PORT EVERGLADES
2014 MASTER/VISION PLAN

ELEMENT 5
FINAL MASTER/VISION PLAN

PRESENTED BY

AECOM




FINAL MASTER/VISION PLAN

5.1 Introduction

This element of the *Port Everglades 2014 Master/Vision Plan* presents the final 5-Year Master Plan and the 10- and 20-Year Vision Plans. It summarizes the changes to the 2009 Plan the Broward County Board of County Commissioners approved in March 2011. It then discusses in detail all the projects that are proposed in this 2014 Plan, their investment costs, and their derived benefits, based on the Decision-Matrix criteria used to evaluate each project (see Element 4). The element concludes with a summary of how the berths in Northport, Midport, and Southport will be used.

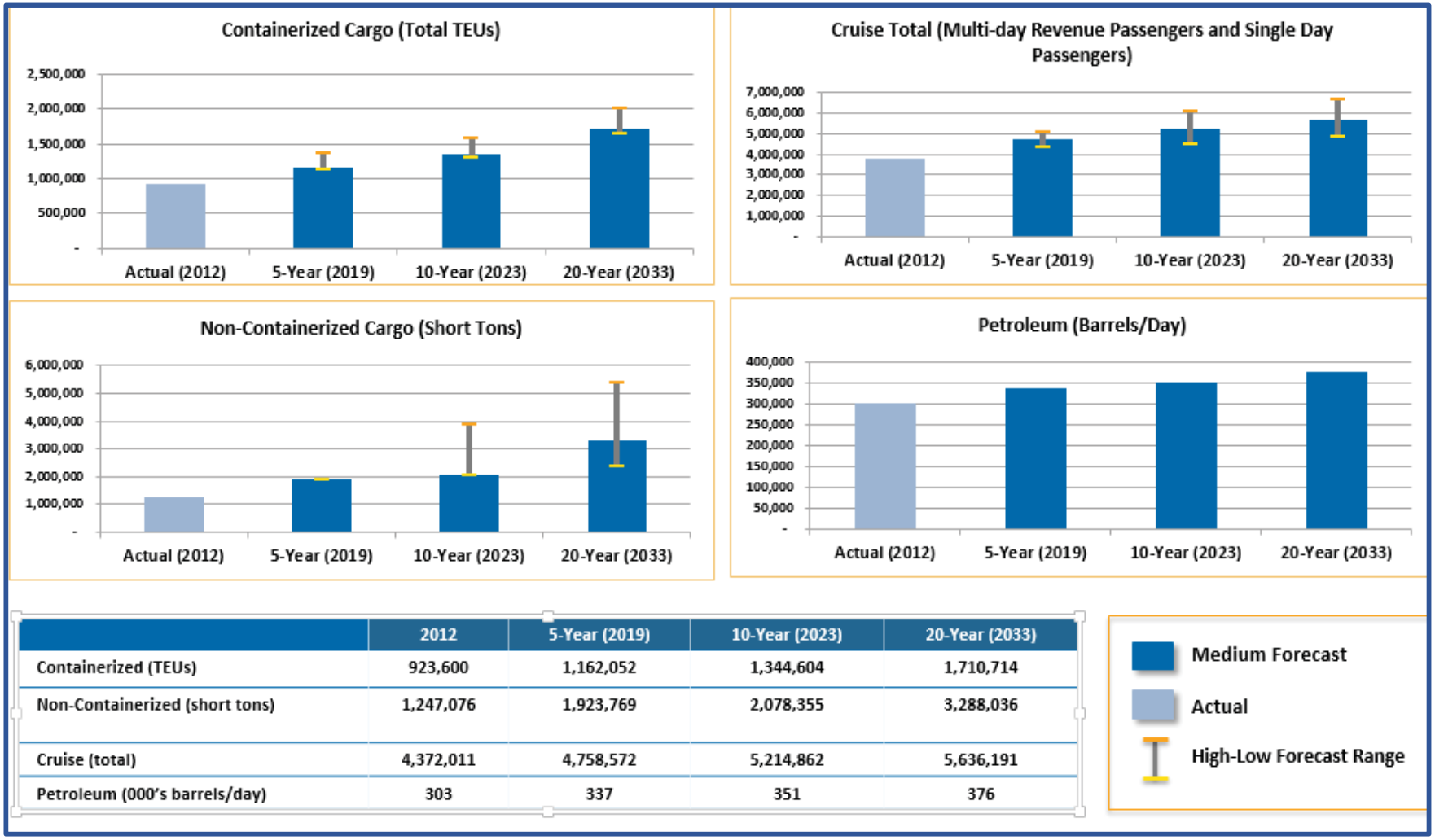
In September 2013, the consultant team submitted Phase I of the 2014 Plan. Following the Phase I submittal, the consultant team initiated Phase II, preparing the conceptual planning studies discussed in Element 3, with input from senior Port staff, the Port's Focus Group, and charrettes conducted with Port tenants, users, and other stakeholders.

Reflecting this input, the final 2014 Plan presented in this element includes the infrastructure improvements needed to support the major projects identified in the 2009 Plan – the Southport turning notch extension, the intermodal container transfer facility (ICTF), and the harbor and channel deepening and widening – and to meet the forecasted market demand for the Port's four core business lines over the planning horizon (see Table 5.1-1 on the next page). Key planning objectives include:

- Ability to berth fully laden super post-Panamax ships of 8,000 to 8,500 20-foot equivalent container units (TEUs).
- Modern cranes to load and unload the super post-Panamax ships swiftly.
- Berthing flexibility.
- Longer cruise berths and wider slips.
- Petroleum berth modernization and redundancy.
- Terminal and access improvements.
- Bulkhead maintenance.

In this 2014 Plan, the 5-Year Master Plan covers fiscal years FY 2015 to 2019; the 10-Year Vision Plan covers FY 2020 to 2023, and the 20-Year Vision Plan covers FY 2024 to 2033. As discussed in Element 3, an iterative process was used to identify and refine the projects included in the 2014 Plan and to determine which projects should be included in the 5-, 10-, and 20-year time frames and which should be removed from the program. One of the new projects considered for further study in Element 3 – the Cruise Terminal and Pier 19/20 – was not recommended for inclusion in this Plan, although it may merit further consideration in the future.

Table 5.1-1
2014 MARKET FORECAST SUMMARY



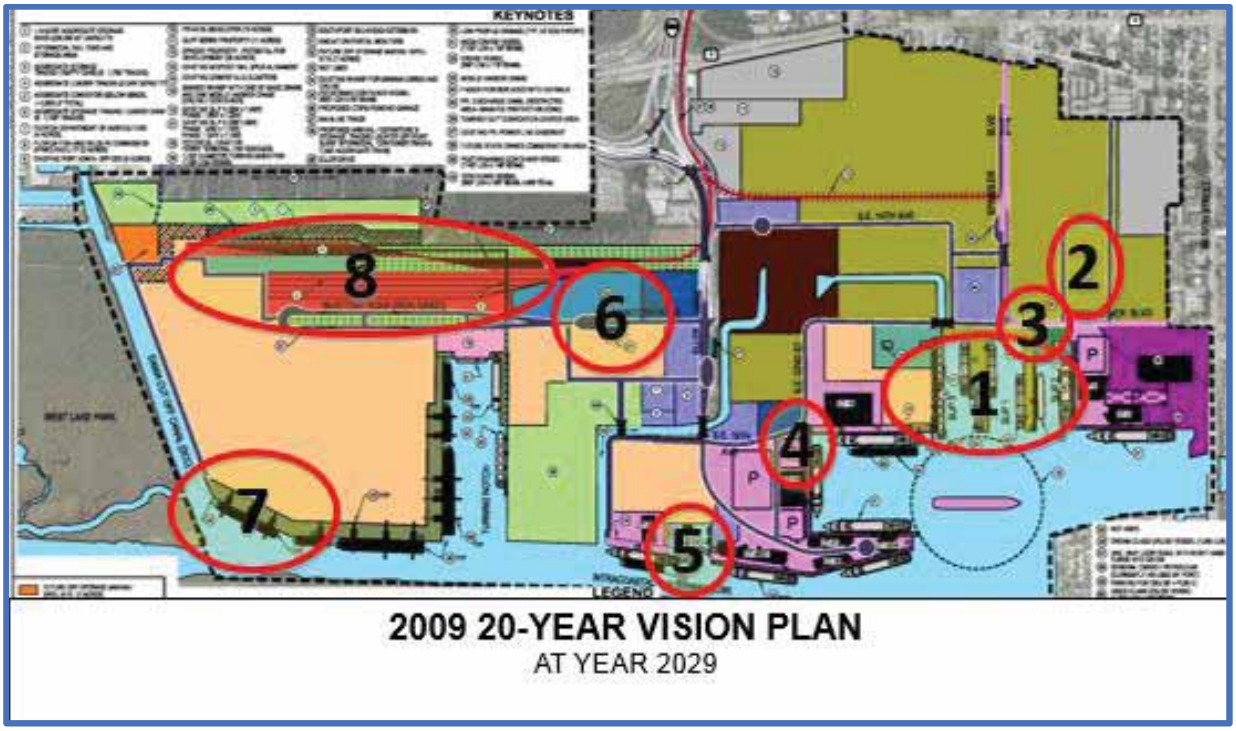
	2012	5-Year (2019)	10-Year (2023)	20-Year (2033)
Containerized (TEUs)	923,600	1,162,052	1,344,604	1,710,714
Non-Containerized (short tons)	1,247,076	1,923,769	2,078,355	3,288,036
Cruise (total)	4,372,011	4,758,572	5,214,862	5,636,191
Petroleum (000's barrels/day)	303	337	351	376

5.2 Transition from the 2009 Plan to the 2014 Plan

The 2009 Plan included the previously identified Southport turning notch extension, ICTF, and harbor and channel deepening and widening, major projects that are a springboard for the Port's future growth and industry competitiveness. In support of these projects, the 2014 Plan introduces ten new or modified infrastructure improvements to the complement of the improvements already included in the 2009 Plan. Each of these projects is discussed and illustrated in the sections that follow, accompanied by the evaluation criteria from the Decision-Matrix that was described in Element 4. Where appropriate a comparison is made between the project configuration in the 2009 Plan and that in the 2014 Plan.

For reference, the 2029 20-Year Vision Plan from the 2009 Plan is illustrated in Figure 5.2-1, which identifies the locations of project changes. In addition to the new projects discussed in the following sections and the rescheduling of several projects, these changes to the 2009 Plan include:

Figure 5.2-1
AREAS OF CHANGE IN THE 2009 MASTER/VISION PLAN



- Modifications to the planned dimensions of Slips 1, 2, and 3, consistent with the bulkhead study results and industry needs (1).
- Repurposing of an underutilized County-owned parcel of land for neo-bulk storage (2).
- Relocation of the security gate on Eisenhower Boulevard and removal of the by-pass road from the program (3).
- Removal of the Cruise Terminal 18 parking garage from the program. Based on current and projected parking demand, the need is not sufficient to require the construction (4).

- Filling of the Tracor Basin (5).
- Relocation of the Foreign-Trade Zone (6).
- Reconfiguration of Berth 33 (7).
- Relocation of the crushed rock (aggregate) facility (8).

As input into the 2009 Plan, an outside engineering firm conducted a bulkhead study[1] for the Port to identify a schedule for replacing Berths 1 through 29. In this 2014 Plan, the resulting bulkhead replacement schedule has been coordinated with the USACE's future portwide deepening and widening program, the ongoing update of the Plan, and the current conditions of the existing steel sheet pile bulkhead walls. Bulkhead improvements are proposed within the 5-, 10-, and 20-year planning horizons, respectively, and are described in each of the sections below. The detailed study is attached in Appendix G.

5.3 The 5-Year Master Plan (2015-2019)

Figure 5.3-1 shows the projects that are included in the 5-Year Master Plan, both those that were previously included in the 2009 Plan and those that are new to this 2014 Plan or are modified from the 2009 Plan. These projects are described and illustrated below.

