

“What? Like it’s Hard?”

Collecting Geotechnical Data for the Chandeleur Island Restoration Project 30 Miles Offshore

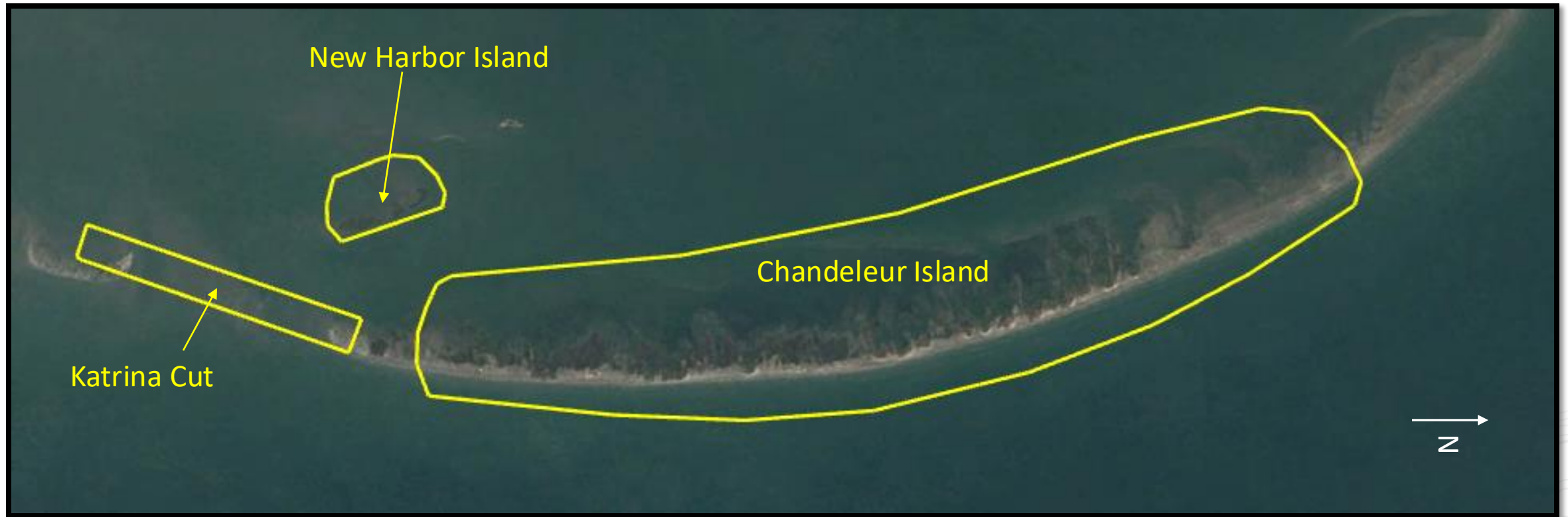
Presented by: Jennifer Aguetant, PE
Date: May 22, 2025



