



U.S. Army
Corps of Engineers
Jacksonville District

Navigation Study for Jacksonville Harbor Duval County, Florida - 008410

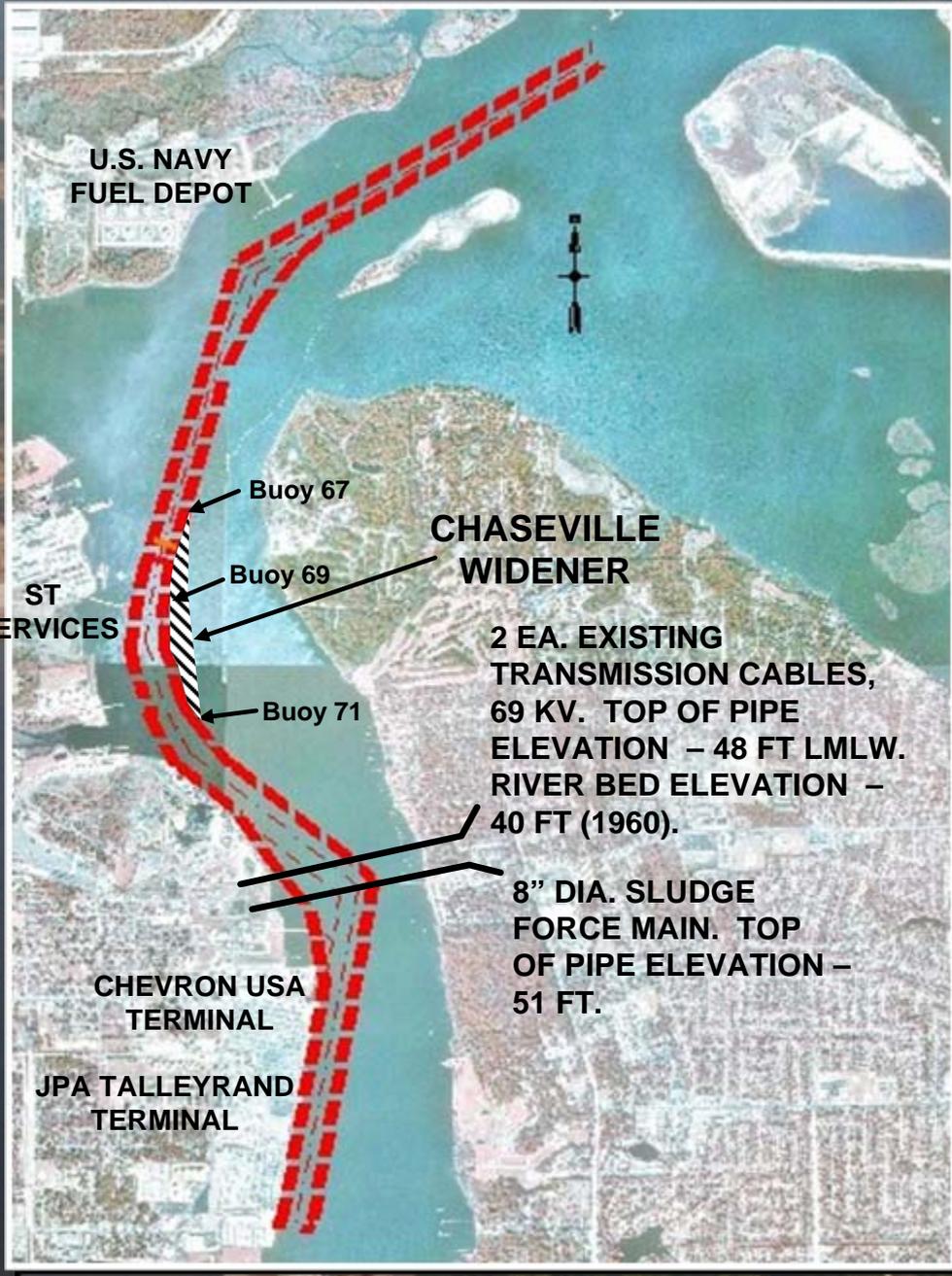


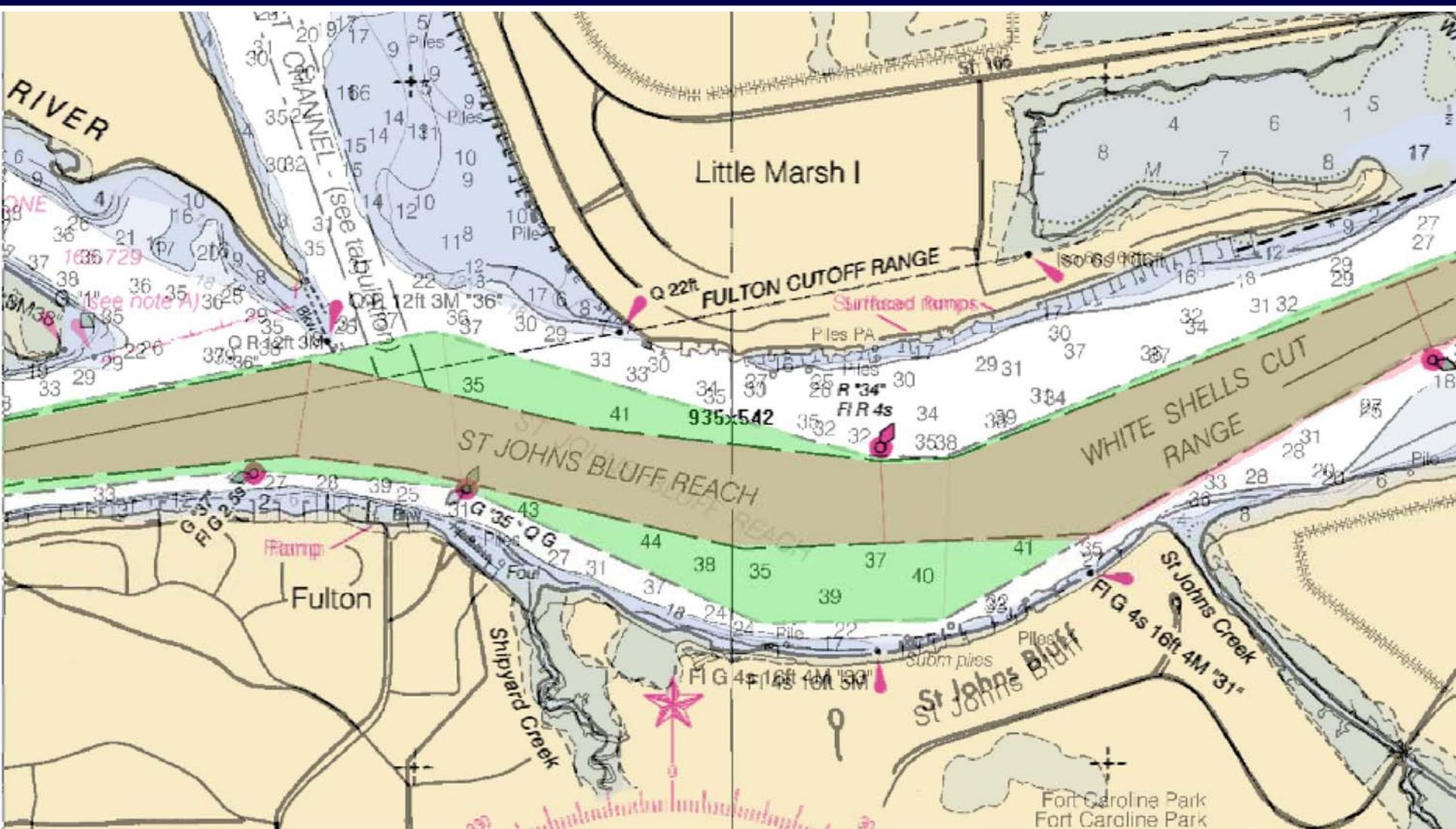
General Reevaluation Report II Feasibility Scoping Meeting