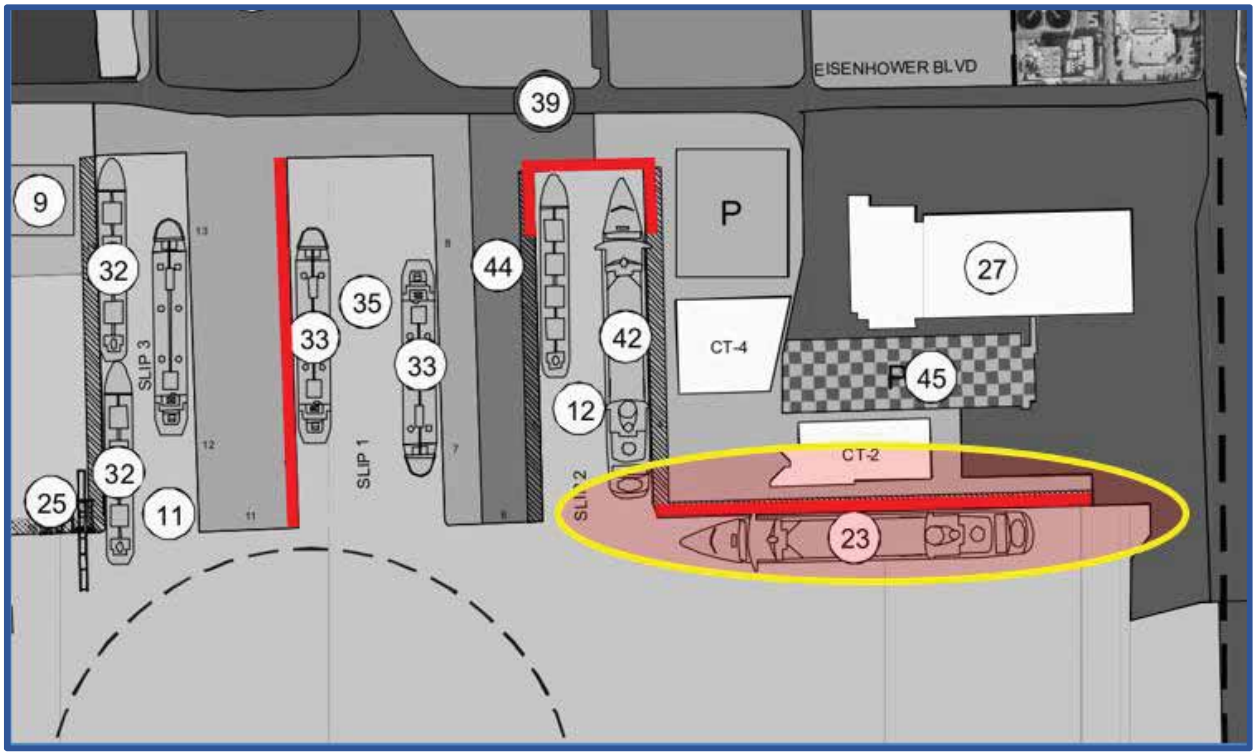
[1] Halcrow, *Bulkhead Study Update and Cathodic Protection System Evaluation,* August 2010.

Figure 5.3-1
5-YEAR MASTER PLAN PROJECT LOCATION MAP

5.3.1 Northport

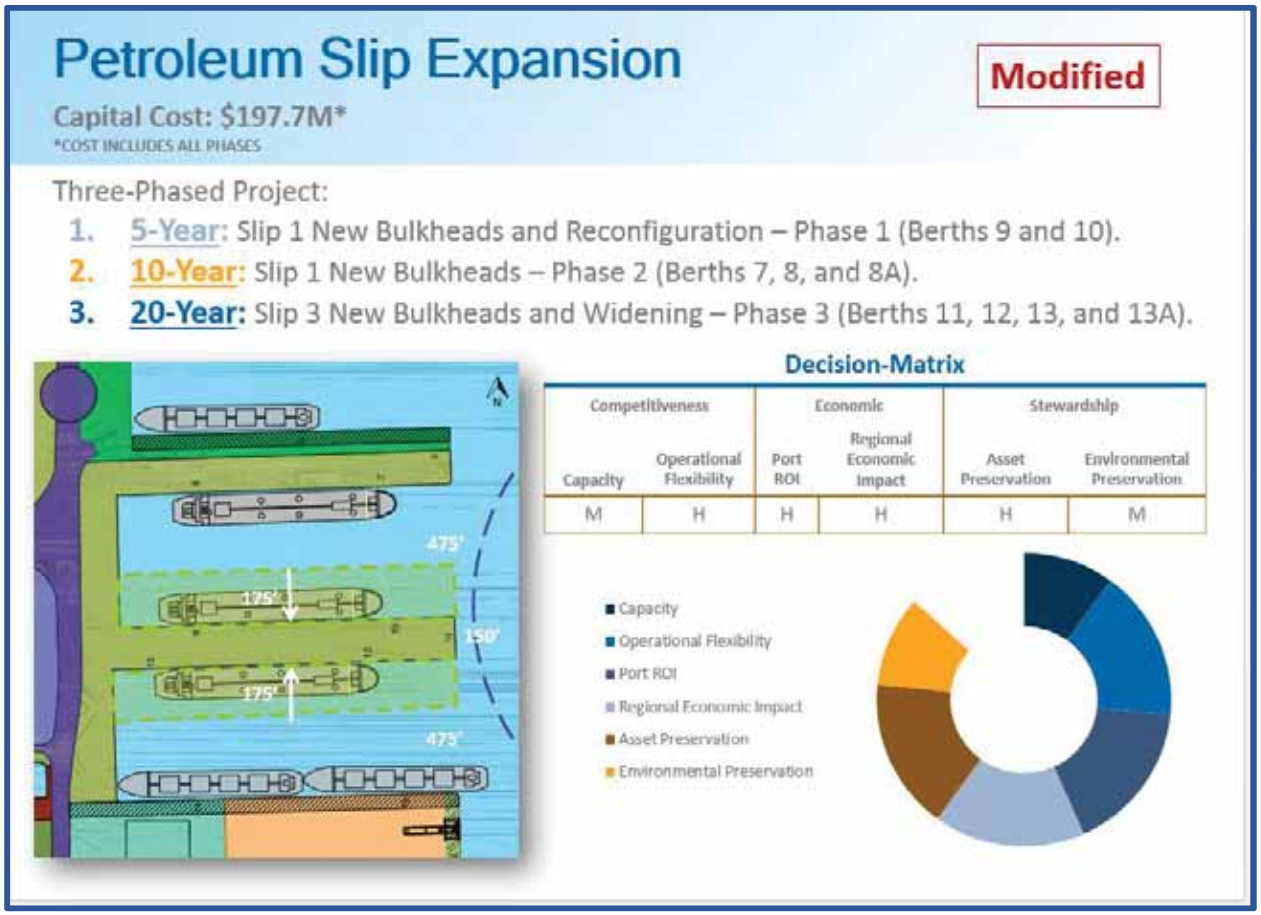
Berths 1, 2, 3 New Bulkheads (1). New bulkheads will be constructed for Berths 1, 2, and 3 in the 5-Year Master Plan, based on the previously cited *Bulkhead Study*. Figure 5.3-2 shows the project locations.

Figure 5.3-2
NEW BULKHEADS AT BERTHS 1, 2, AND 3



Petroleum Slip Expansion: Slip 1 New Bulkheads and Reconfiguration (Berths 9 and 10) (2). To accommodate the Port's petroleum operations, the 2009 Plan called for widening Slip 1 to the south by 125 LF and to the north by 50 LF; however, as discussed in Element 3, the reconfiguration to the north would have obstructed the entrance channel range lights used by the port pilots. To address this issue, the 2014 Plan calls for the widening to occur entirely to the south, in a three-phase process to rebuild bulkheads and widen Slip 1 and Slip 3 for modernization, capacity, and safety-driven expansion. Figure 5.3-3 shows the entire three-phased project.

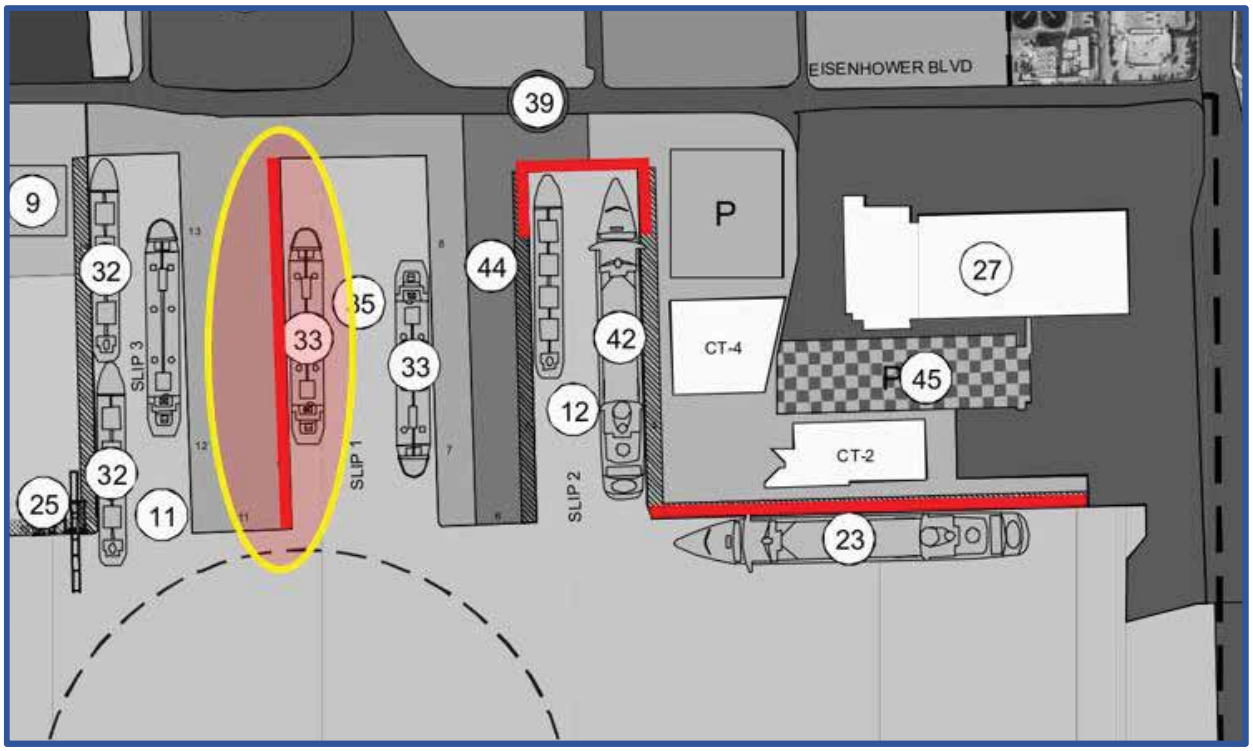
Figure 5.3-3
PETROLEUM SLIP EXPANSION



In Phase 1, Slip 1 will be widened to the south by 175 LF from 300 linear feet (LF) to 475 LF; this new bulkhead (Berths 9 and 10) is 1,200 LF in length, no change from the current dimension. This project includes dredging, consistent with the proposed USACE channel deepening and widening program, approximately half of the overall Slip 1 paralleling Berths 9 and 10, and demolishing and replacing the topside petroleum piping and loading infrastructure. Environmental remediation is included in the total project cost. Phases 2 and 3 are discussed below.