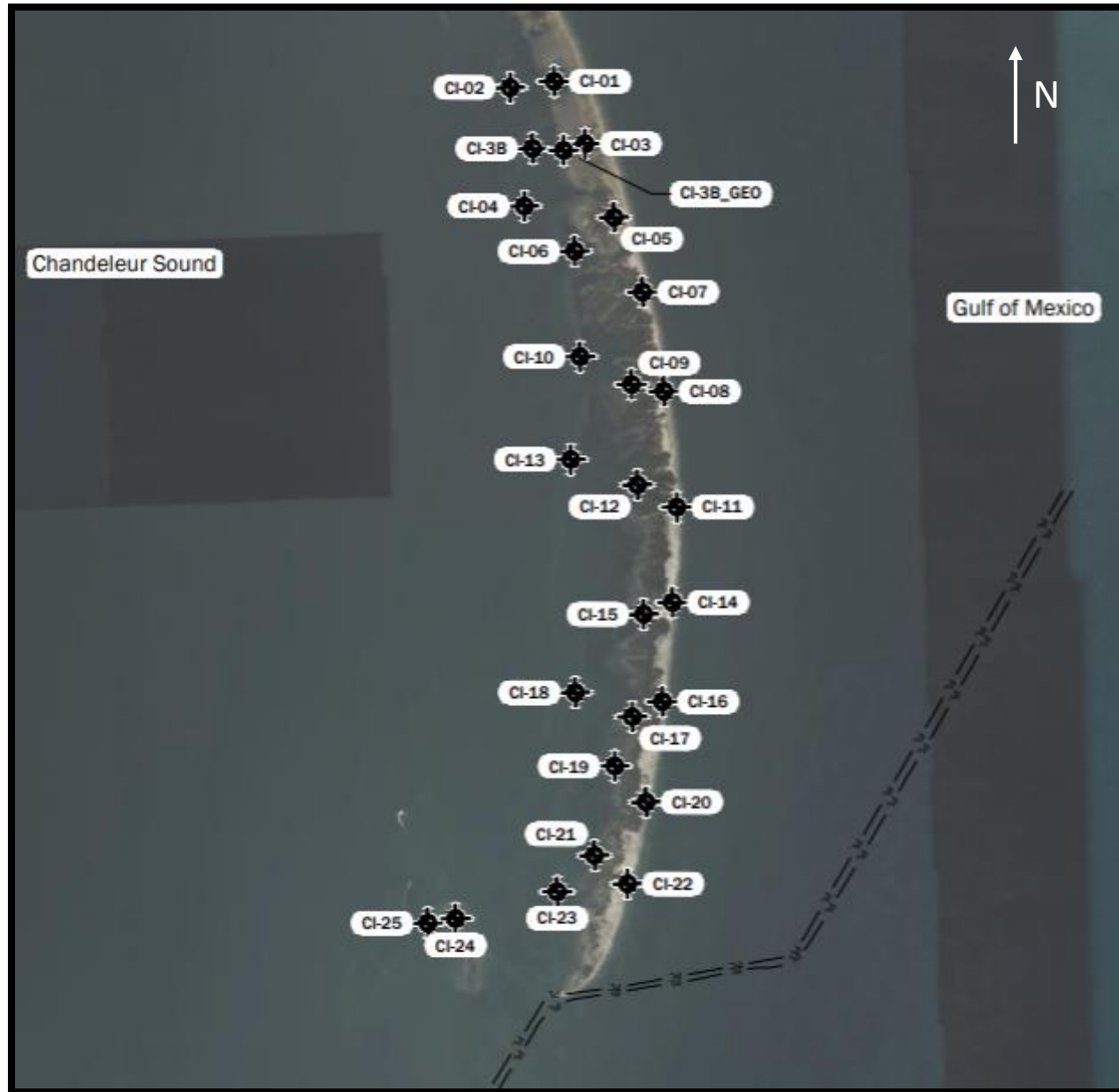


PROJECT LOCATION

Geotechnical Field Exploration Focus



Drilled Boring Locations



26 Boring Locations Total:

- 9 to depth = 40 feet
- 13 to depth = 50 feet
- 4 to depth = 80 feet

Geotechnical Field Exploration Challenges

- Daily travel distance
- Food and Lodging
- Communication
- Multiple types of drilling equipment
- Geotechnical sample transport (CPRA requirements for soil sample handling)
- Rough seas/weather
- Turtle nests
- Sequencing with other team members
- Re-supply
- Hurricanes



