REDFISH TO BAYPORT CONSTRUCTION HSC ECIP / PROJECT 11 UPDATE

Carlos Tate, P.E.
U.S. Army Corps of Engineers

Jose Tapia & Amanda Hamrick Port Houston

WEDA Gulf Coast Chapter Meeting

Tuesday, November 7, 2023

Visit: www.expandthehoustonshipchannel.com







HOUSTON SHIP CHANNEL EXPANSION

1A

Bolivar Roads to Redfish

- Approximately 11.5 miles in length
- Widen Channel to 700 feet
- Bend easing
- Construct New Bird Island
- Mitigate for oyster habitat loss

1B

Redfish to Bayport Ship Channel

- Approximately 8.3 miles in length
- Widen Channel to a minimum of 700 feet
- Bend easing
- Construct marshes and three bird islands in Galveston Bay
- Mitigate for oyster habitat loss
- Currently not in the proposed federal plan, so must be built by local interests

1C

Bayport Ship Channel to Barbours Cut

- Approximately 5 miles in length
- Widen Channel to 700 feet
- Construct additional marshes
- Mitigate for oyster habitat loss
- Currently not in the proposed federal plan, so must be built by local interests

2

Bayport Ship Channel

- · Approximately 4 miles in length
- Widen Channel to approximately 455 feet
- Construct marshes and three bird islands in Galveston Bay
- Mitigate for oyster habitat loss
- Modify channel entrance to reduce shoaling

3

Barbours Cut Ship Channel

- Widen Channel to approximately 455 feet
- Construct additional marshes on Atkinson Island
- Modify channel entrance

4

Boggy Bayou (BW 8) to Sims Bayou*

- Widen Channel to approximately 530 feet through Greens Bayou confluence
- Deepen from existing 41 feet to 46.5 feet from Boggy Bayou to Hunting Bayou (last Turning Basin before reaching Washburn Tunnel)

5

Sims Bayou to IH 610*

• Deepen from existing 37 feet to 41.5 feet

6

IH 610 to Turning Basin*

- Deepen from existing up to 41.5 feet
- Increase Brady Island Turning Basin
- * Pending federal appropriations



No work planned in these areas

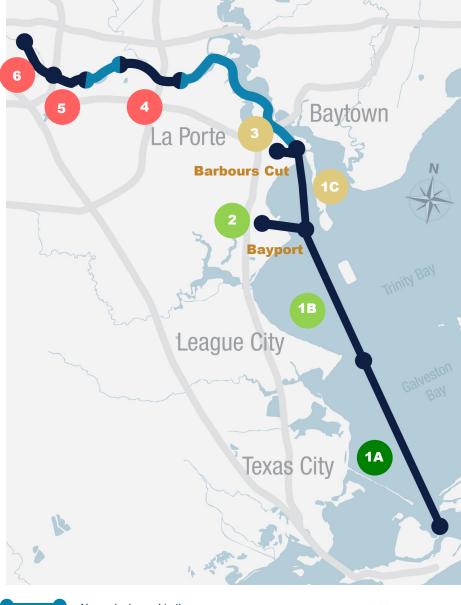






TENTATIVE PROCUREMENT AND CONSTRUCTION SCHEDULE

Package		Segment	Advertise	Construction	
Completed	1	1A	Aug 2021	USACE	Jan - Oct 2022
	2	4	Feb 2021	Port	Jun 2021 - Jun 2022
	Abandoned Pipeline Removal	1A, 1B, 1C	Aug 2021	Port	Jan - Jul 2022
Under	3/4A	1A	Jul 2021	Port	Feb 2022 - Mar 2023
	4B/5	1B,1C, 2	Nov 2021	Port	Oct 2022 - Sept 2024
Funded	6	1C	Oct 2023	Port	Apr 2024 - Feb 2025
	7	3	Nov 2023	USACE	Jun 2024 - Dec 2026
	8 – E2C	4	Feb 2024	USACE	May 2024 - May 2025
Pending Federal Appropriations	8 – BW8	4	Apr 2024	USACE	Jul 2024 - Jul 2025
	9	4	Mar 2025	USACE	Aug 2025 - Aug 2026
	10, 11	5, 6	Sept 2024	USACE	Feb 2025 - Feb 2026
	12	5, 6	Nov 2025	USACE	Apr - Dec 2026