February 7, 2008

Existing Federal Project







Economic Benefit Segments

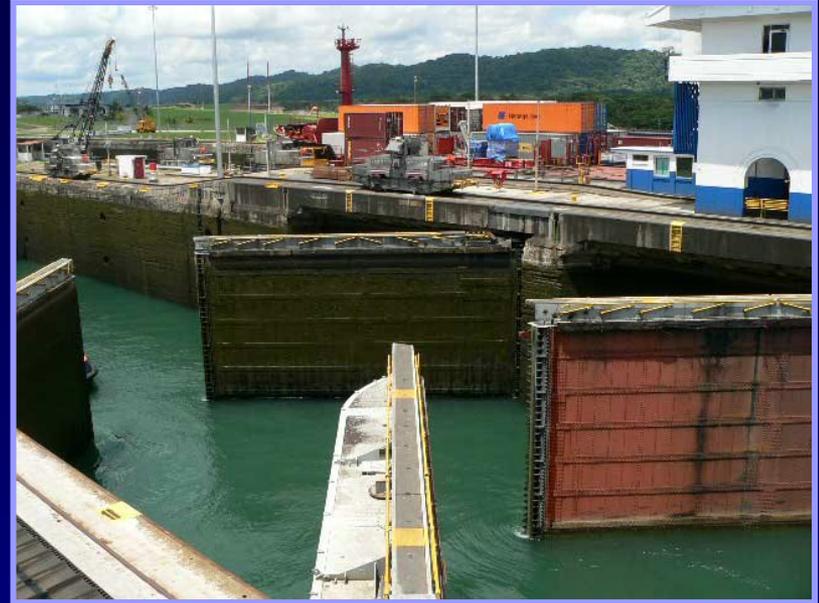


Commodity Projections GRR-2

- Based on user interviews, capacities, historical data, and population projections
- Further analysis for all new and projected terminals will evaluate
 - Types of service, origins and destinations, types of commodities (imports/exports), routes (Panama & Suez Canals), types and sizes of vessels
 - Analysis from the world market to the U.S. market to the regional market and then to the port share

Panama Canal Expansion

Components of Third Set of Locks Project



Gatun Lock



- 1 Deepening and widening of the Atlantic entrance channel
- 2 New approach channel for the Atlantic Post-Panamax locks
- 3 Atlantic Post-Panamax locks with 3 water saving basins per lock chamber
- 4 Raise the maximum Gatun lake operating water level
- 5 Widening and deepening of the navigational channel of the Gatun lake and the Culebra Cut
- 6 New approach channel for the Pacific Post-Panamax locks
- 7 Pacific Post-Panamax locks with 3 water saving basins per lock chamber
- 8 Deepening and widening of the Pacific entrance channel

Images courtesy of PanCanal.com

Panama Canal Expansion

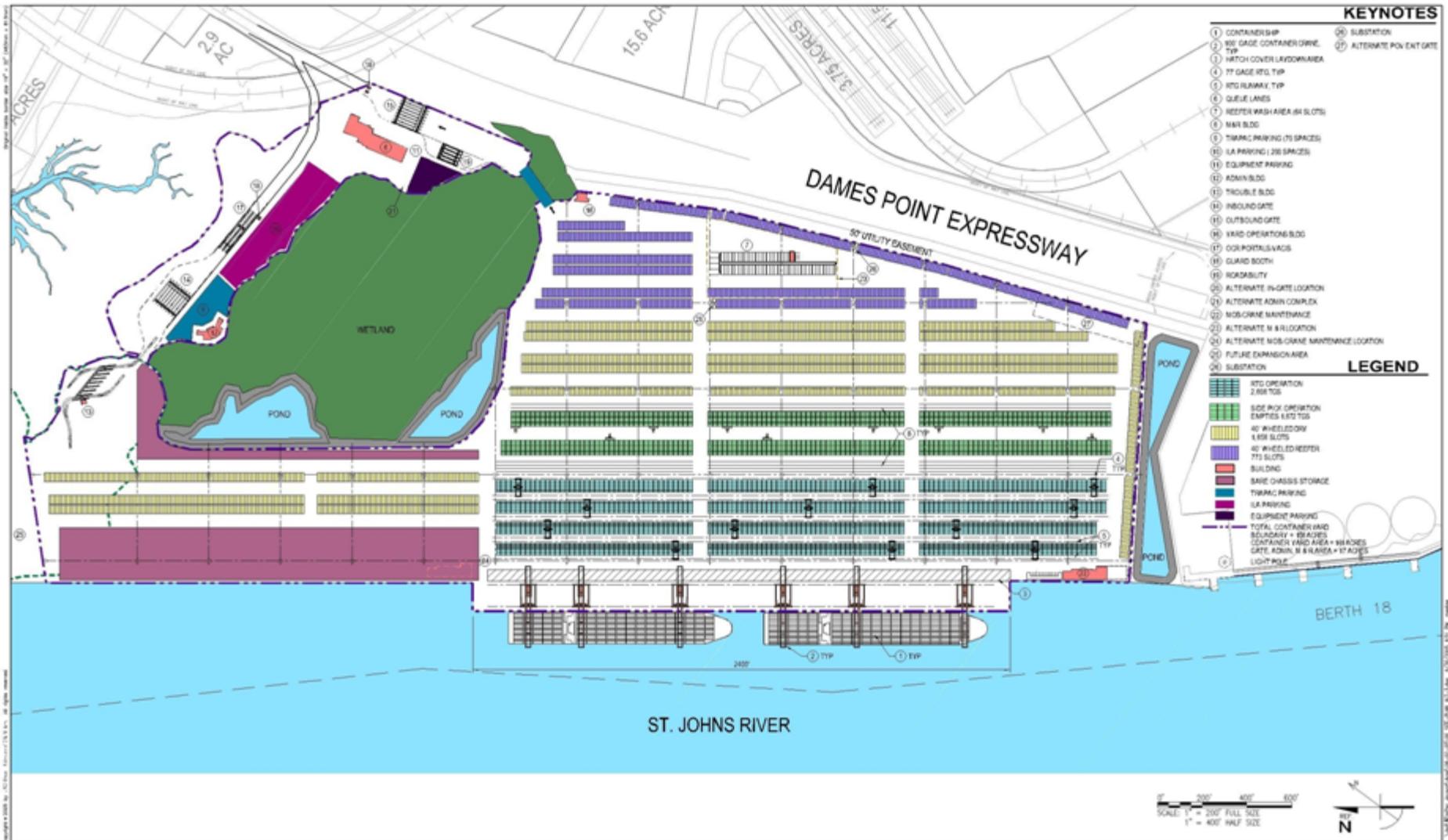
Potential Benefits to Include in Future Economic Analyses (will continue verification)