Lodging for Drill Crews

- Travel to/from
Guantanamo each day

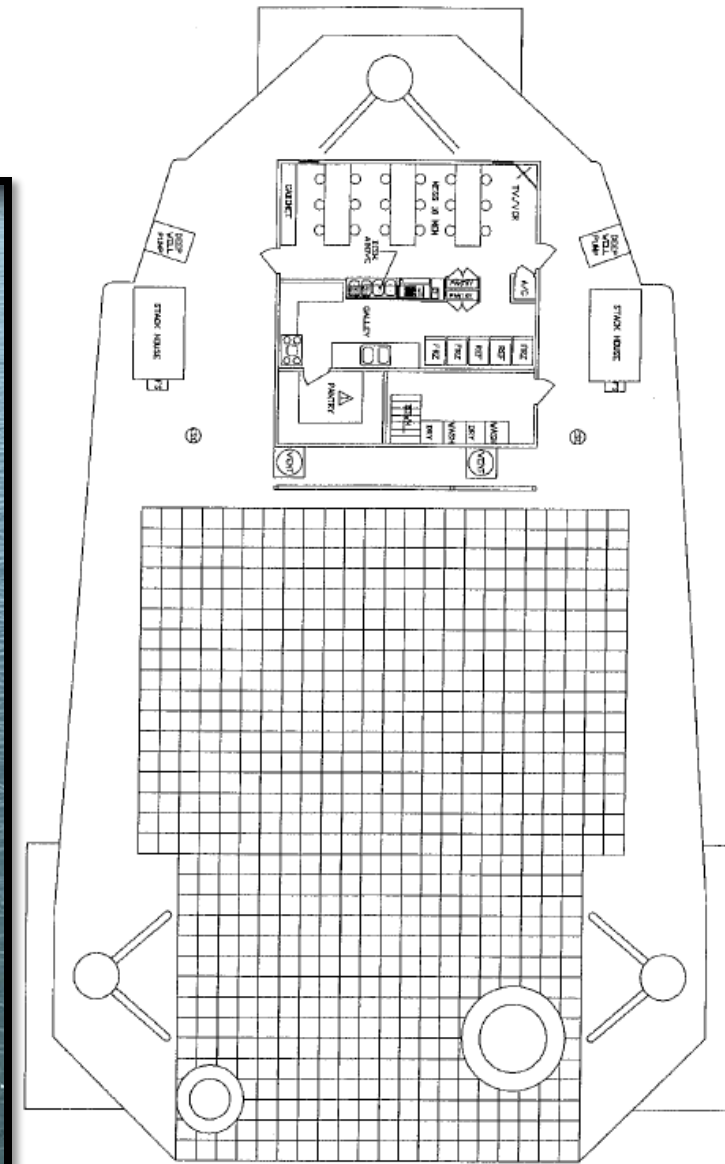
- The Islander

- Fishing Charter

- Liftboat

Liftboat – L/B Janie (175 Class)

- Accommodations 22 (not including LB crew)
- Dimensions 113 ft. x 70 ft.
- Open Deck Area 4,000 ft²



Remote Island Location

- Crew travel from Gulfport, MS
- Liftboat travel from Port Fourchon, LA
- Re-Supply of Food, Fuel, Water, LB Crew travel from Venice, LA