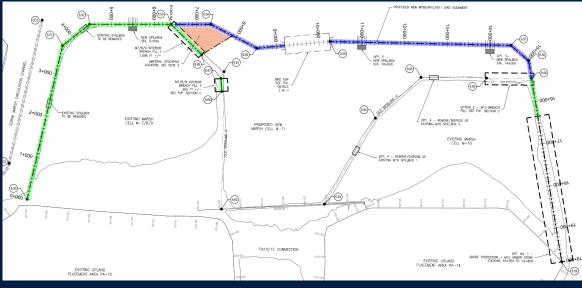


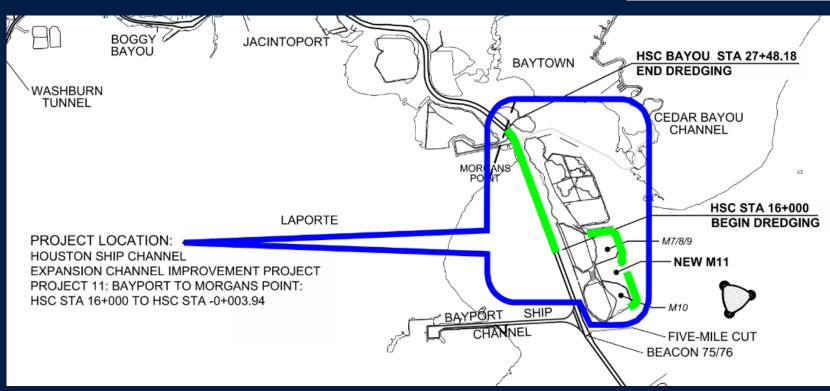




Upcoming Projects

Segment 1C Construction





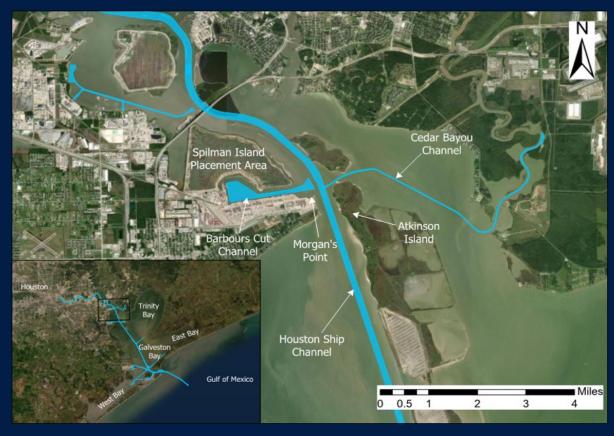






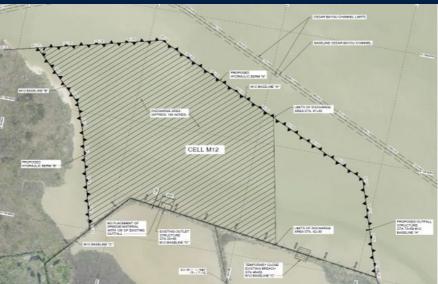
Upcoming Projects

Segment 3 Construction













Upcoming Projects

Segments 4, 5, & 6 DMPA

Segment 4: Boggy Bayou (BW 8) to Sims Bayou



Funded

Pending federal appropriations