- **Existing Canal**
 - Maximum vessel draft: 39.5 feet (tropical fresh water)
 - Maximum vessel beam: 106 feet
 - Maximum vessel length: 965 feet
- **Expanded Canal**
 - Maximum vessel draft: 50 feet (tropical fresh water)
 - Maximum vessel beam: 160 feet
 - Maximum vessel length: 1,200 feet
- **Scheduled Completion: 2014 (will continue to monitor)**
- **Post Panamax Containerships - Affected Vessels**
 - U.S. - Asia trade routes
 - Now call West Coast U.S. with land bridge service (rail & truck) to rest of U.S.
 - Will call East Coast U.S. ports with canal expansion
- **Vessel dimensions: Maersk S-Class**
 - Max Draft: 48 feet
 - Beam: 141 feet
 - Length: 1,139 feet

Future Considerations

Projections and Substantiating the Numbers for New Container Terminal

- National Economic Development (NED) Analysis - new container terminals (MOL, Hanjin) and two new bulk (aggregate) terminals
 - Review of preliminary projections provided by Jaxport for the new container terminal requires review by the district for NED benefit analysis
 - The district will contact the Port and all new terminal users for:
 - ◇ Possible additional information required including types of commodities in containers, origin, destination, tonnage, letters of intent for new facilities (eg. warehouses)...
 - ◇ Potential multi-port analysis impacts
 - Information must be verified based on market conditions/demand
 - Additional details of the NED analysis requirements will be provided



Revision	By	Approved	Date

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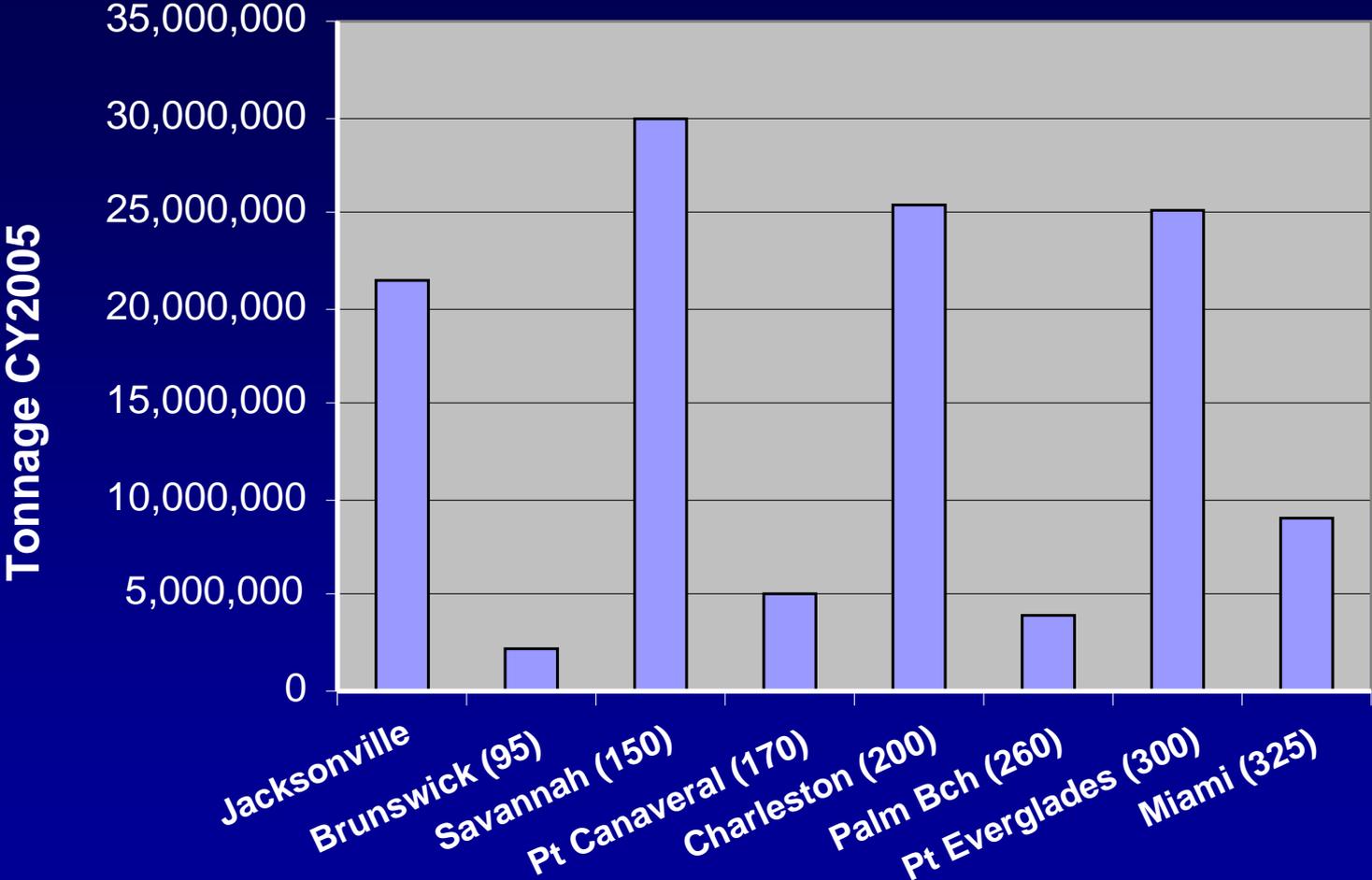
DAMES POINT MARINE TERMINAL