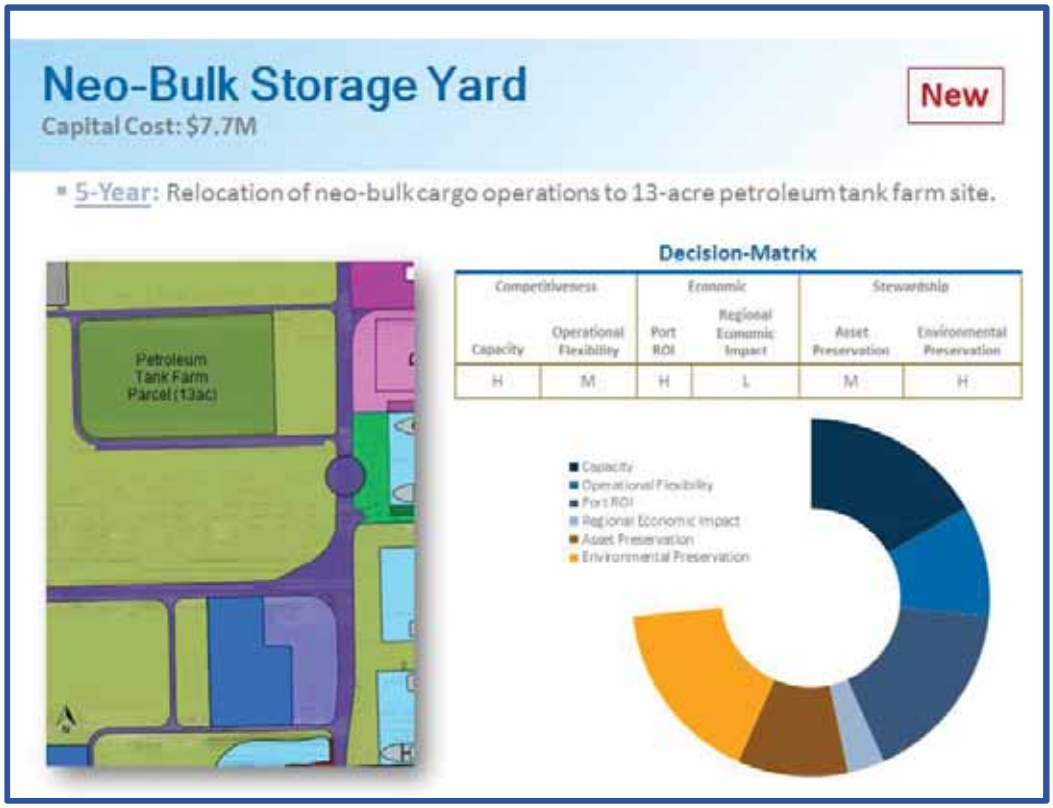
In Figure 5.3-4, the red lines show the locations of the proposed Slip 1 reconfiguration and the new bulkheads at Berths 9 and 10.

Figure 5.3-4
PHASE 1 EXPANSION OF SLIP 1 AND NEW BULKHEADS AT BERTHS 9 AND 10



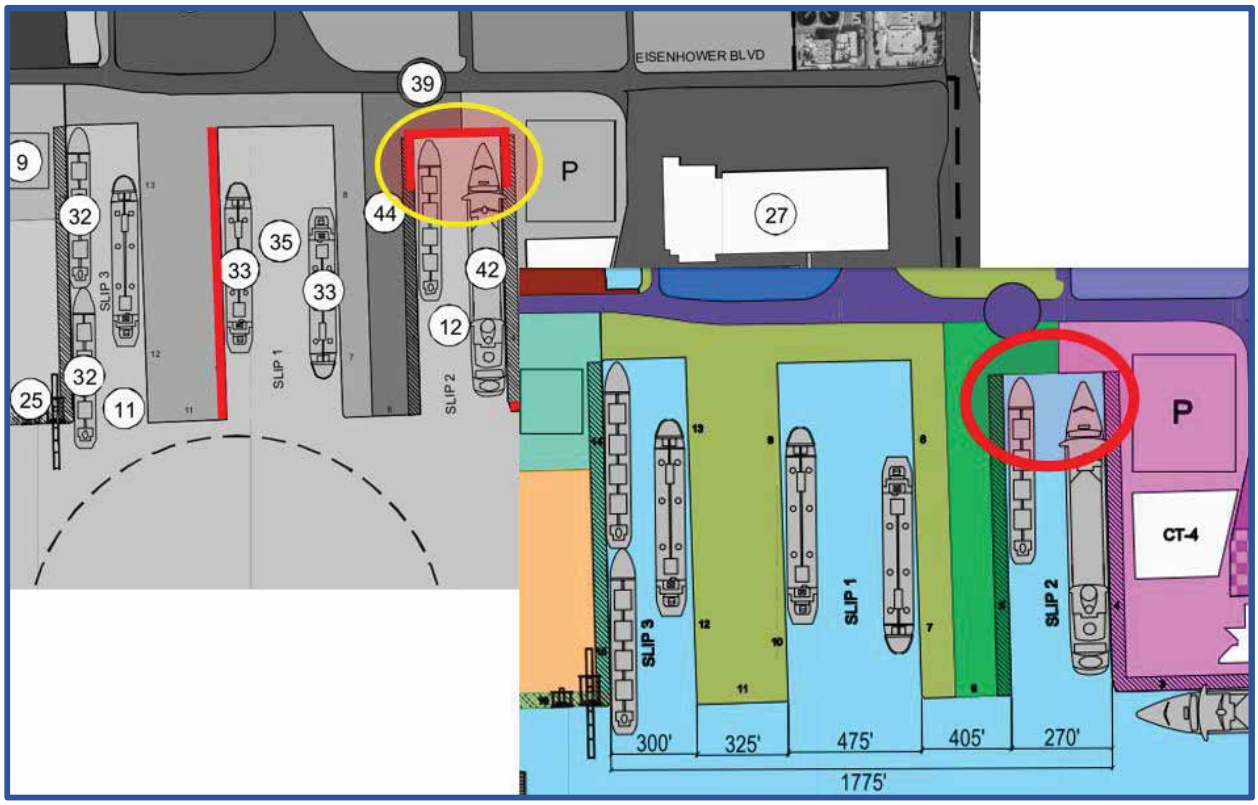
Neo-Bulk Storage Yard (3). The loss of grid space resulting from the Slip 2 extension necessitates the relocation of the neo-bulk storage yard currently located adjacent to the western end of Slip 2. After considering two areas in Northport – a 10-acre parcel on FPL's property and the 13-acre former molasses tank farm -- the former molasses tank farm was identified as the preferred location for this storage. The site is located west of Eisenhower Boulevard, as shown in Figure 5.3-5. The neo-bulk commodities will continue to be unloaded at Berth 5. The project cost includes paving, lighting and security measures.

Figure 5.3-5
NEO-BULK STORAGE YARD



Slip 2 Westward Lengthening (4). As shown in Figure 5.3-6, Slip 2 lengthening to the west will increase the slip's length from 900 LF to 1,150 LF to accommodate the larger cruise ships calling at the Port. Based on studies of the slip and adjacent land, the slip in its entirety will be lengthened to the west. This project will allow Berth 4 to accommodate up to a 1,040-foot length overall (LOA) cruise vessel.

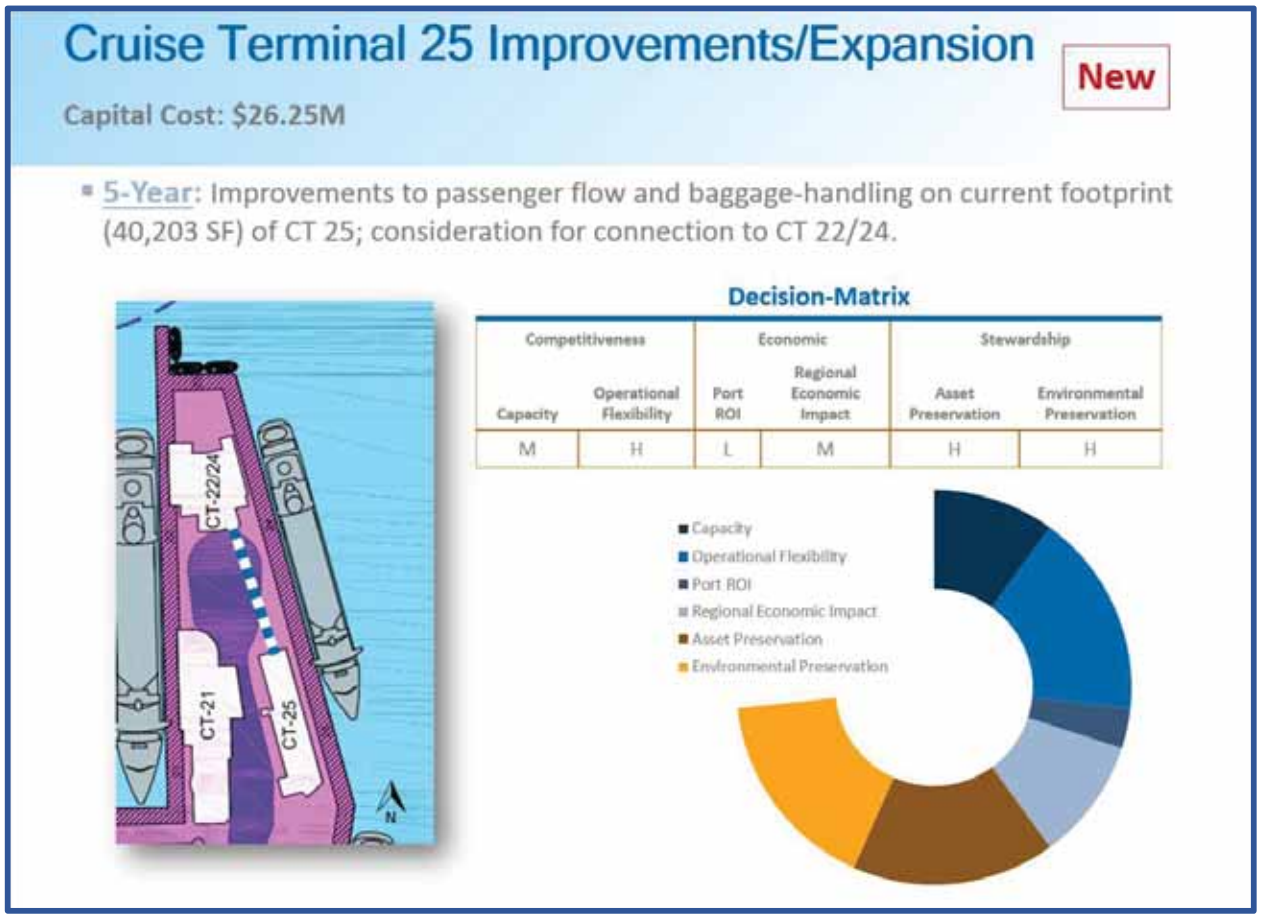
Figure 5.3-6
SLIP 2 LENGTHENING



5.3.2 Midport

Cruise Terminal 25 Improvements/Expansion (Design/Construction) (5). This cruise terminal is located in the vicinity of Cruise Terminals 21, 22/24, and 26. The current footprint of Cruise Terminal 25 -- 40,203 square feet (SF) -- and its associated ground transportation area are not sufficiently sized to handle the increasingly larger cruise ships handled at Berth 24/25. Improvements are required to the cruise terminal building to better service passenger flows and luggage handling, and additionally to assure that the terminal has safe and efficient access to parking. For these reasons and the Port's commitment to continue modernizing its cruise facilities, the Port will undertake a detailed planning and design study of Cruise Terminal 25 to select the best alternative for expanding and upgrading the facility. As part of this project the concept of connecting Cruise Terminal 25 to Cruise Terminal 22/24 (35,996 SF) will be studied as an alternative. Figure 5.3-7 illustrates these improvements. Although this project has a low return on investment to the Port, its operational advantages make it a sound choice for implementation.

Figure 5.3-7
CRUISE TERMINAL 25 IMPROVEMENTS/EXPANSION (DESIGN/CONSTRUCTION)



5.3.3 Southport

West Lake Mitigation (Southport Turning Notch Extension) (6)

The mitigation project at West Lake Park is part of the overall mitigation for the development of the Southport turning notch extension. The Westlake mitigation includes the following elements:

- Installation of culvert connections to increase flushing of a mangrove forest approximately 1,500 acres in size.
- Installation of tidal flushing channels.
- Construction of a riprap/crib structure for shoreline stabilization along approximately three miles of shoreline adjacent to the mangrove edge along the Intracoastal Waterway and for approximately 1.5 miles along the Dania Cutoff Canal (DCC).
- Scraping down and/or removal of exotic vegetation from approximately 63 acres of upland soil to create mangrove, mudflat, tidal flats and pools, seagrass, and maritime hammock habitat, along with exotic removal in smaller areas throughout the park.

