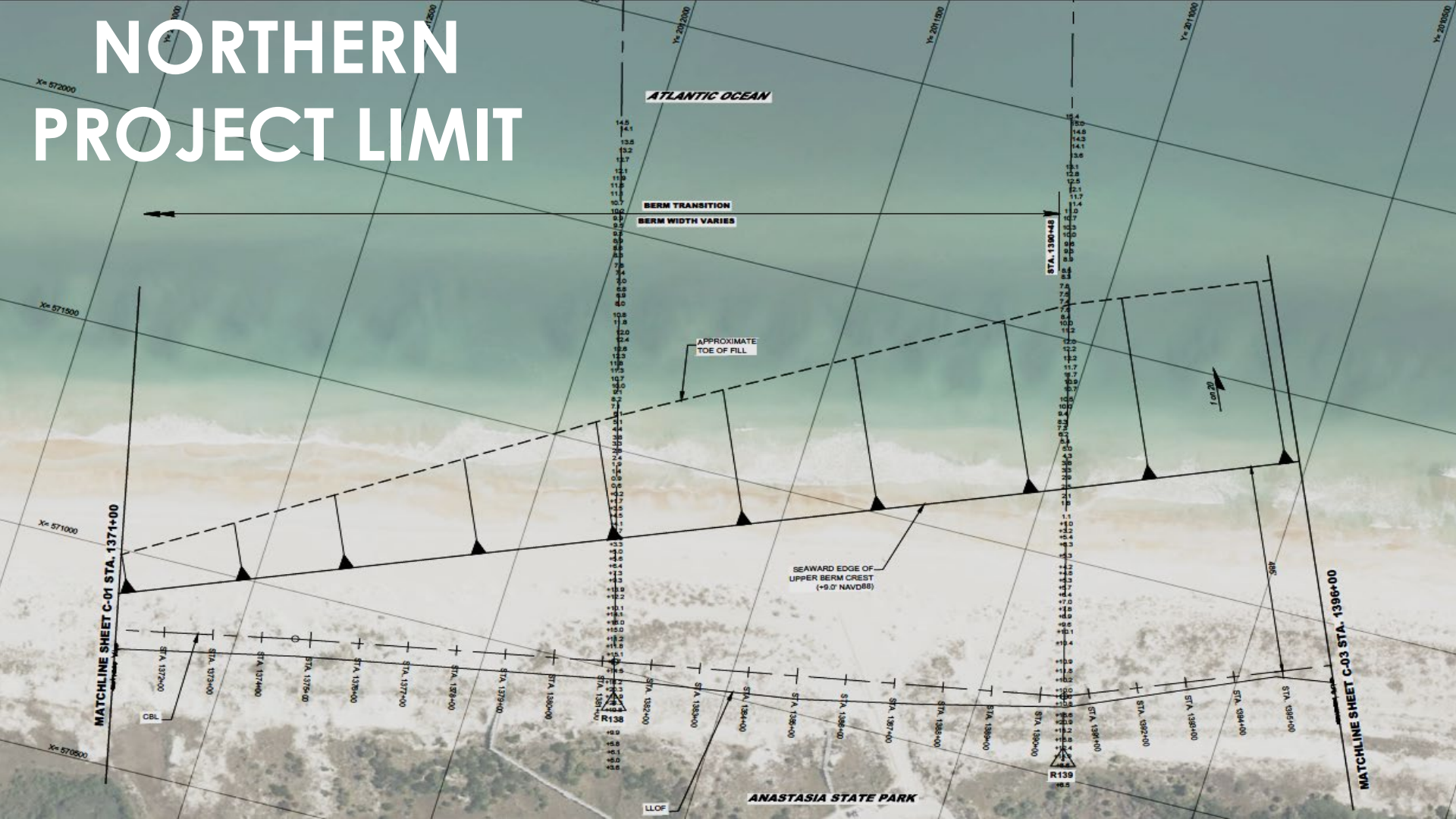
Shore Line

Discharge



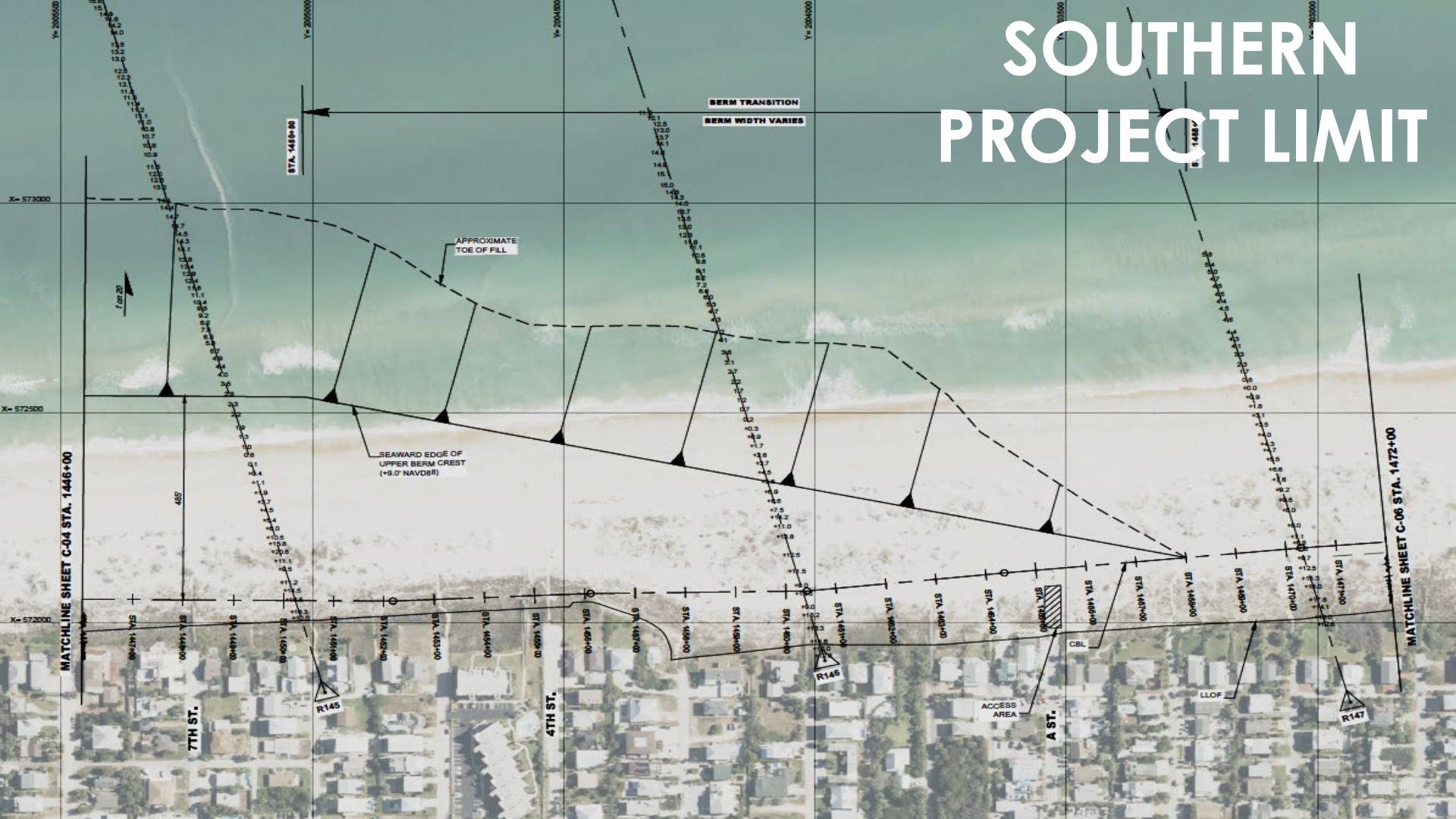


NORTHERN PROJECT LIMIT

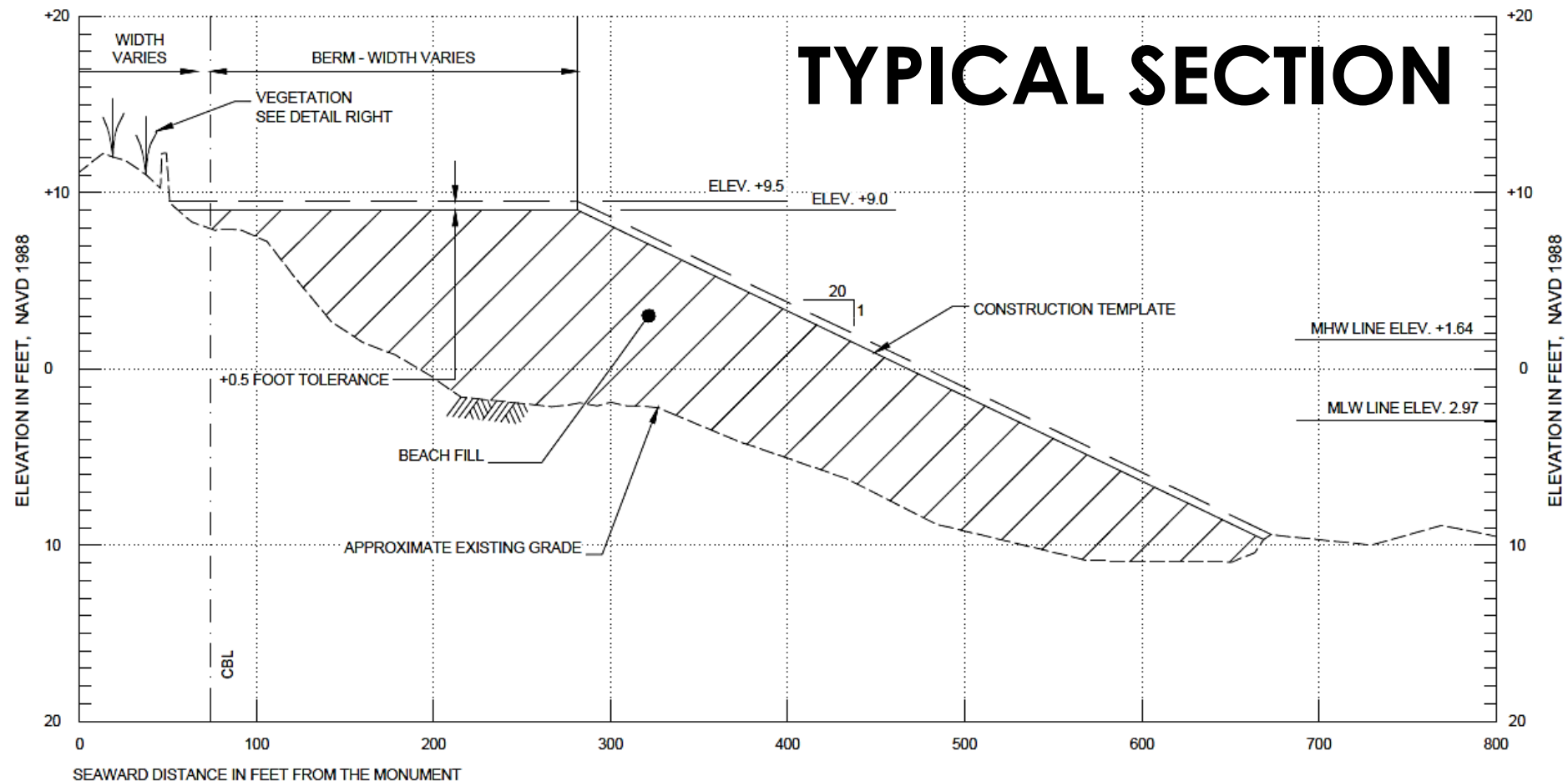