Sheet Title	
CONTAINER YARD LAYOUT - ALT 3	
Project Number	Sheet Number
	of

JPA/TraPac Container Terminal Mitsui O.S.K. Lines, Ltd. (MOL)

Southeast Ports

Southeast Ports



Note: Distance in parentheses indicate miles from Jacksonville Harbor

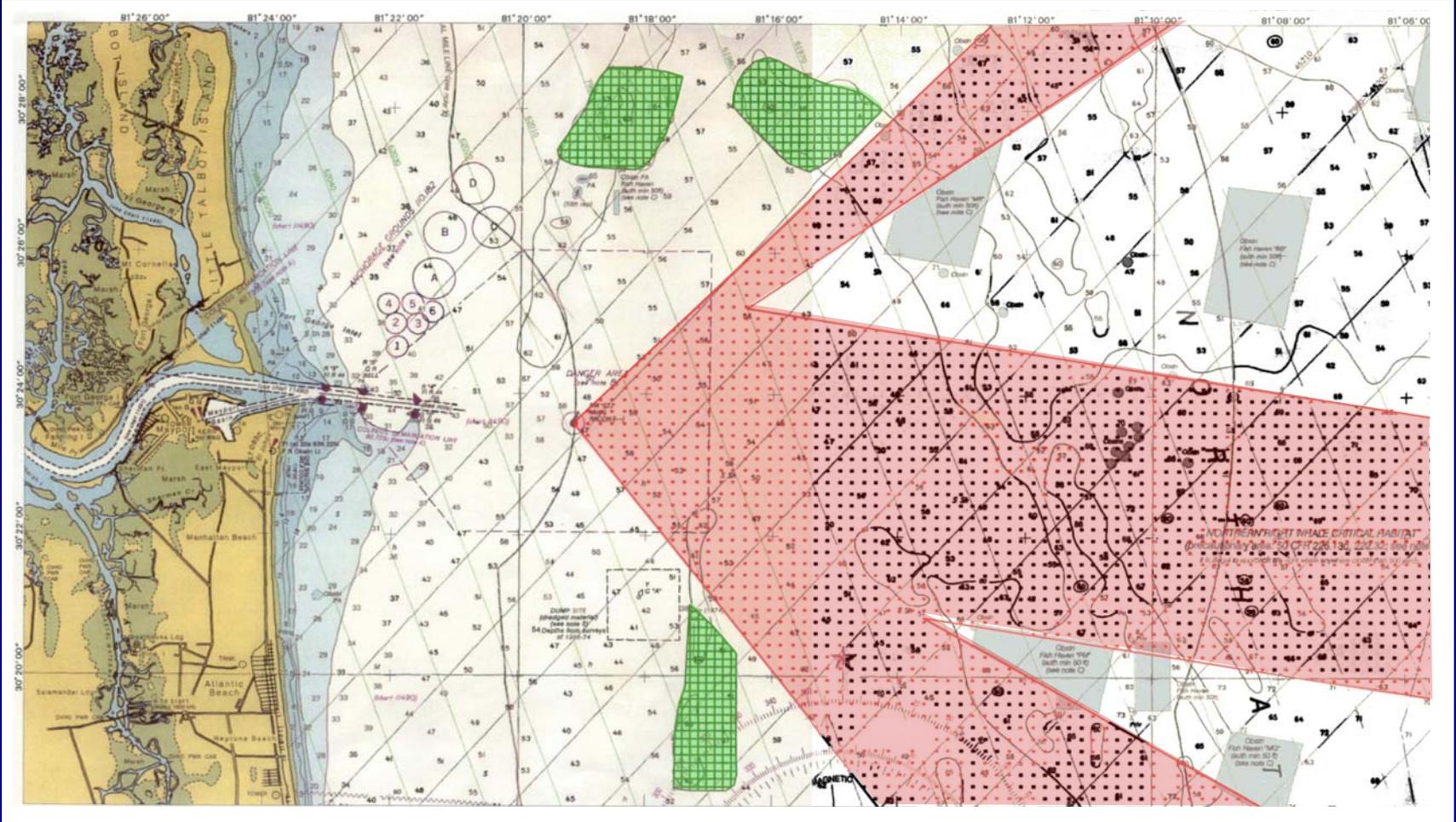
Engineering Considerations

- Hydrodynamic modeling
- Revision of Interim Dredged Material Management Plan (DMMP); Ocean Dredged Material Disposal Site (ODMDS) expansion
- Future upland disposal considerations
 - Expansion of Bartram Island
 - Evaluation of other upland sites
- Beneficial Uses:
 - Manufactured soil
 - Artificial reefs
 - Construction fill Buck Island
 - Filling deep holes (Mile Point)
 - Beach placement (near shore)
- JEA Utility relocation required



Engineering Considerations Proposed Artificial Reef Sites

Engineering



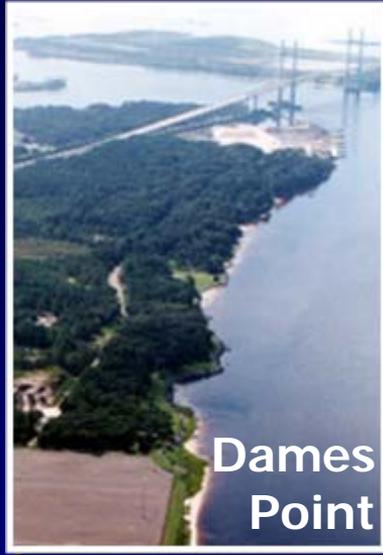
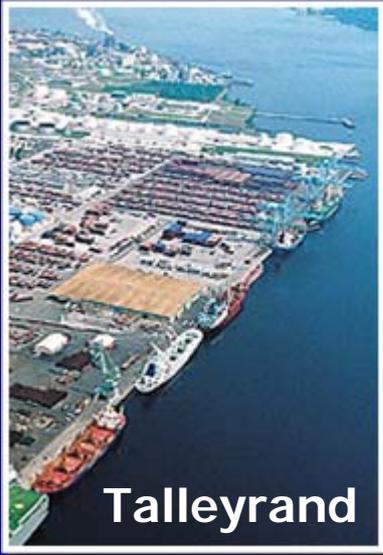
Legend

-  Shipping Channels (to be modified)
-  Artificial Reef Sites

Geotechnical Considerations

- Encountered Rock
- Encountered Rock Hardness
- Construction Techniques
- Blasting Issues
- Blasting solutions





20 Mile Stretch



Encountered Rock

Jacksonville Harbor					
Location	2003 Survey Depths			% Expected Material	
	Low	High	Dominant	Rock	Sediment
Cut 1					
Cut 2					
Cut 3	43	47	45	50	50
Cut 4	42	47	45	50	50
Cut 5	43	48	45	50	50
Cut 6	42	46	45	50	50
Cut 7	40	44	45	50	50
Cut 8	44	48	45	50	50
Cut 9	42	44	45	50	50
Cut 10	44	46	45	50	50
Cut 11	44	46	45	50	50
Cut 12	43	45	44	50	50
Cut 13	43	45	44	50	50
Cut 14/15	42	45	44	50	50
Cut 16	42	43	42	75	25
Cut 17	42	44	43	50	50
Cut 18	42	44	43	50	50
Cut 19	42	44	43	100	0
Cut 39	43	45	44	100	0
Cut 40	40	44	42	100	0
Cut 41	43	45	44	100	0