Segments 5 and 6: Sims Bayou to Turning Basin



Pending federal appropriations





Package 4B/5 - Redfish to Bayport

Overview

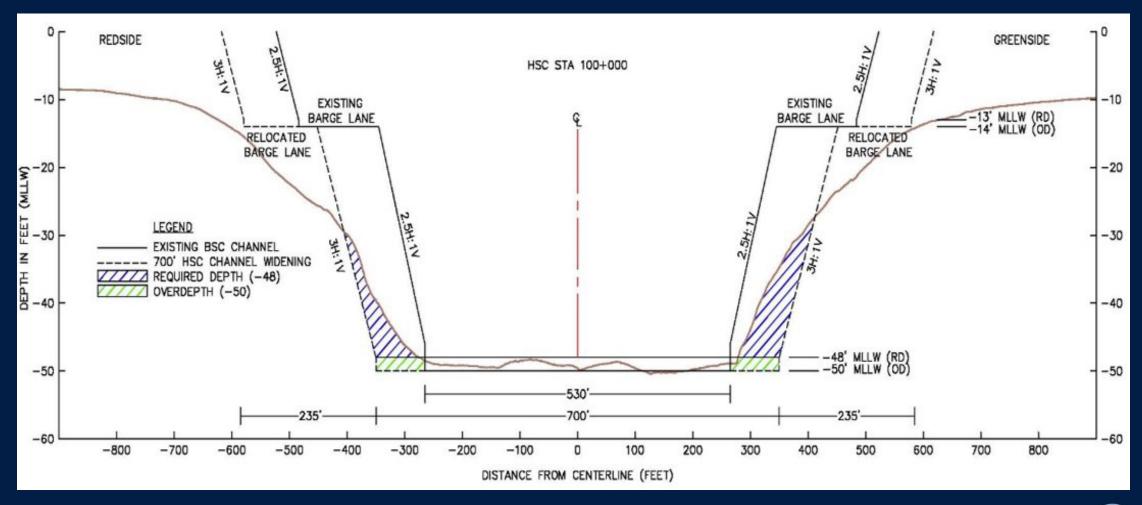






TYPICAL CHANNEL DESIGN

Segment 1



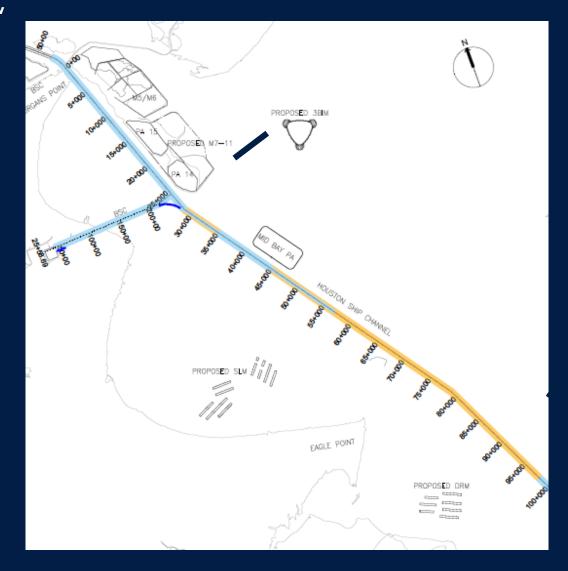


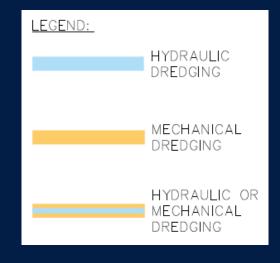




Package 4B/5 - Redfish to Bayport

Overview

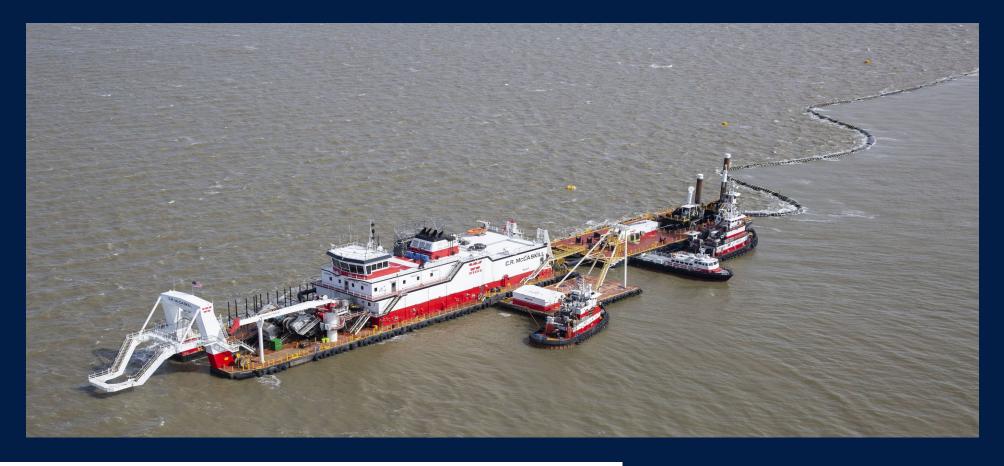








Overview - Weeks Marine Inc.