SOUTHERN PROJECT LIMIT



TYPICAL SECTION



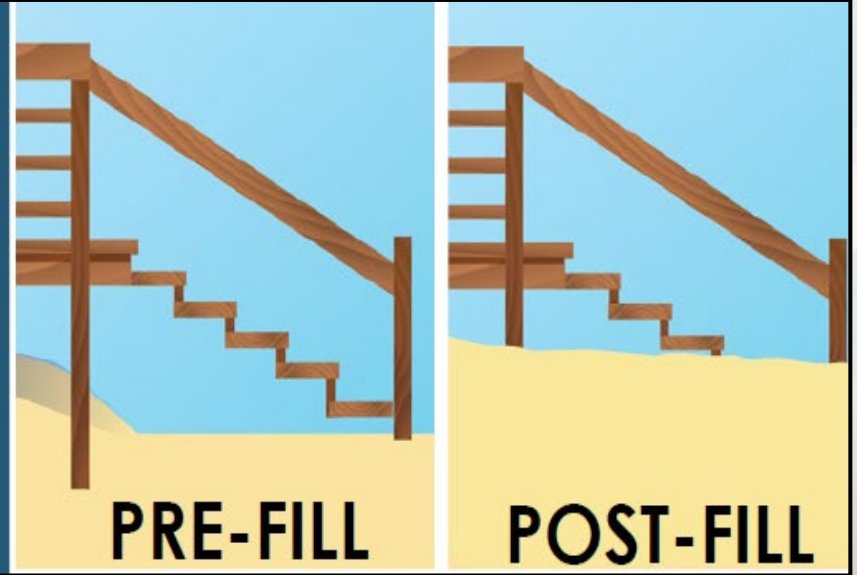
TYPICAL BEACH FILL PROFILE PERPENDICULAR FROM THE CBL

VERTICAL 0 10' 20'

HORIZONTAL 0 100' 200'

DUNE WALKOVERS

- The contractor will place sand on, around and underneath each walkover to maintain a continuous protective dune.
- Sand will naturally equilibrate and expose walkover steps over time.
- Photos will be taken of each walkover prior to construction.
- The contractor is bonded and insured if damage occurs as a result of construction activities.