Multiple Types of Drilling Equipment

Beach



Marsh



Open Water



Marsh Buggy Drill



Airboat Drill





Pontoon Drill

Offloading Equipment



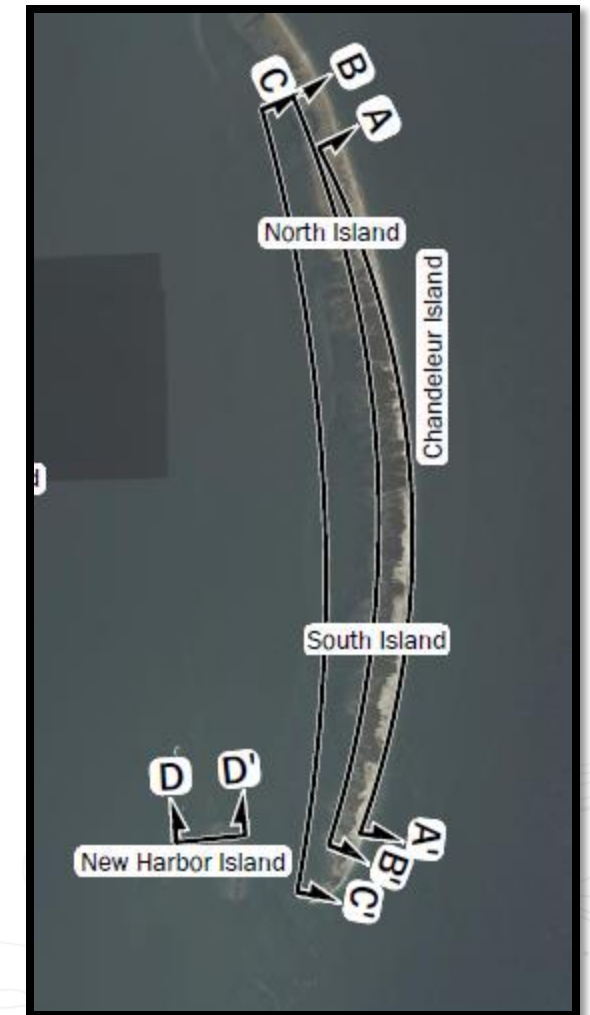
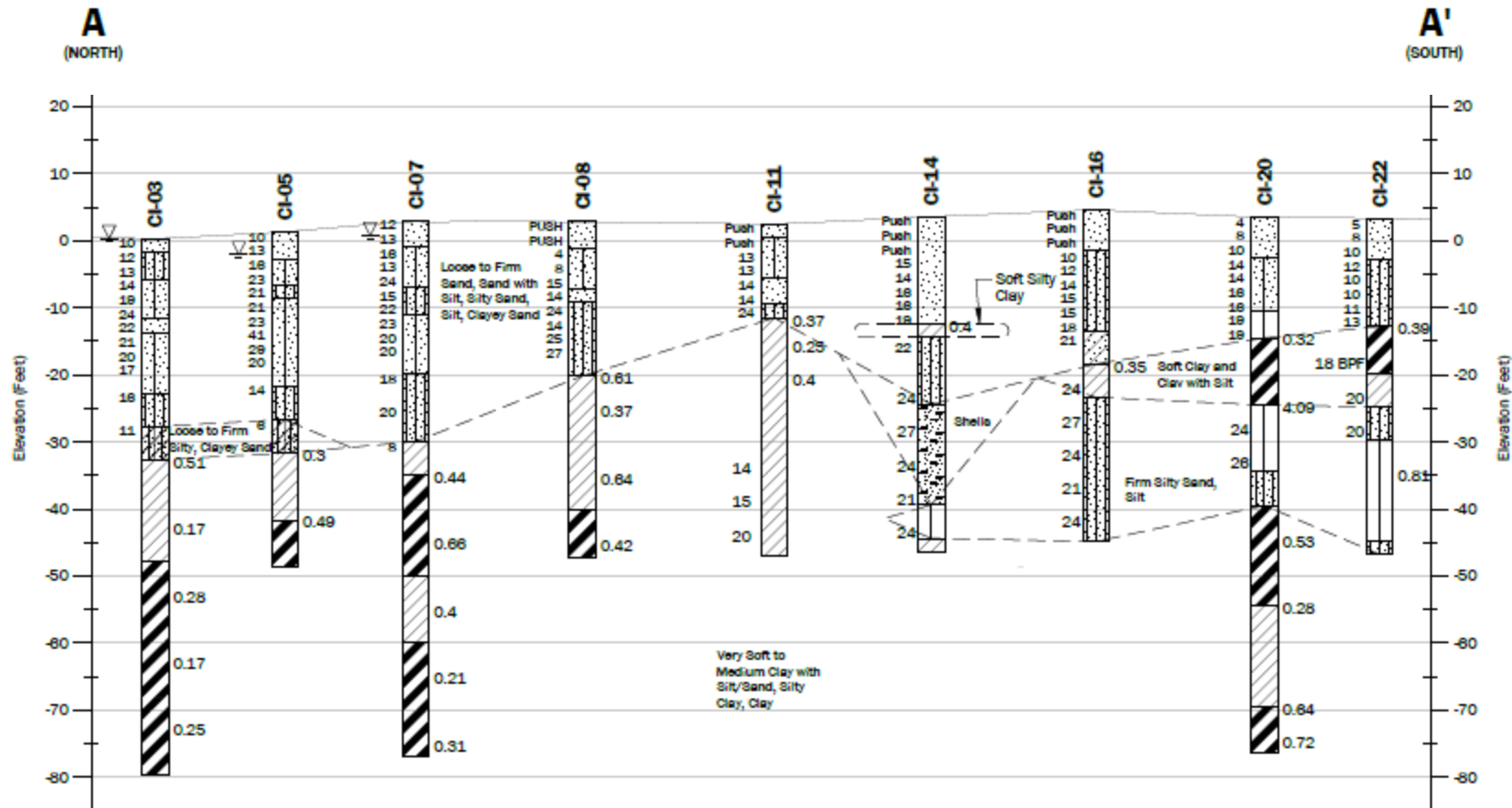
Drilling Schedule

Day	Activity	Drilling Equipment		
		Pontoon	Marsh Buggy	Airboat
1	Load equipment on Liftboat in Port Fourchon			
2	Travel to Liftboat staging area			
3	Unload and Stage Equipment			
4	Drill CI-2 and CI-8			
5	Drill CI-9, CI-11, CI-13			
6	Drill CI-12, CI-14, CI-16, CI-18			
7	Drill CI-10, CI-17, CI-19, CI-21			
8	Drill CI-20, CI-23, CI-25			
9	Drill CI-4, CI-20, CI-22			
10	Drill CI-15 and CI-24			
11	Drill CI-7 and CI-15			
12	Drill CI-5 and CI-7			
13	Drill CI-1 and CI-3			
14	Drill CI-3B and CI-6, Load Liftboat, and Demob			
15	Travel back to Port Fourchon			
16	Unload Equipment off Liftboat			