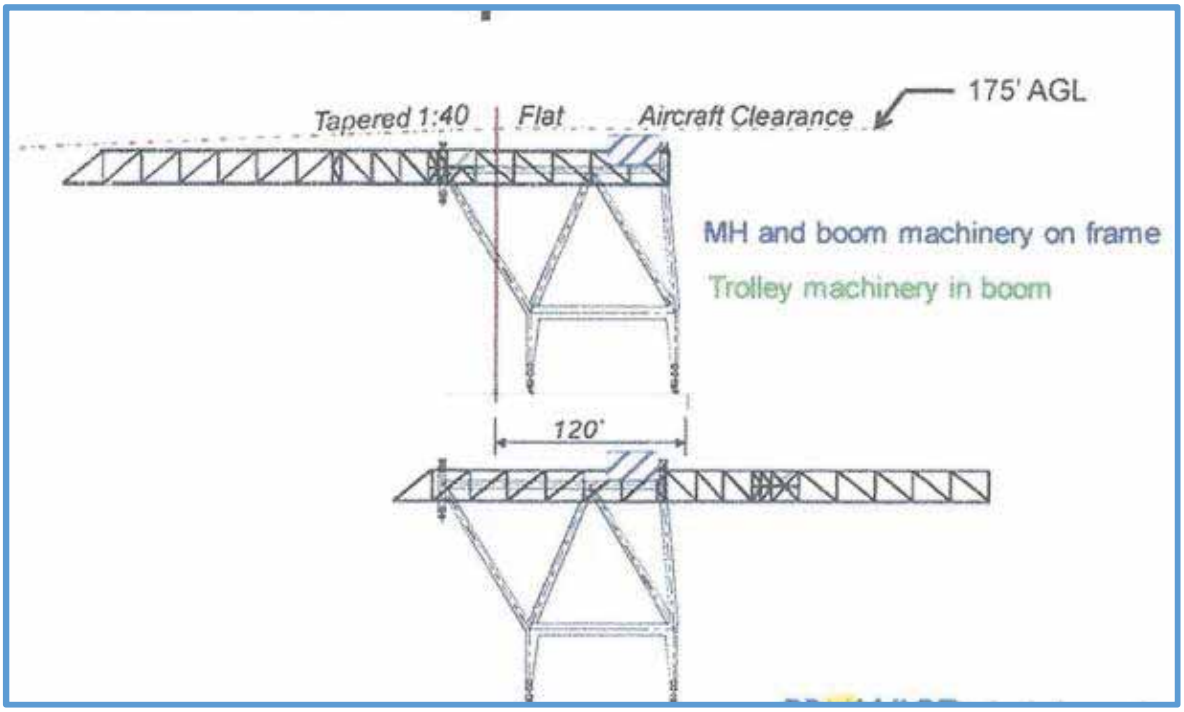
The entire project is expected to result in the creation of 24.2 acres of mangrove habitat, 7.0 acres of mud flats/tidal pools, 8.6 acres of tidal channels, 8.0 acres of seagrass habitat, 13.4 acres of marine hammock, 1.9 acres of structural habitat (riprap/crib structure), and 2.0 acres of supplemental structural restoration (along the DCC). The project will also enhance 32 acres of existing mangroves by way of riprap replacement, and preserve 23.3 acres of mangrove habitat through parcel acquisition. Element 1, Section 1.10 contains a detailed description of the permitting for this project and mitigation credits allocated by the respective agencies involved with the project.

Two Super Post-Panamax Cranes (7). These super post-Panamax cranes will be the first of five the Port will purchase over 20 years to handle the forecast container volumes. The sketch shown in Figure 5.3-8 is conceptual as the final rail gauge is yet to be determined. It is, however, expected to be between 120 and 125 feet, although it could go as high as 135 feet. The proposed cranes, specially designed as low-profile to meet the Federal Aviation Administration's (FAA) height restriction of 182.5 feet above mean sea level, will be able to serve 21-row-wide container ships.

The dimensions of the mega-low-profile crane the Port is studying are as follows:

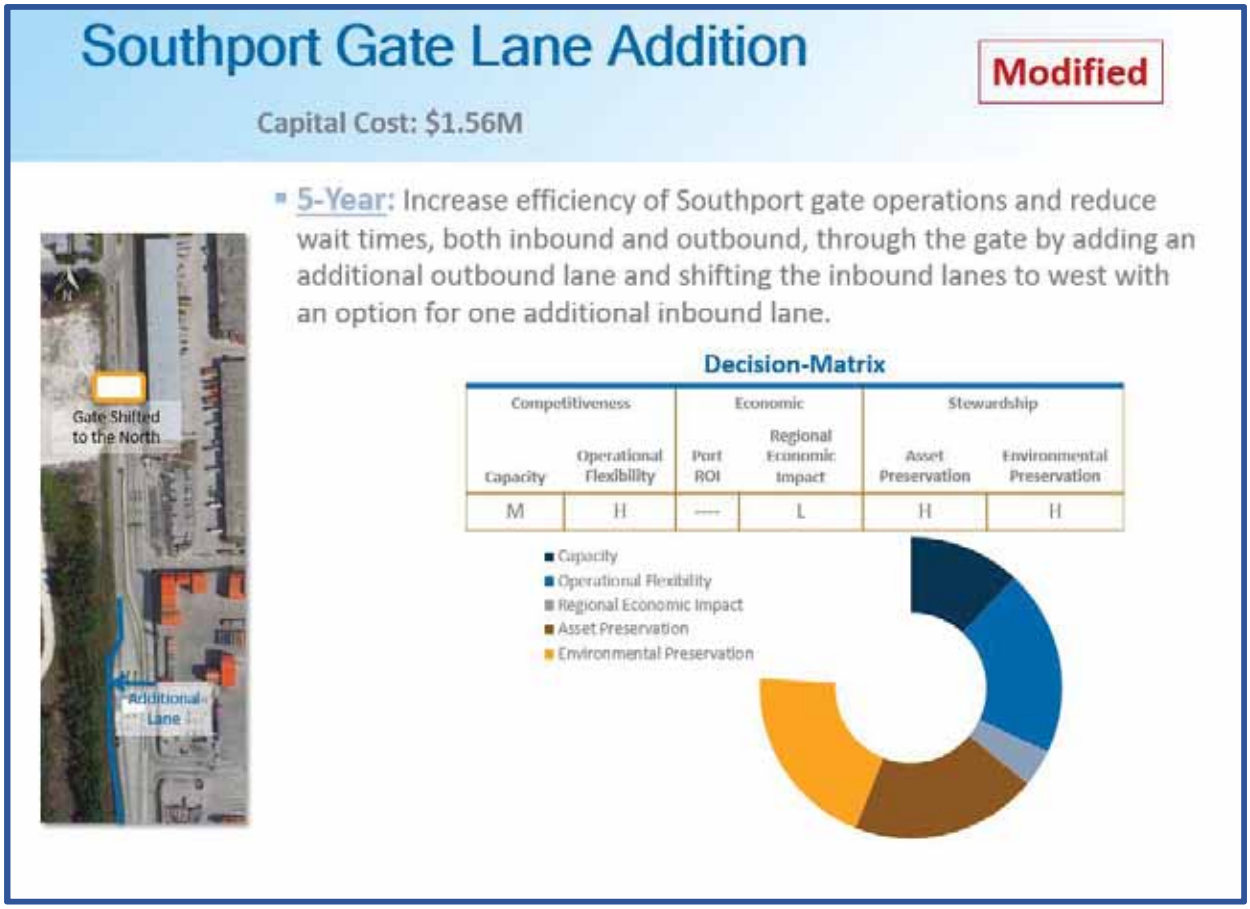
- Crane height = 182 feet above mean sea level.
- Overall height from top of rail to the highest point on the crane = 175 feet.
- Estimated back reach from bulkhead = 400 feet.
- Outreach from bulkhead = 200 feet.

Figure 5.3-8
CONCEPTUAL DESIGN OF LOW-PROFILE SUPER POST-PANAMAX CRANE



McIntosh Road Southport Gate Lane Addition (8). Due to truck congestion on the outbound lanes of the Southport container operational area, expansion of the McIntosh Road gate in Southport is needed. Adding one outbound lane and shifting the inbound lanes to the west will alleviate this congestion. The project, shown in Figure 5.3-9, includes provisions for an additional inbound lane to the west if required in the future.

Figure 5.3-9
MCINTOSH ROAD SOUTHPORT GATE LANE ADDITION



Southport Turning Notch Extension (9). Extending the Southport turning notch to the west at first at the existing 42-foot water depth, as shown in Figure 5.3-10, and later at the 48-foot depth is needed to develop additional berth capacity for the diverse cargo ships calling at the Port. Work on the turning notch is dependent on the completion of the ongoing uplands enhancement and mitigation project. Construction is, however, currently expected to begin in 2016, with completion estimated for 2018. This project has been updated from the 2009 Plan to include only one contract for all the waterside and landside elements and to account for the FAA flight determinations that will allow the existing Southport container cranes to be used for the entire length of the extended notch.

Figure 5.3-10
SOUTHPORT TURNING NOTCH EXTENSION PROJECT 1 (42- AND 48-FOOT DEPTHS)