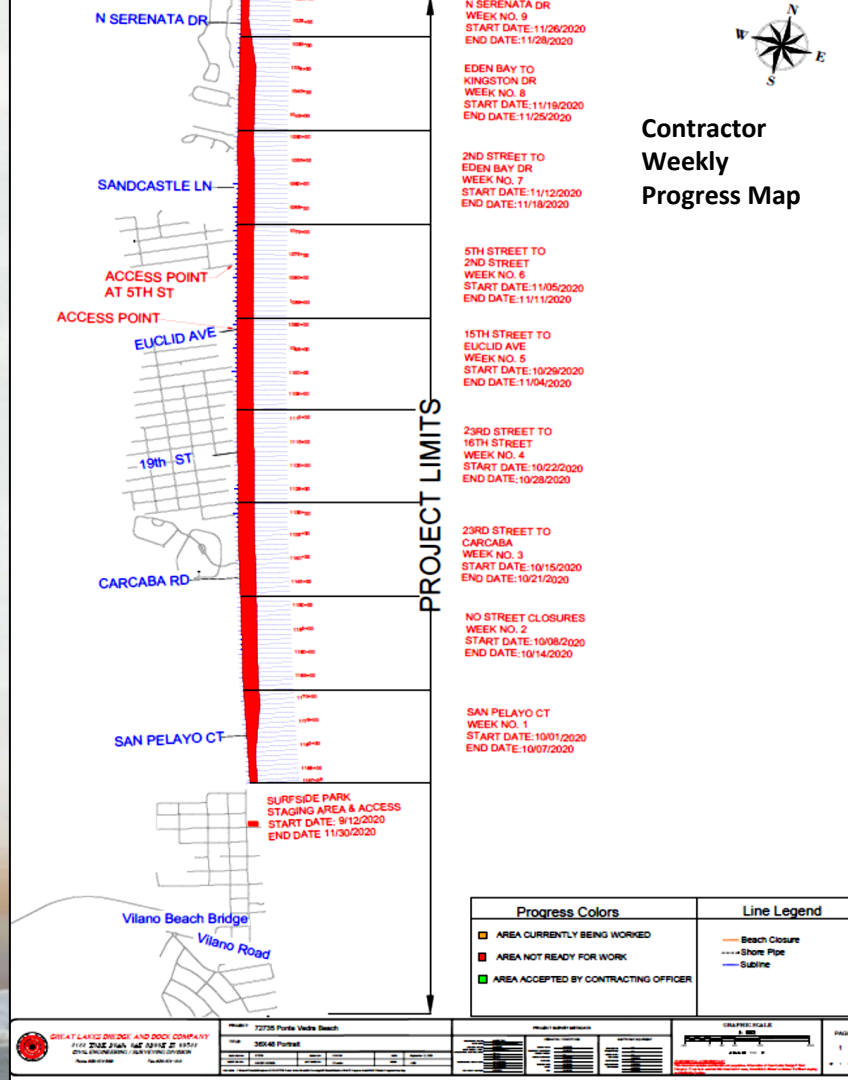
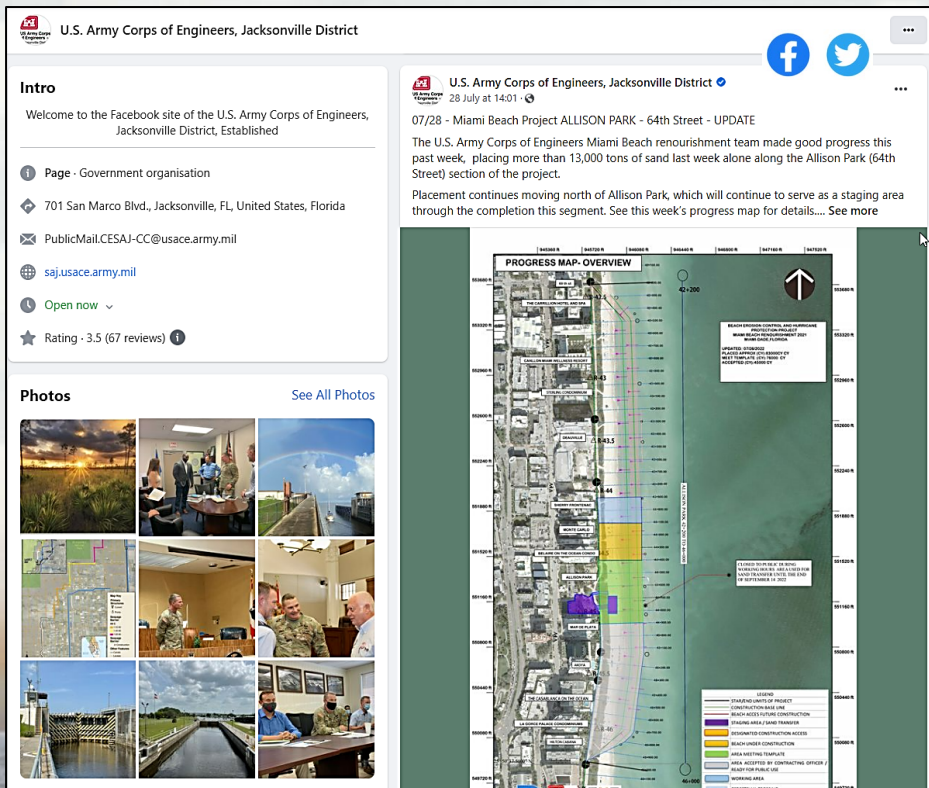