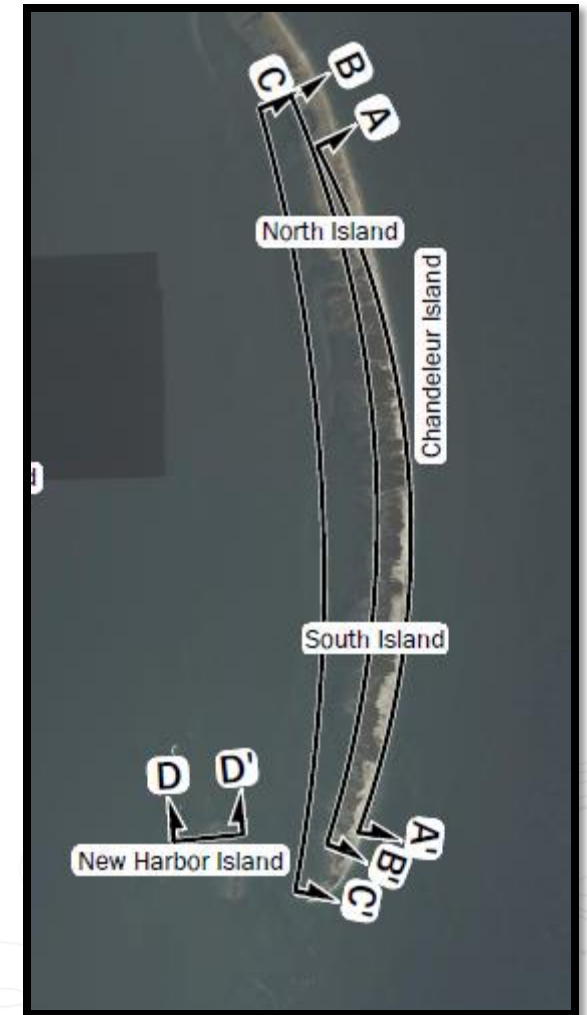
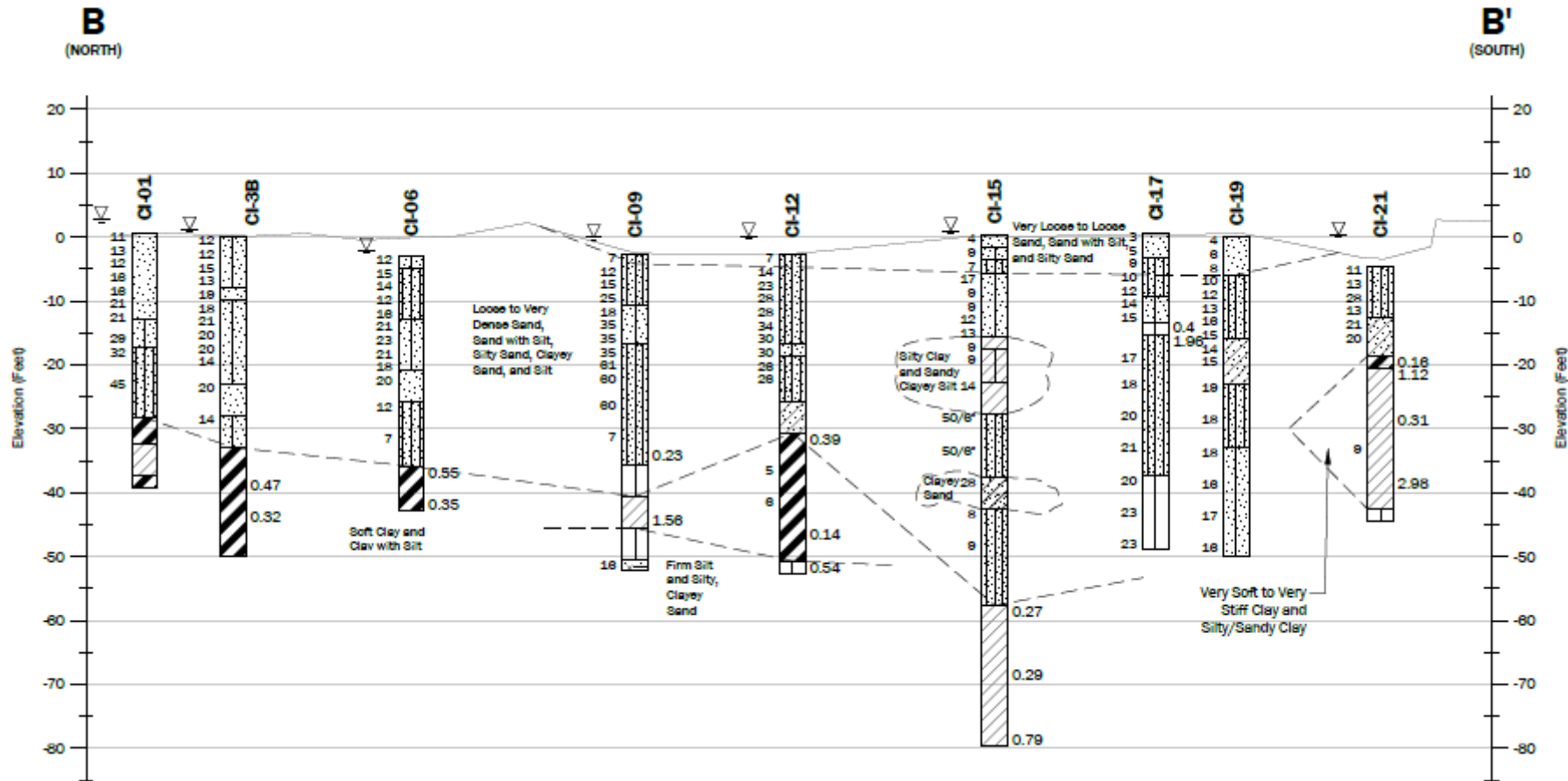
 Indicates days equipment was used to drill.
 Indicates borings were attempted with the pontoon drill.