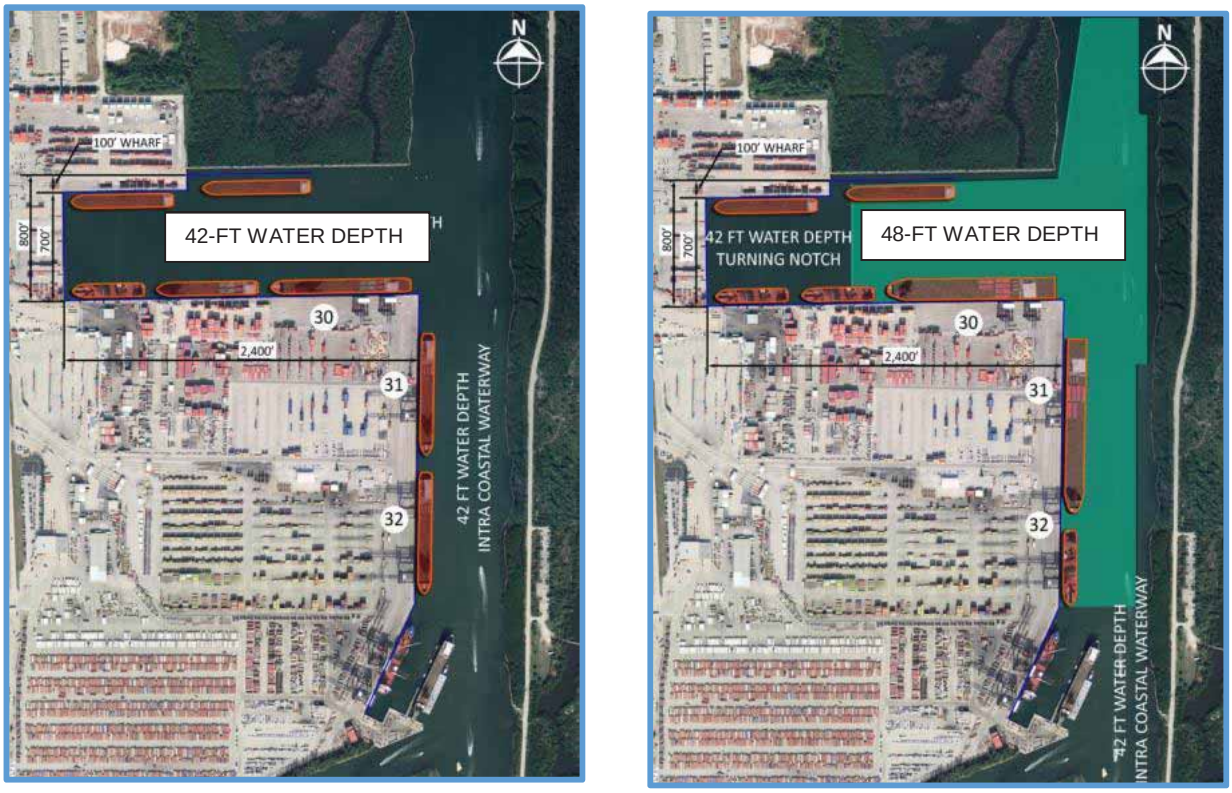
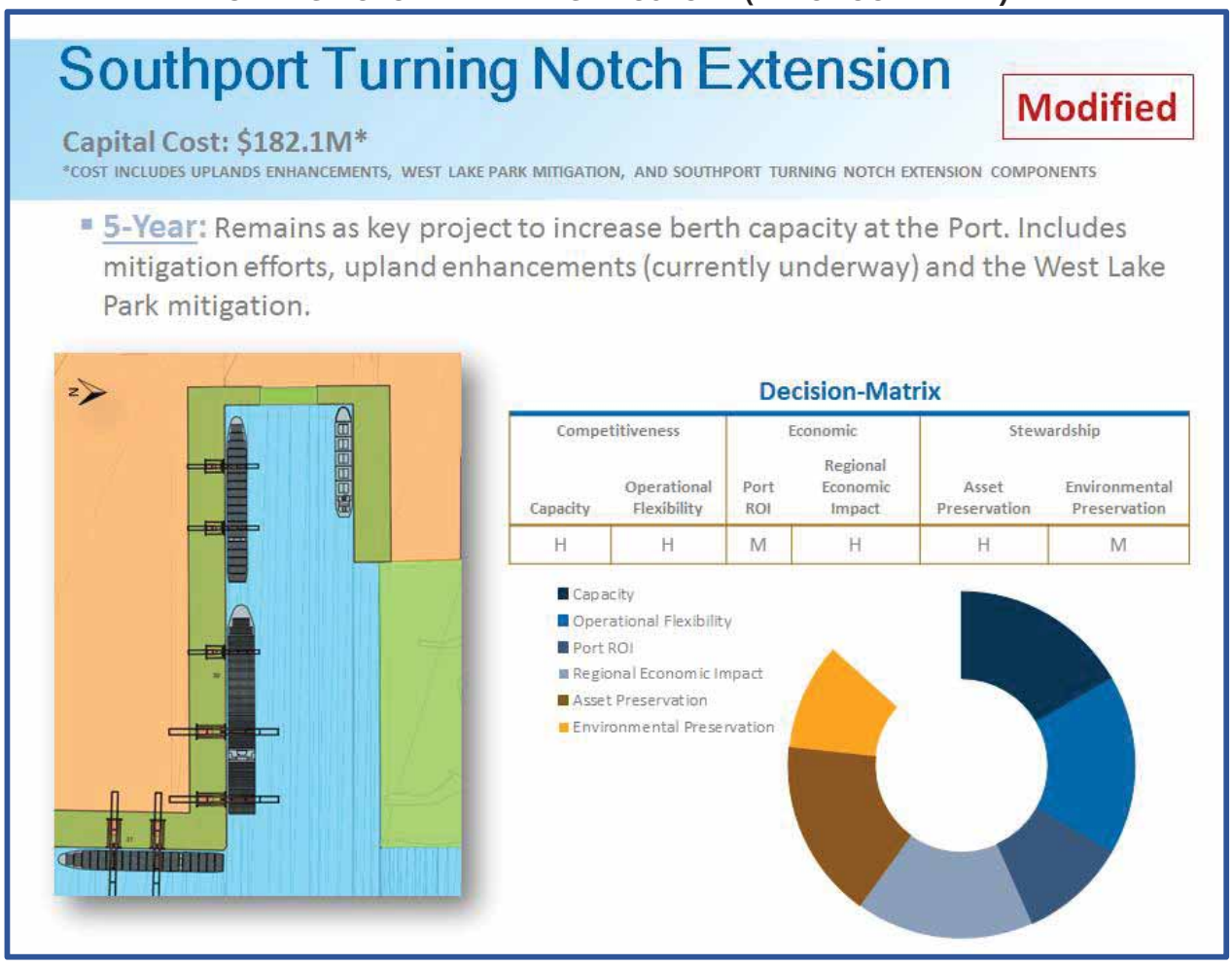


Figure 5.3-11 shows the future turning notch after the east end is deepened to 48 feet as part of the USACE deepening and widening program.

Figure 5.3-11
TURNING NOTCH DEEPENING PROJECT 2 (AT 48-FOOT DEPTH)

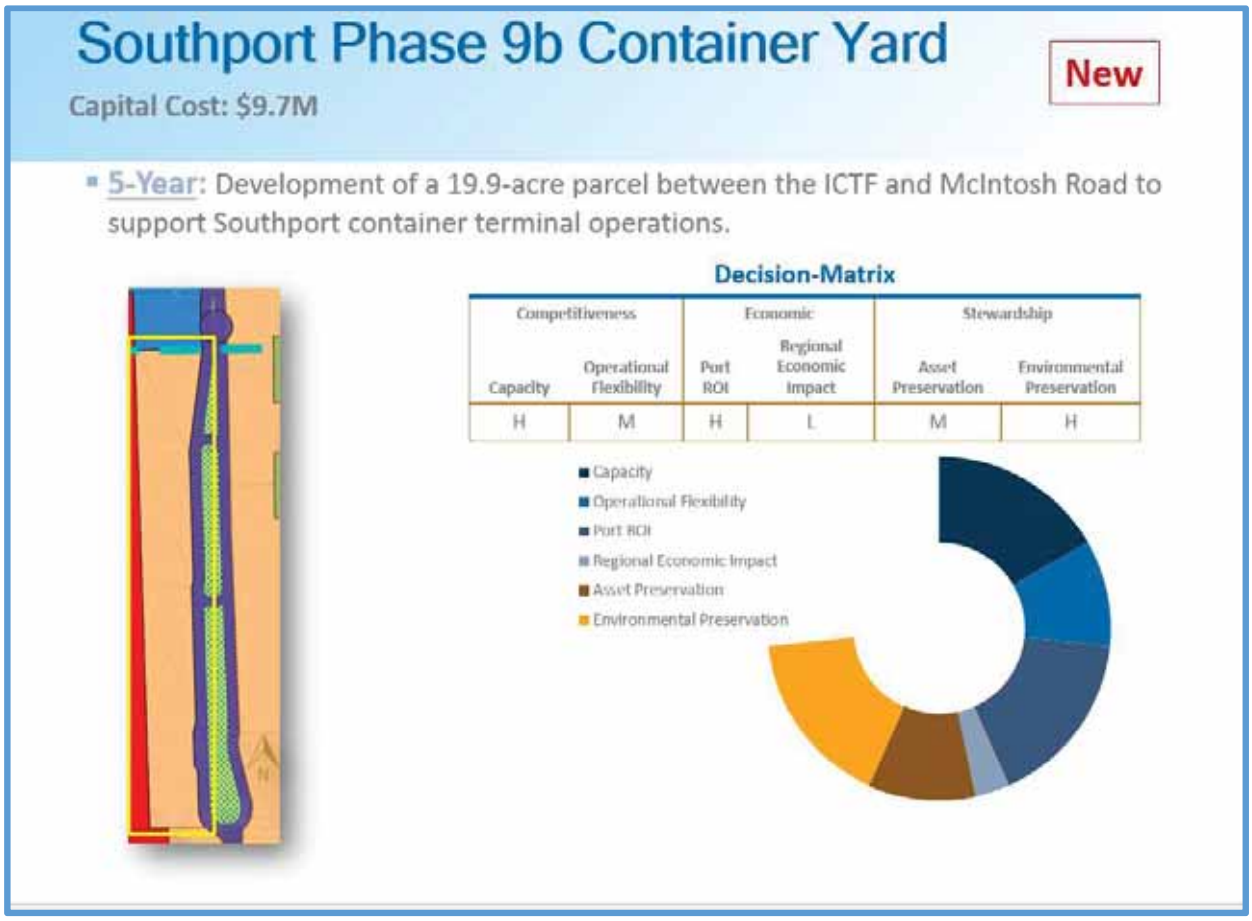


Southport Phase 9a Container Yard (10). Due to the Southport turning notch extension project, the Southport Phase 9a Container Yard (approximately 16 acres) is to be developed on the current Foreign-Trade Zone (FTZ) site east of McIntosh Road. For this project to proceed, the FTZ (see discussion below) will be relocated to the west of McIntosh Road, leaving the 16 acres for container yard development. The project, shown in Figure 5.3-12, on the next page, calls for the demolition of two warehouse buildings and development of infrastructure consistent with the Southport Container Yard Densification Improvements project.

Figure 5.3-12
SOUTHPORT 9a CONTAINER YARD

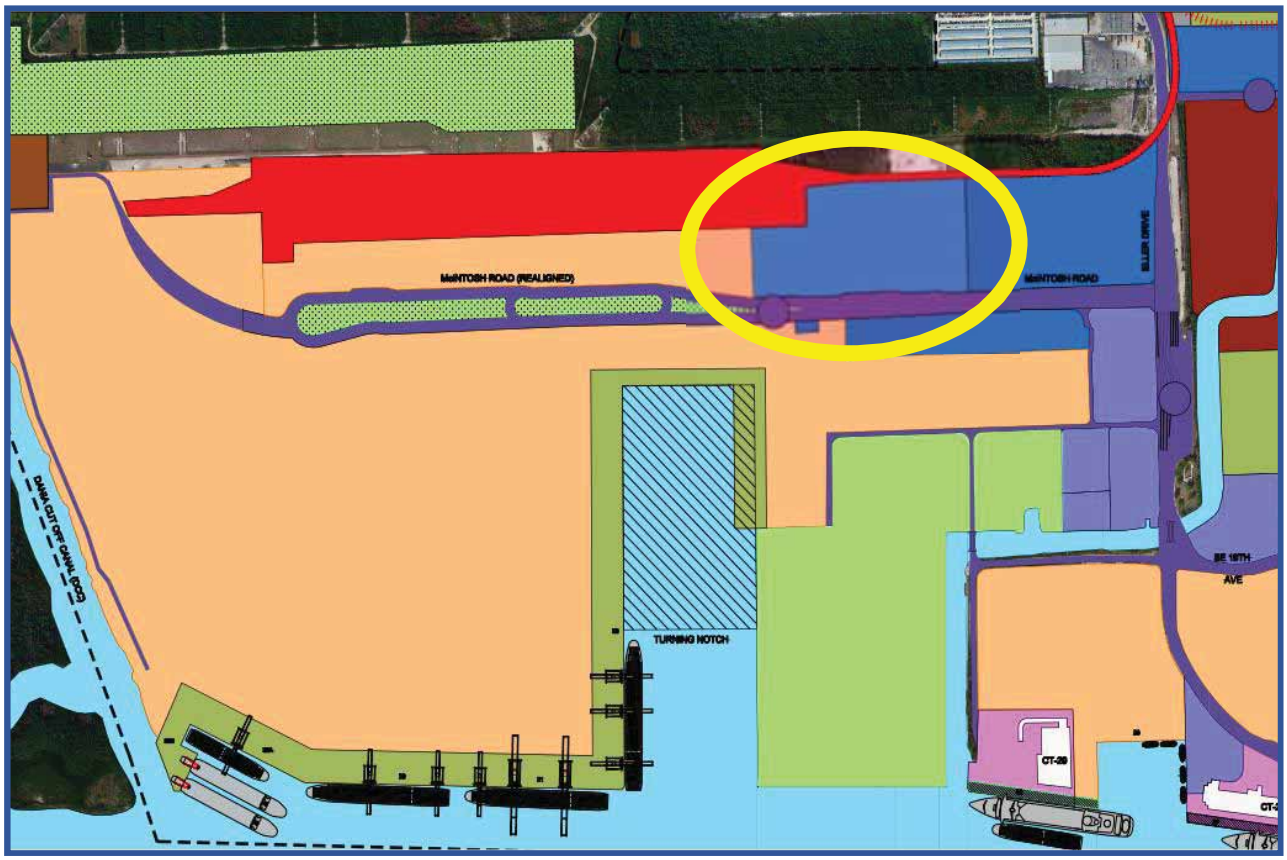
Southport Phase 9b Container Yard (11). An approximately 19.9-acre parcel located west of McIntosh Road, which is acreage previously earmarked for crushed rock or aggregate storage, will now provide Southport container yard support services. This project evolved through ICTF negotiations, as the aggregate storage location was perceived to have an impact on ICTF operations. The project includes clearing, paving, lighting, and security measures, as shown in Figure 5.3-13. The new location of the aggregate storage is shown in Section 5.5.