Jacksonville Harbor					
Location	2003 Survey Depths			% Expected Material	
	Low	High	Dominant	Rock	Sediment
Cut A					
Cut B					
Cut F				50	50
Cut G				50	50
Cut 42	41	43	44	50	50
Cut 43	42	45	44	100	0
Cut 44	43	45	44	10	90
Cut 45	43	45	44	10	90
Cut 46	42	44	44	100	0
Cut 47	43	46	45	90	10
Cut 48	41	45	44	90	10
Cut 49	41	49	45	100	0
Cut 50	41	43	42	100	0
Cut 51			40	75	20
Cut 52			40	10	90
Cut 53			40	90	10
Cut 54			40	100	0
Cut 55			40	100	0
Terminal-38			40	100	0
Terminal-34			40	80	20

Information from past surveys and Navigation Study Report (1998)

Environmental Considerations

Water Quality Concerns

- Upstream salinity impacts
- Total Maximum Daily Loads (TMDL) based on 38 – foot depth
- Turbidity
- HTRW issues
- Aquifer impacts
- Potential Water Withdrawals



Environmental Resources

- Threatened and Endangered species
- Non-ESA protected marine mammals
- Salt marshes
- Oyster bars
- Essential fish habitat
- Migratory birds



Cultural Resources

- Mile Point Widener (Area A)
- Trout river cut widener (Area A – 2 targets)
- Bartram Island expansion
(Additional Magnetometer Survey required)
- Expansion of off shore disposal areas



National Environmental Policy Act (NEPA)

- Public coordination
 - Initial scoping
 - Public Meetings
 - Respond to comments
(Impacts Alternative Selection)
- Supplemental Environmental Impact Statement