26 borings
completed in 11 days

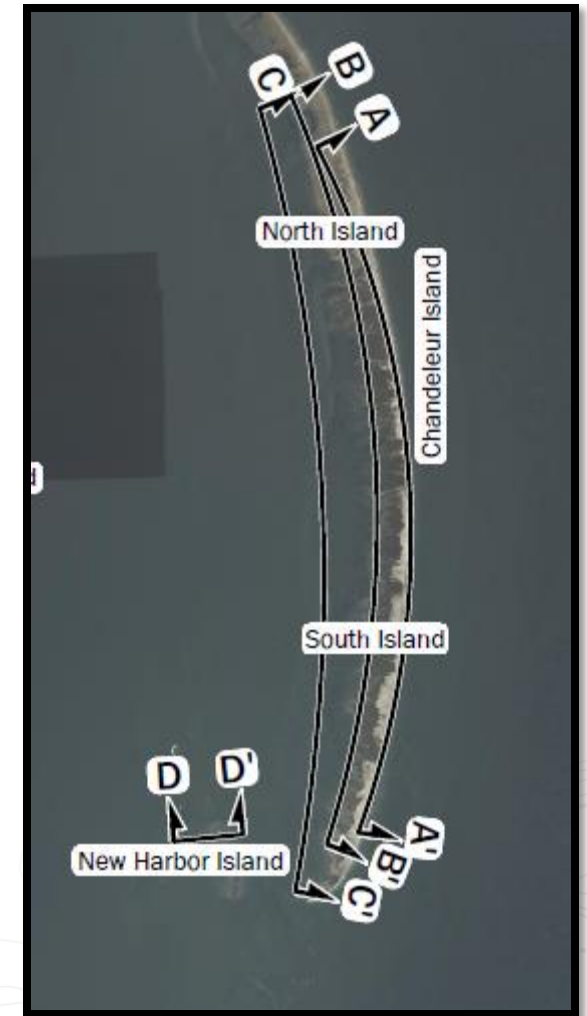
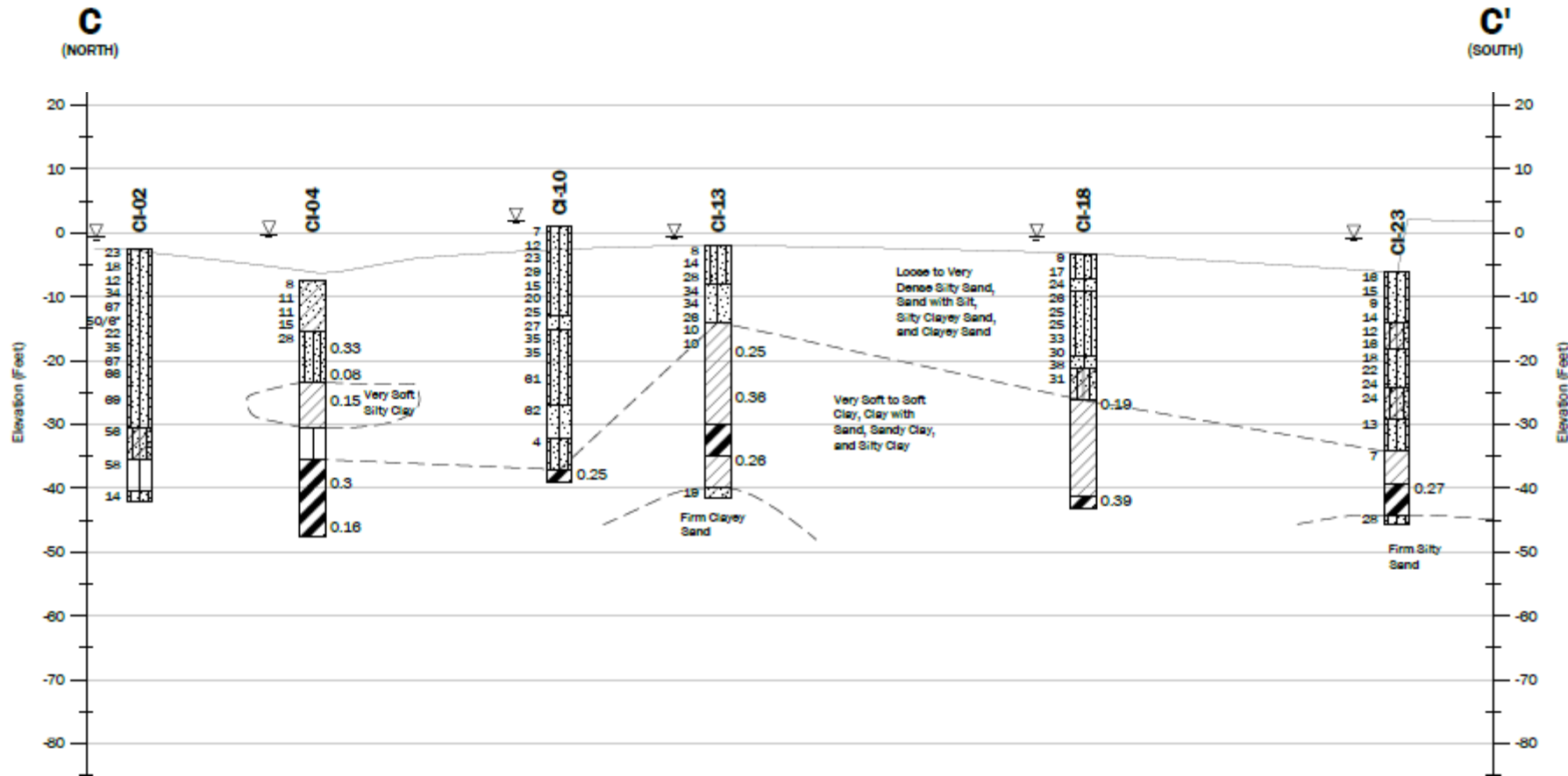
Geotechnical Subsurface Conditions - Beach