Figure 5.3-13
SOUTHPORT 9b CONTAINER YARD



Foreign-Trade Zone Relocation (12). FTZ 25 will be relocated to the west of McIntosh Road to a Port-owned parcel (approximately 17 acres), as shown in Figure 5.3-14. The Customs and Border Protection operations will continue to operate out of Building B and E of the existing FTZ site, allowing the new site to be solely used for private businesses with FTZ operations.

Figure 5.3-14
FOREIGN-TRADE ZONE RELOCATION



New Crane Rails (Berths 30, 31, and 32) (13). In support of the programmed purchase of the five new super post-Panamax cranes, a new set of crane rails is required along the length of Berths 30, 31, and 32 due to the larger crane gauge (expected to be between 120 to 125 feet).

5.3.4 Portwide Improvements

USACE Deepening and Widening Program (14). As discussed in Element 1, in June 2013, the USACE released its long-awaited *Draft Feasibility Report and Environmental Impact Statement* concerning the proposed deepening and widening of the Port's harbor and channels. The feasibility study was initiated in 1996 with Broward County's Port Everglades Department - the local, non-federal, sponsor for the federal civil works harbor deepening and widening project to be implemented by the USACE.

Finding that the Port's existing federal channel project depth of 42 feet does not provide an adequate, safe depth for large tankers and container ships visiting the harbor; that the next

generation of container ships and oil tankers requires significantly more channel depth to operate efficiently; and that a wider and deeper outer entrance channel will greatly improve the safety of navigation, the USACE identified an economically and environmentally sound Tentatively Selected Plan (TSP) to deepen the Port's channel from 42 feet to 48 feet and widen the channel entrance (see Figure 5.3-15). (When constructed, the project will include an additional two feet of over depth, one foot of which is required and one foot of which is allowable, for a total of 50 feet.)

Figure 5.3-15
USACE DEEPENING AND WIDENING PROGRAM:
TENTATIVELY SELECTED PLAN
Source*: USACE Draft Feasibility Study, 2013*

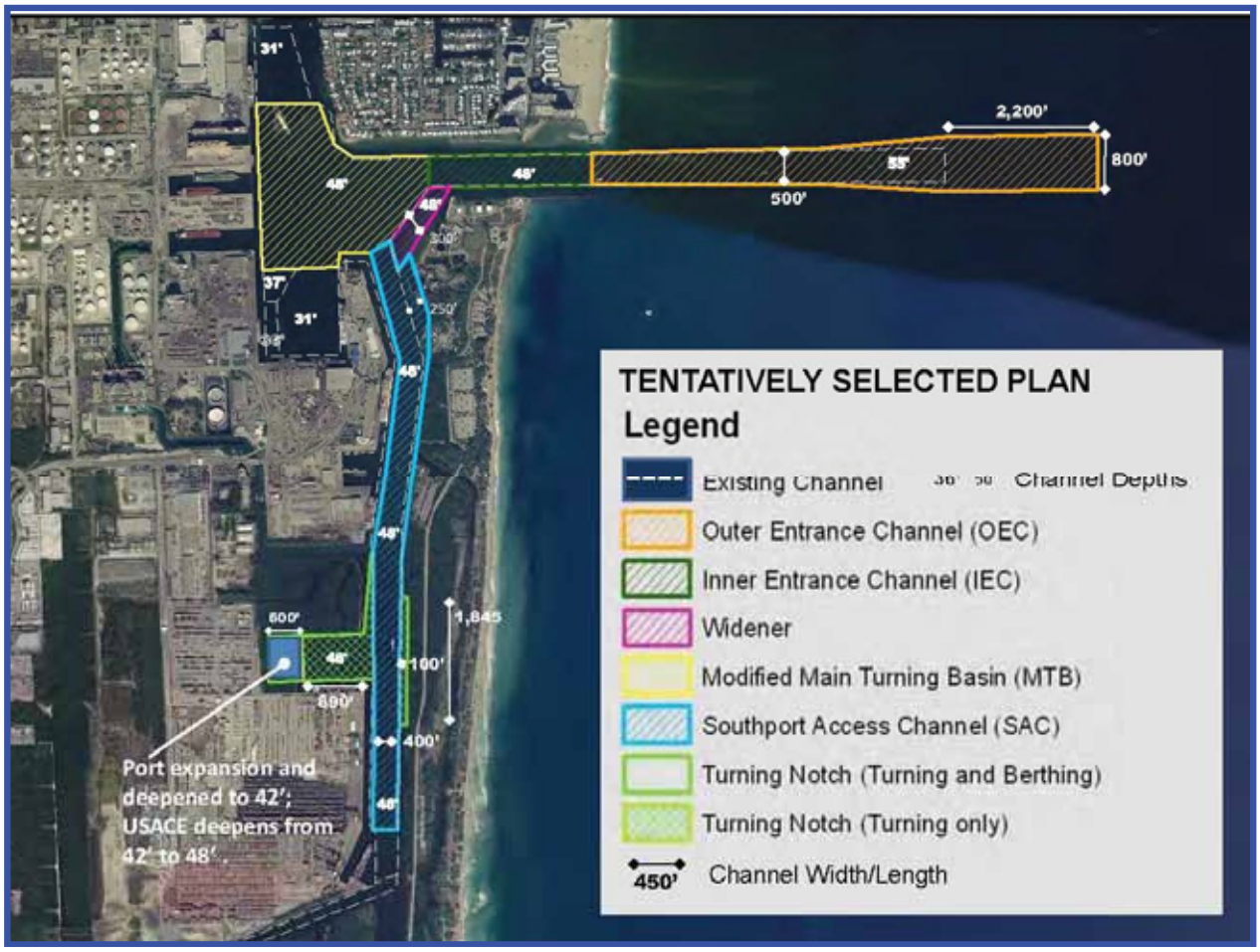
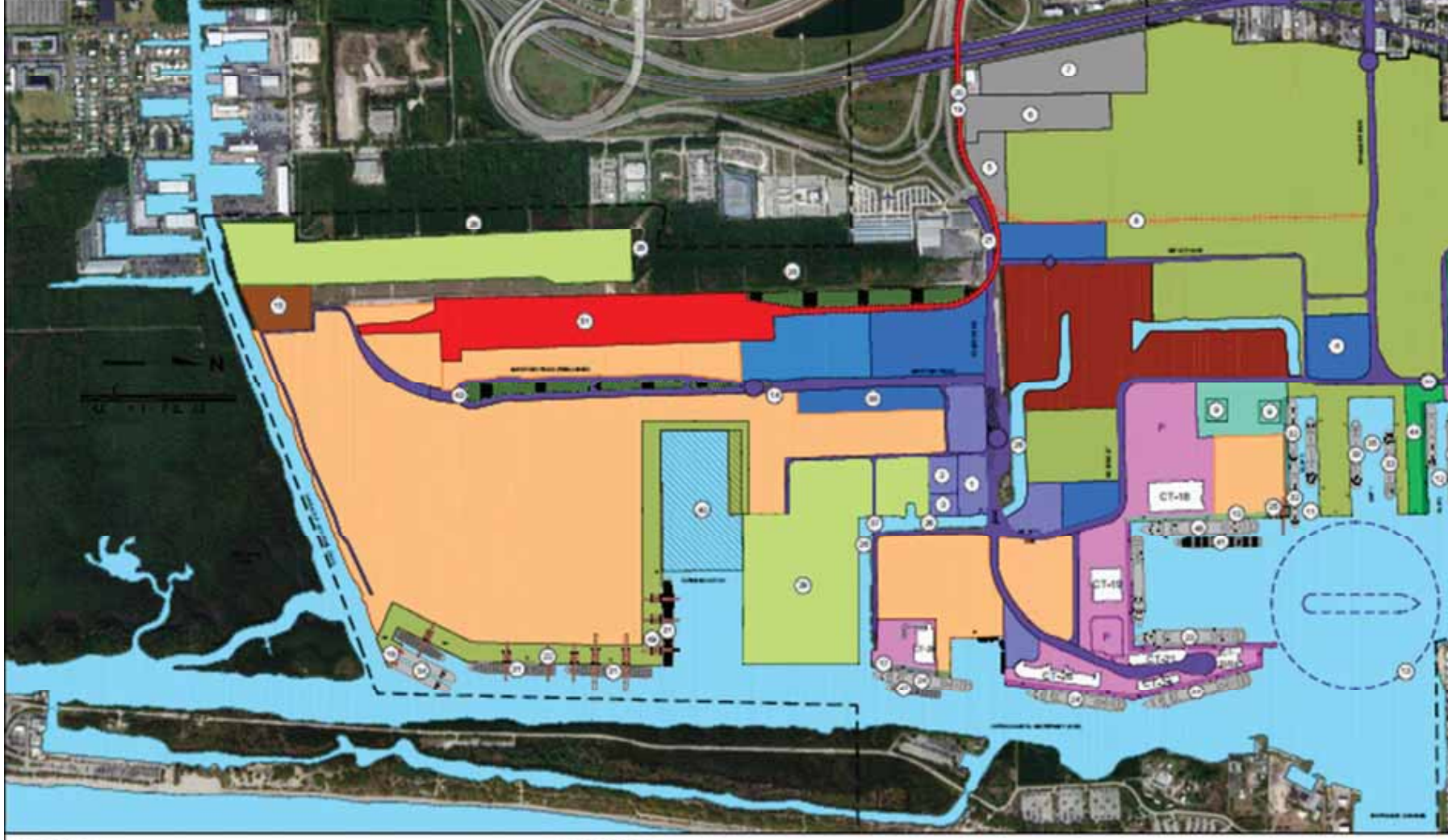


Figure 5.3-16 shows the final 5-Year Master Plan and Figure 5.3-17 shows the bulkhead projects planned in the 5-year time frame.



LEGEND

CONVENTION CENTER	38.6 ACRES	PROTECTED ENVIRONMENTAL AREA	130.66 ACRES
CRUISE AREA	138.28 ACRES	STORM WATER RETENTION AREA	15.18 ACRES
LIQUID BULK / PETROLEUM	314.64 ACRES	CRUISE WHARF/BERTH	47,997 LF
COMMERCIAL	39.67 ACRES	SHARED CONTAINER/CRUISE BERTH	40,472 LF
BREAK BULK	16.12 ACRES	PUBLIC CONTAINER WHARF/BERTH	40,822 LF
CONTAINER AREA	340.66 ACRES	CRUISE TERMINAL/BUILDING	
FLORIDA POWER AND LIGHT	56.85 ACRES	PARKING	
CEMENT/DRY BULK	12.25 ACRES	CULVERT / BRIDGE	
WAREHOUSE AREA	21.67 ACRES	PORT SECURITY GATE	
OFFICE AREA	23.83 ACRES	DEAD END	
FTZ	18.36 ACRES	AGGREGATE CONVEYOR	
US CUSTOMS & BORDER PROTECTION	8.67 ACRES	PRIMARY ACCESS ROAD	
SPOIL AREA	6.77 ACRES	RAIL LINE	
RAIL YARD	10.23 ACRES	PORT JURISDICTION BOUNDARY	