SCHEDULE & PRICING SCHEDULE

Activity	Start	Finish
Contract Advertisement	July 25, 2023	August 25, 2023
Bid Opening	August 25, 2023	
Turtle Nest Relocations Start	August 28, 2023	
Contract Award	September 29, 2023	
Notice to Proceed	October 29, 2023	
Mobilization Starts (65 calendar days after nest relocations start)	November 1, 2023	
Anticipated Construction Completion	June 30, 2024	

SECTION 00010A LINE ITEMS AND PRICING SCHEDULE SHORE PROTECTION PROJECT ST. AUGUSTINE BEACH, RENOURISHMENT 2023 ST. JOHNS COUNTY, FLORIDA					
LINE ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL
0001	MOBILIZATION AND DEMOBILIZATION		JOB		\$ _____
0002	BEACH FILL (ESTIMATED QUANTITY)	2,500,000	CUBIC YARD	\$ _____	\$ _____
0003	BEACH TILLING (ESTIMATED QUANTITY)	95	ACRE	\$ _____	\$ _____
0004	SCREENING (ESTIMATED QUANTITY)	2,500,000	CUBIC YARD	\$ _____	\$ _____
0005	REMEDiation OF NONCOMPLIANT MATERIAL (ESTIMATED QUANTITY)	1	ACRE	\$ _____	\$ _____
0006	TRANSPORTATION AND DISPOSAL OF UNACCEPTABLE MATERIAL (ESTIMATED QUANTITY)	500	CUBIC YARD	\$ _____	\$ _____
0007	VIBRATION CONTROL AND MONITORING		JOB		\$ _____
0008	ENVIRONMENTAL SPECIES MONITORING		JOB		\$ _____
0009	TURBIDITY MONITORING		JOB		\$ _____
0010	STANDBY TIME (SEE NOTE 3)	72	HOUR	\$ _____	\$ _____
0011	MOBILIZATION AND DEMOBILIZATION FOR CAPTURE SEA TURTLE TRAWL SWEEPING AND RELOCATION (HOPPER DREDGE ONLY, SEE NOTE 2)		JOB		\$ _____
0012	SEA TURTLE CAPTURE TRAWL SWEEPING AND RELOCATION (HOPPER DREDGE ONLY, ESTIMATED QUANTITY, SEE NOTE 2)	3	DAY	\$ _____	\$ _____
TOTAL BID (LINE ITEMS 0001 THROUGH 0012)					\$ _____

COMMUNITY CONNECTIONS



WHAT TO EXPECT WITH BEACH CONSTRUCTION

DURING

- Contract will stage equipment near the beach (metal pipe, trucks, etc.)
- Construction **will likely occur 24/7 until complete, backup alarms, lights, noise.**
- Sand will be pumped onto the beach from offshore and graded into place by bulldozers and other equipment.
- Sections of the beach will be closed off while working (~1,000 sections w/crossovers).
- Updated progress maps will be published on social media and local news.
- Safety personnel will be on site to direct the general public away from potential hazards.

AFTER

- **Beach will naturally reshape and equilibrate quickly due to severe erosion.**
- Escarpments will form along the new template (**sponsor is responsible to remove and maintain beach template after construction**).
- Any dune repairs (above 9 ft. NAVD88) and vegetation will be completed by the County/City as desired.
- Walkovers will naturally become exposed as sand erodes.
- USACE and Sponsor will monitor the beach frequently to determine when renourishment is needed or soon after major storm events.

A scenic photograph of a sunset or sunrise over the ocean. The sky is filled with soft, white and yellow clouds. The horizon line is visible in the middle of the frame, with a small, dark boat or structure visible on the water. The foreground shows the dark, textured surface of the ocean with white foam from a wave.

Questions?