Bayport North Shore







Bayport North Shore



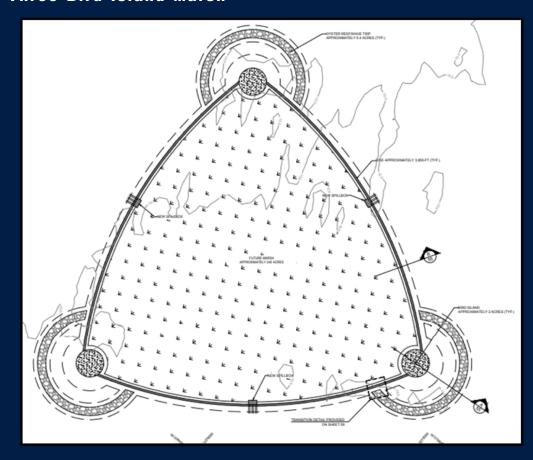








Three Bird Island Marsh





Three Bird Island Design







HYDRAULIC METHODOLOGY

THREE BIRD ISLAND MARSH

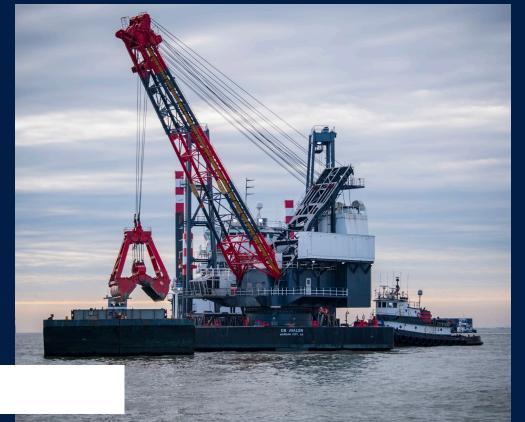


Three Bird Island Construction















OYSTER MITIGATION CONSTRUCTION





SAN LEON

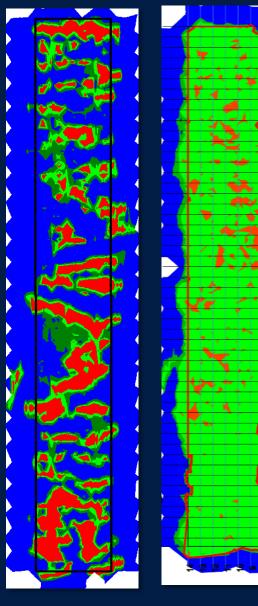






















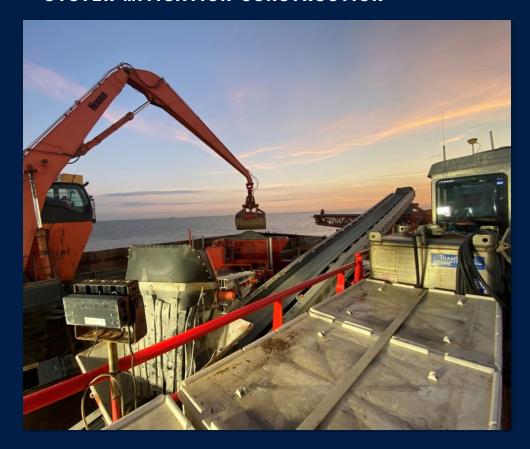


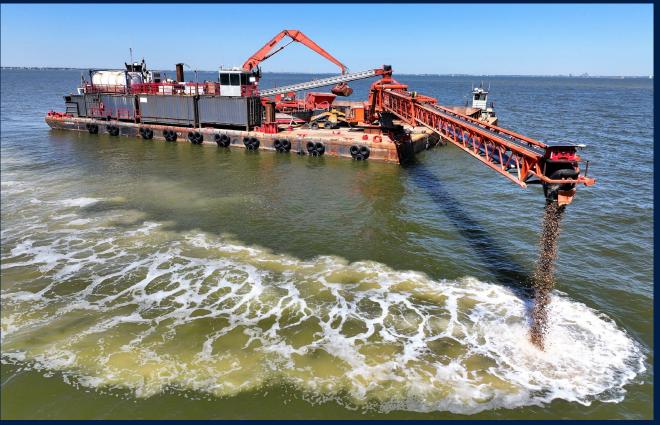










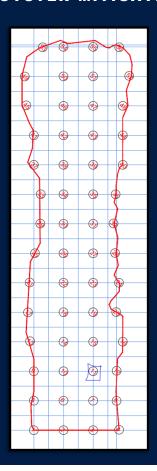






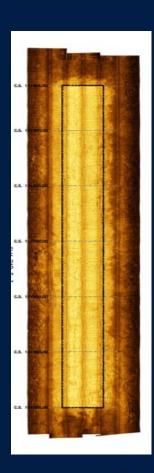


OYSTER MITIGATION CONSTRUCTION









Cultch Placement Inspection







ENVIRONMENTAL, INDUSTRY, AND SAFETY



10 acres created with material from Segments 1A through 1C and 2

Bird Islands



324 acres created with material from Segments 1A and 1B

Oysters



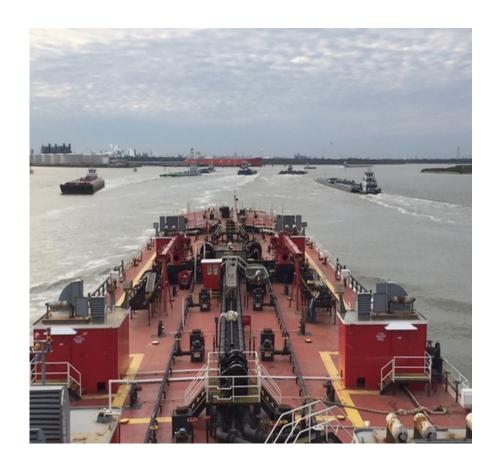
800 acres created with material from Segments 1A through 1C, 2 and 3

Marsh



3-7% regional air quality improvement via increased vessel efficiency & reduced congestion

Air Quality









IMPROVED CHANNEL VALUE TO STAKEHOLDERS

- Combined beam meeting rule increased from 310' to 340'
- Move daylight restriction from Bolivar Roads to Morgans Point
- Container vessels over 1000' LOA will not be daylight restricted











RETHINKING THE TRADITIONAL PROCESS – DESIGN CONSULTANT TEAMS

AECOM GE

















ASSOCIATES







Industry























QUESTIONS?

View the Project 11 Bid Packages: https://buyspeed.porthouston.com

https://sam.gov/opp/483581ae59b441a2a1f614b7aca8ce97/view

Visit the Project 11 Webpage https://www.ExpandTheHoustonShipChannel.com/

Email the Project 11 Team Project11@PortHouston.com Carlos.D.Tate@USACE.Army.mil AHamrick@PortHouston.com JTapia@PortHouston.com