KEYNOTES

1. EXISTING PORT ADMIN OFFICE
2. FLORIDA DEPT. OF AGRICULTURE
3. FLORIDA FISH AND WILDLIFE COMMISSION FACILITY
4. EXISTING OFFICES AND WAREHOUSES
5. PRIVATE DEVELOPER
6. CLIFF BERRY PROPERTY
7. CHASE PROPERTY POTENTIAL FOR DEVELOPMENT
8. EXISTING MIDPORT RAIL SPUR ALIGNMENT
9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 50' GAGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (344' X 1,225') PHASE I (600' X 1,225')
12. EXPAND SLIP 2 (620' X 488') PHASE 1 (390' X 1,150') PHASE II (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. FUTURE DRY STORAGE MARINA/BOAT SITE
15. EXISTING RORO PIER
16. EXISTING WHARF FOR BANANA CARGO AND CRUISE
17. NOT USED
18. MARLINS TRACK
19. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF PORT (9,000' INTERMODAL CONTAINER TRAIN & 7,200' PASSENGER TRAIN)
20. ELLER DRIVE
21. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
22. MEGA CRUISE VESSEL (1,157' LOA X 157' BEAM)
23. CRUISE VESSEL (952' LOA X 116' BEAM)
24. MOBILE HARBOR CRANE
25. FPL DISCHARGE CANAL (RESTRICTED AREA-MANATEE PROTECTION ZONE)
26. CONVENTION CENTER AREA
27. EXISTING FPL POWER LINE EASEMENT
28. FUTURE STATE OWNED CONSERVATION AREA
29. NOT USED
30. CONTAINER VESSEL (900' LOA X 106' BEAM, 4800 TEUs
31. CEMENT 4-HOLD VESSEL (660' LOA X 90' BEAM)
32. PANAMAX TANKER PETROLEUM VESSEL (700' LOA X 106' BEAM)
33. CONTAINER RORO VESSEL (660' LOA X 90' BEAM)
34. EXISTING SLIP 1 (344' X 1,225') PHASE I (425' X 1,225') PHASE II 475' X 1,225')
35. O&P OPERATIONS IN EXISTING BUILDINGS
36. BRIDGE
37. NOT USED
38. RELOCATED GATE
39. EXPANDED TURNING NOTCH (600' X 2,400')
40. SUB-PANAMAX CONTAINER VESSEL (550' LOA X 90' BEAM)

Portions of plans shown are on property not owned or leased by Port Everglades. Schemes are for discussion purposes only and are not intended as notice of intent to acquire that property. This plan is intended merely as a planning device and is in no way intended to limit the rights of property owners in said area. All areas are approximate and only shown for planning purposes.

AECOM

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGL
5-YEAR MASTE
YEARS 2015-

- BULKHEADS

LEGEND

CONVENTION CENTER	38.6 ACRES	PROTECTED ENVIRONMENTAL AREA	61.52 ACRES
CRUISE AREA	108.26 ACRES	STORM WATER RETENTION AREA	54.09 ACRES
LIQUID BULK / PETROLEUM	314.94 ACRES	CRUISE WHARF/BERTH	±7,867 LF
COMMERCIAL	39.67 ACRES	SHARED CONTAINER/CRUISE BERTH	±2,472 LF
BREAK BULK	18.12 ACRES	PUBLIC CONTAINER WHARF/BERTH	±3,622 LF
CONTAINER AREA	340.96 ACRES	CRUISE TERMINAL/BUILDING	
FLORIDA POWER AND LIGHT	59.85 ACRES	PARKING	
CEMENT/DRY BULK	12.25 ACRES	CULVERT / BRIDGE	
WAREHOUSE AREA	21.67 ACRES	PORT SECURITY GATE	
OFFICE AREA	23.83 ACRES	DEAD END	
FTZ	18.38 ACRES	AGGREGATE CONVEYOR	
US CUSTOMS & BORDER PROTECTION	8.67 ACRES	PRIMARY ACCESS ROAD	
SPOIL AREA	6.77 ACRES	RAIL LINE	
RAIL YARD	42.23 ACRES	PORT JURISDICTION BOUNDARY	

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9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 50' GAGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (294' X 1,225') PHASE II (803' X 1,225')
12. EXPAND SLIP 2 (920' X 900') PHASE 1 (290' X 1,150') PHASE II (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. RADIATION PORTAL MONITORS
15. FUTURE DRY STORAGE MARINA/SPOIL SITE
16. EXISTING RORO PIER
17. EXISTING WHARF FOR BANANA CARGO AND CRUISE
18. NOT USED
19. MAIN LINE TRACK
20. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF-PORT (9,000' INTERMODAL CONTAINER TRAIN & 7,200' AGGREGATE TRAIN)
21. ELLER DRIVE
22. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
23. MEGA CRUISE VESSEL (1,150' LOA X 150' BEAM)
24. CRUISE VESSEL (950' LOA X 116' BEAM)
25. MOBILE HARBOR CRANE
26. FPL DISCHARGE CANAL (RESTRICTED AREA-MANATEE PROTECTION ZONE)
27. CONVENTION CENTER AREA
28. EXISTING FPL POWER LINE EASEMENT
29. FUTURE STATE OWNED CONSERVATION AREA
30. NOT USED
31. CONTAINER VESSEL (900' LOA X 106' BEAM, 4800 TEUs
32. CEMENT 4-HOLD VESSEL (660' LOA X 90' BEAM)
33. PANAMAX TANKER PETROLEUM VESSEL (700' LOA X 106' BEAM)
34. CONTAINER RORO VESSEL (660' LOA X 96' BEAM)
35. EXISTING SLIP 1 (294' X 1,200') PHASE I (425' X 1,200') PHASE II 475' X 1,200')
36. CBP OPERATIONS IN EXISTING BUILDINGS
37. BRIDGE
38. NOT USED
39. RELOCATED GATE
40. EXPANDED TURNING NOTCH (800' X 2,400')
41. SUB-PANAMAX CONTAINER VESSEL (660' LOA X 90' BEAM)

Revision	By	Approved	Date

Portions of plans shown are on property not owned or leased by Port Everglades. Schemes are for discussion purposes only and are not intended as notice of intent to acquire that property. This plan is intended merely as a planning device and is in no way intended to limit the rights of property owners in said area. All areas are approximate and only shown for planning purposes.

AECOM

800 S. Douglas Road North Tower, Suite 350 Coral Gables, FL 33134 305-592-4900

Drawn By: MTF
Approved By:
Date: 05/29/14
Meeting:
--

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGLA
5-YEAR MASTER
YEARS 2015-20

5.3.5 5-Year Master Plan Cost Estimates

Reasonable order-of-magnitude cost estimates are provided in Table 5.3-1 for each project discussed above in the 5-Year Master Plan. For projects that were also identified in the 2009 Plan, cost estimates have been updated to reflect 2014 conditions. Cost estimate details are provided in Appendix H.

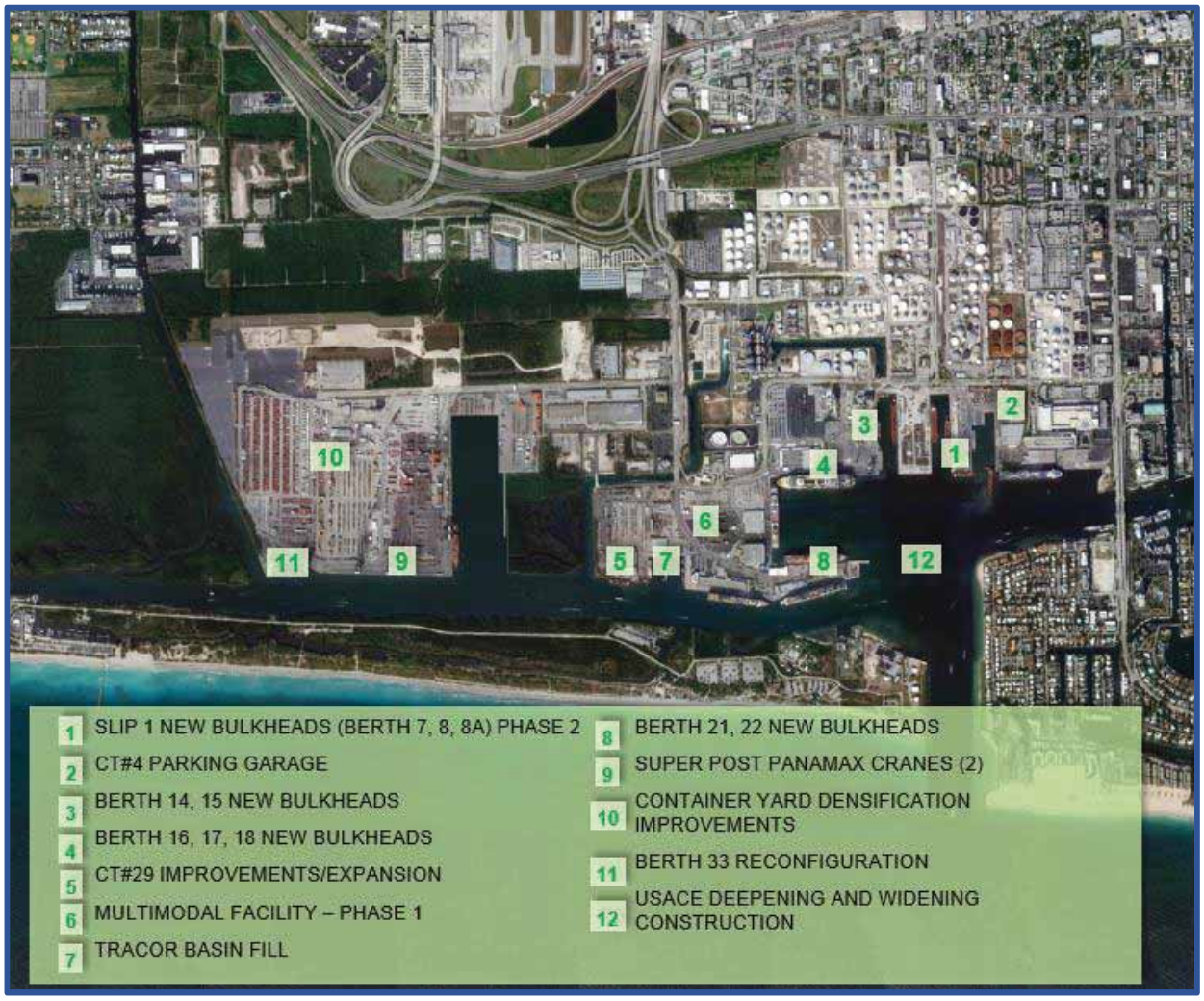
Table 5.3-1
5-YEAR PROJECT COST ESTIMATES
(In millions of 2014$)

5-Year Master Plan: 2015-2019		
Port Area	**Project**	**Cost**
Northport	Berths 1,2,and 3 New Bulkheads	$24.90
	Slip 1 New Bulkheads and Reconfiguration- Phase 1 (Berths 9 and 10)	$83.90
	Neo-Bulk Storage Yard	$7.70
	Slip 2 Westward Lengthening	$19.50
Midport	CT 25 Improvements/Expansion	$26.25
Southport	Westlake Mitigation (Southport Turning Notch Extension)	$6.10
	Super Post-Panamax Cranes (2)	$30.00
	Southport Turning Notch Extension	$147.50
	Southport McIntosh Road Gate Lane Addition	$1.56
	Southport Phase 9a Container Yard	$8.80
	Southport Phase 9b Container Yard	$9.70
	Foreign-Trade Zone Relocation	$54.00
	New Crane Rails (Berths 30,31, and 32)	$45.00
Portwide	USACE Deepening and Widening Design	$5.30
TOTAL		**$470.21**

5.4 The 10-Year Vision Plan (2020-2023)

Figure 5.4-1 shows the locations of the projects proposed for inclusion in the 10-Year Vision Plan, both those that were previously included in the 2009 Plan and those that are new to this 2014 Plan or are modified from the 2009 Plan. These projects are described and illustrated below.