Jacksonville Harbor Mile Point Area

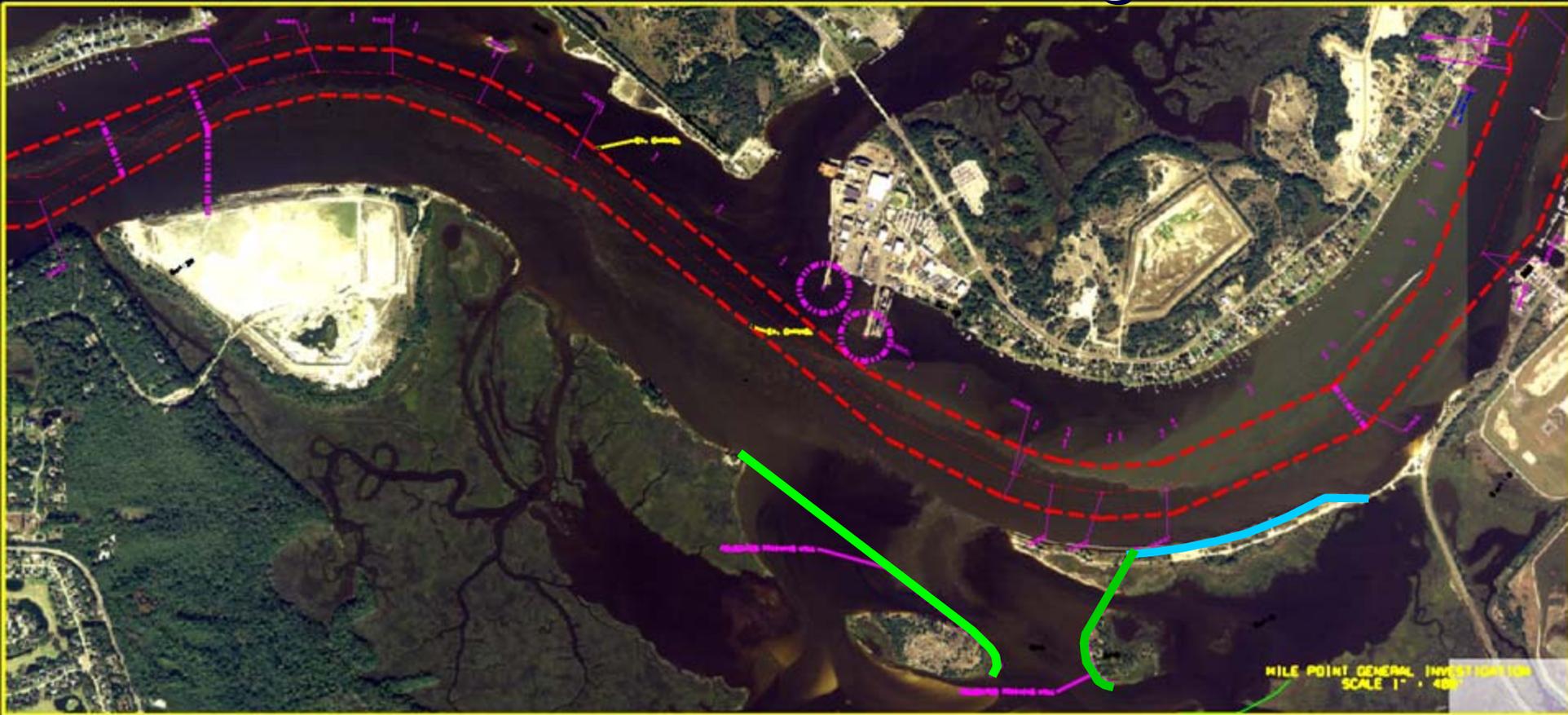
Relocate Mile Point Training Wall



■ Existing Training Wall to be Reconfigured

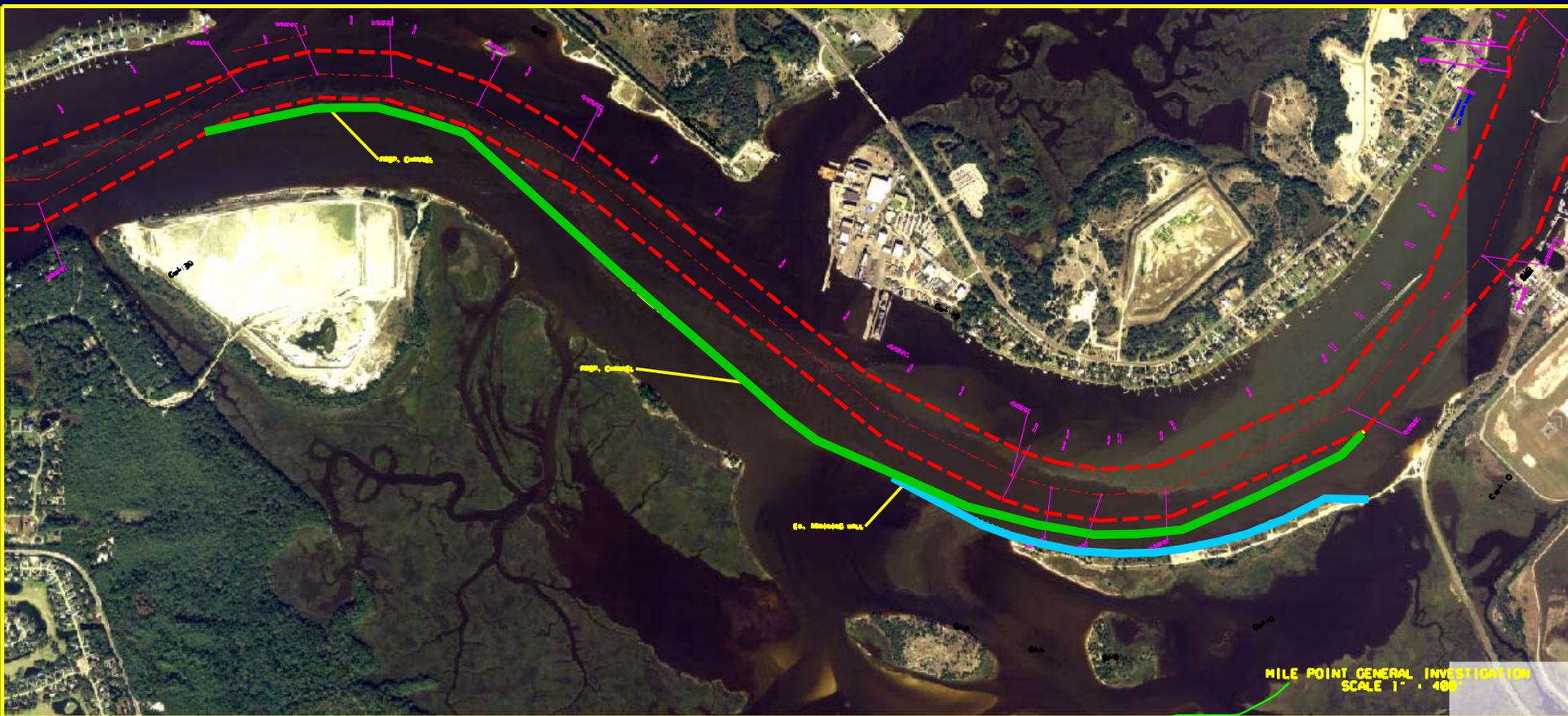
Jacksonville Harbor Mile Point Area

Relocate Mile Point Training Wall



-  Existing Training Wall to be Reconfigured
-  Proposed Configuration for Relocated Training Wall

Jacksonville Harbor Mile Point Area Bar Pilots Widening Alternative



- Existing Training Wall
- Bar Pilots Widening Alternative



Thank you