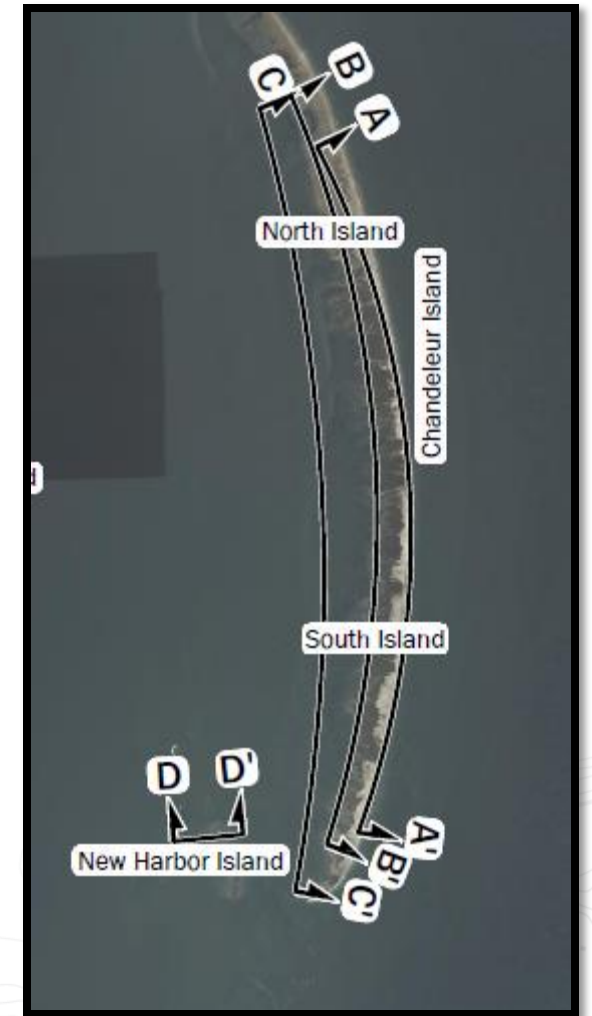
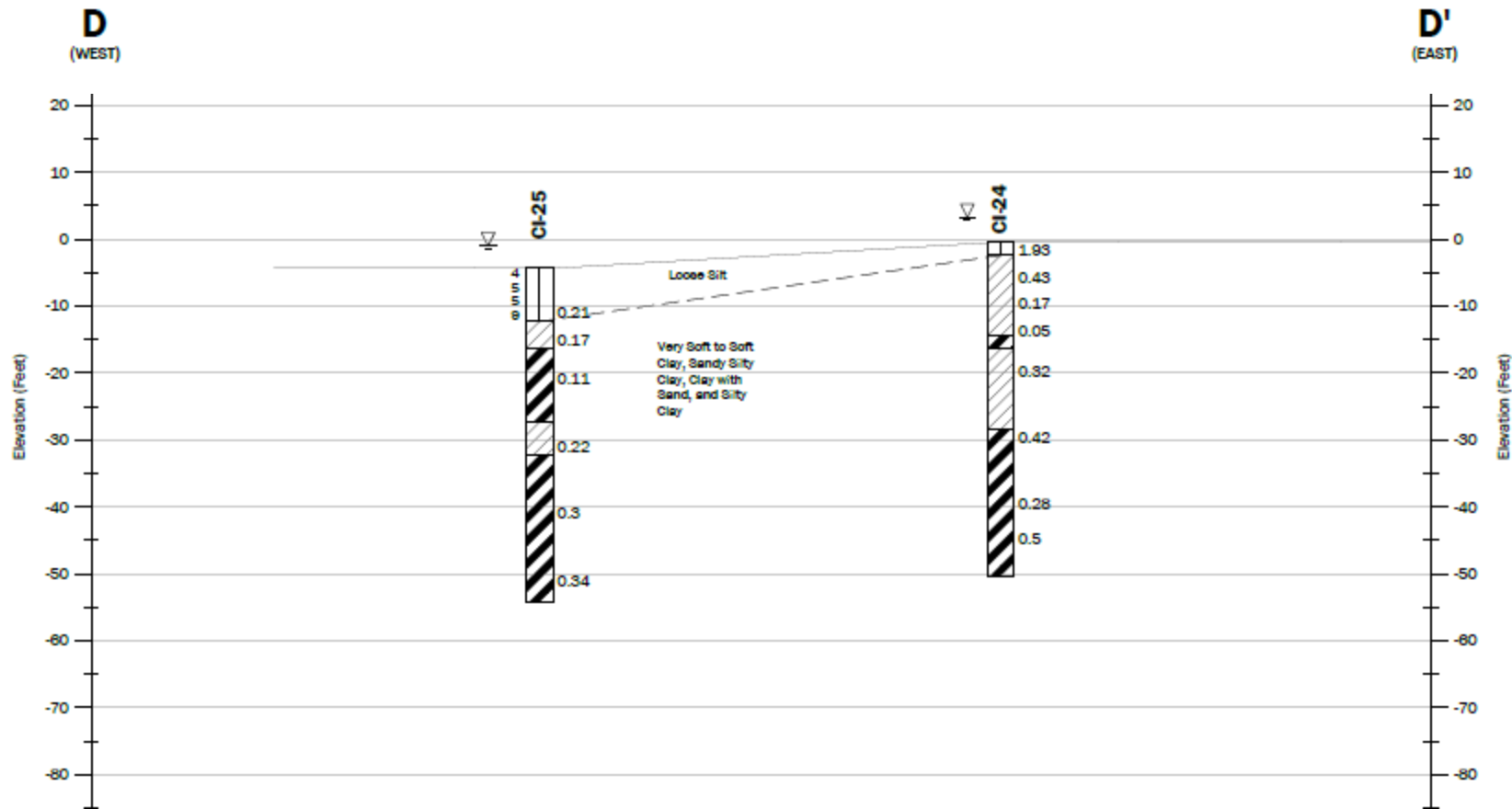
Geotechnical Subsurface Conditions – Seagrass Beds



Geotechnical Subsurface Conditions – Open Water



Geotechnical Subsurface Conditions – New Harbor Island



Geotechnical Field Exploration Summary

- \$600k field exploration program
- Completed in 16 days including mobilization/demobilization
- 2 drill crews
- 0 safety incidents!
- 0 hurricanes (barely)!

Special Thanks to:

- The Louisiana Coastal Protection and Restoration Authority
- Coastal Engineering Consultants, Inc.
- Offshore Liftboats
- Specialized Environmental Resources





Thank you for
your attention.

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