Figure 5.4-1
10-YEAR VISION PLAN PROJECT LOCATION MAP

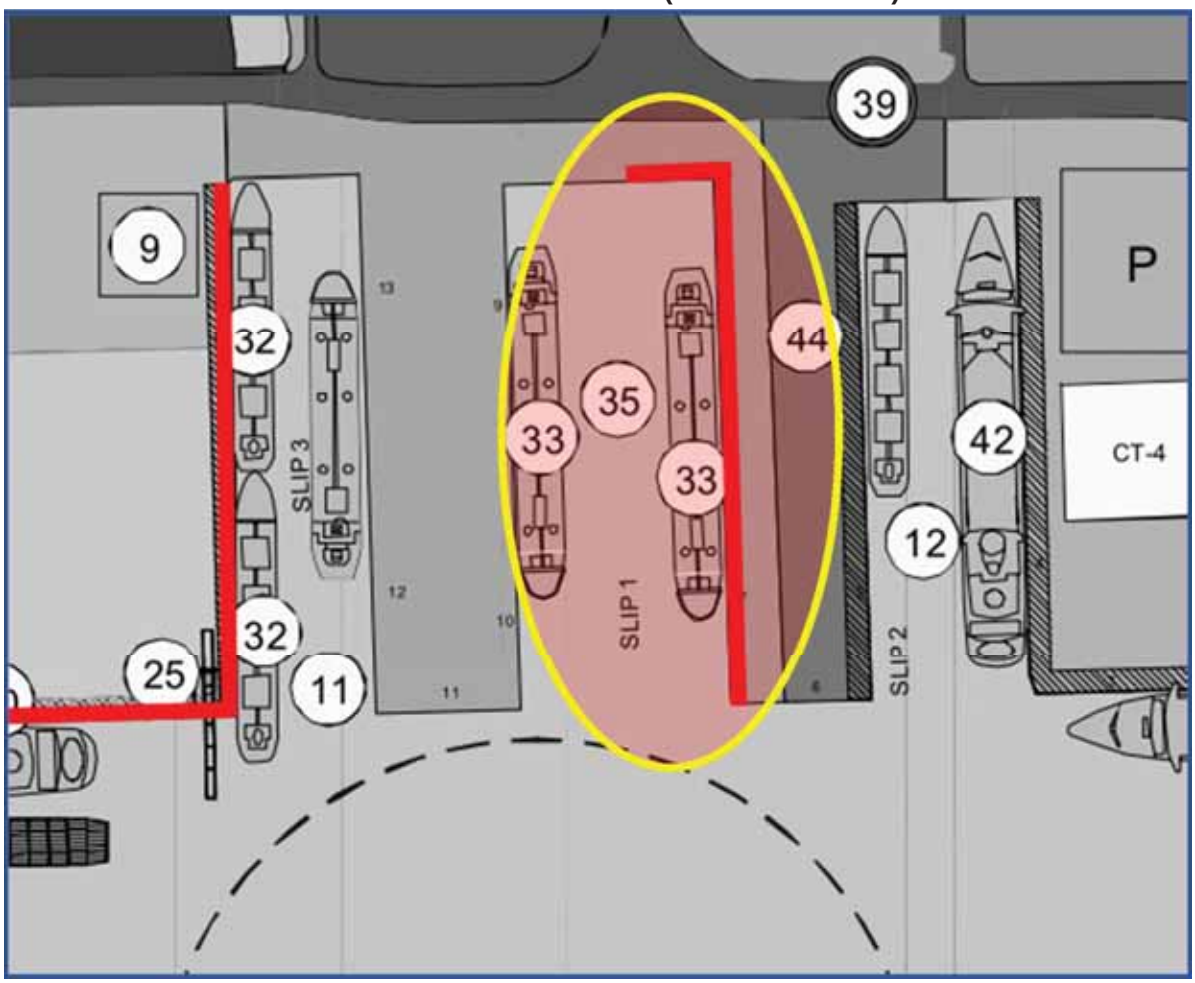


5.4.1 Northport

Slip 1 New Bulkheads (Berths 7 and 8) (1). This project, which is Phase 2 of the Petroleum Slip Expansion, addresses the new bulkheads at Berths 7 and 8 in Slip 1. This project includes the rebuilding of the existing bulkheads in their current alignment. As discussed above, keeping Berths 7 and 8 in their current position will alleviate any impacts to the range lights for the pilots. These new bulkheads (Berths 7 and 8) are 1,200 LF in length, no change from the current

dimension. This project includes dredging in the remaining half of Slip 1, paralleling Berths 7 and 8, consistent with the proposed USACE channel deepening and widening. Figure 5.4-2 illustrates the location of these improvements.

Figure 5.4-2
SLIP 1 NEW BULKHEADS PHASE 2 (BERTHS 7 AND 8)

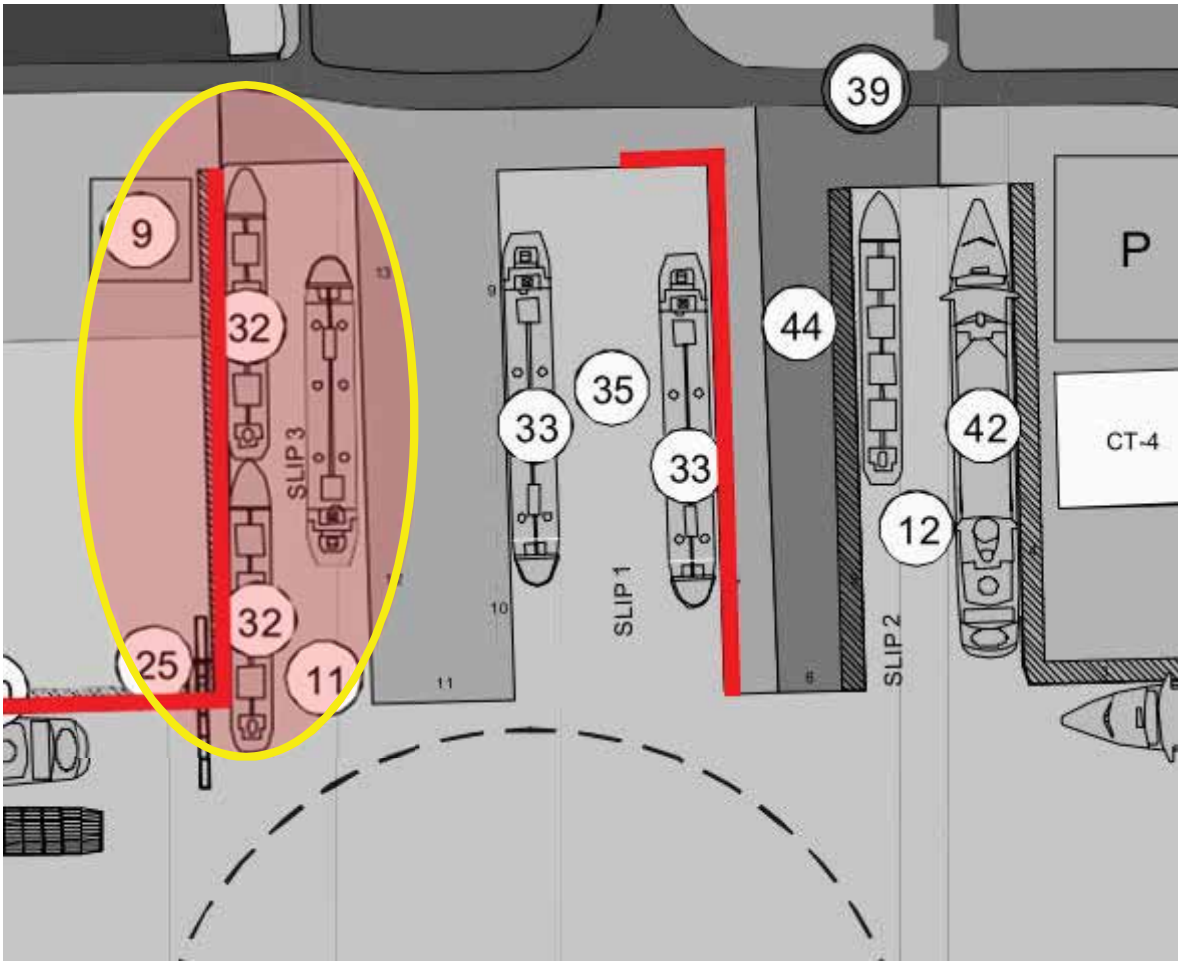


Cruise Terminal 4 Parking Garage (2). A new 1,680-space structured parking facility will be constructed west of Cruise Terminal 4 and over a ground transportation area to serve future parking needs for both Cruise Terminal 4 and Cruise Terminal 2. The circle in Figure 5.4-3 shows the location of the proposed new garage.

Figure 5.4-3
CRUISE TERMINAL 4 PARKING GARAGE

Berth 14 and 15 New Bulkheads (3). As discussed in Section 5.2, new bulkheads will be constructed for Berths 14 and 15 in the 10-Year Vision Plan. The circle in Figure 5.4-4 shows the locations of these new bulkheads.

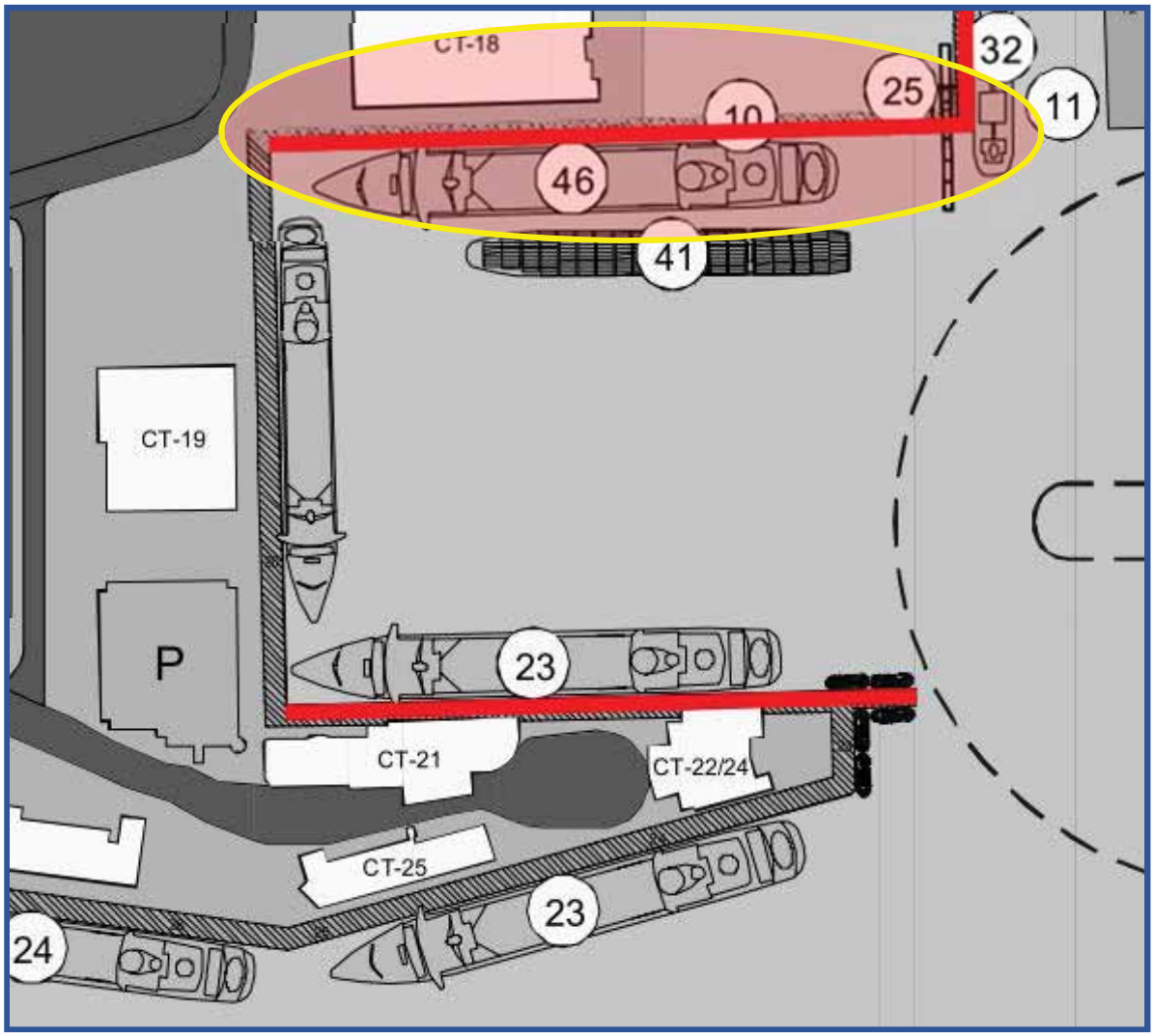
Figure 5.4-4
BERTHS 14 AND 15 NEW BULKHEADS



5.4.2 Midport

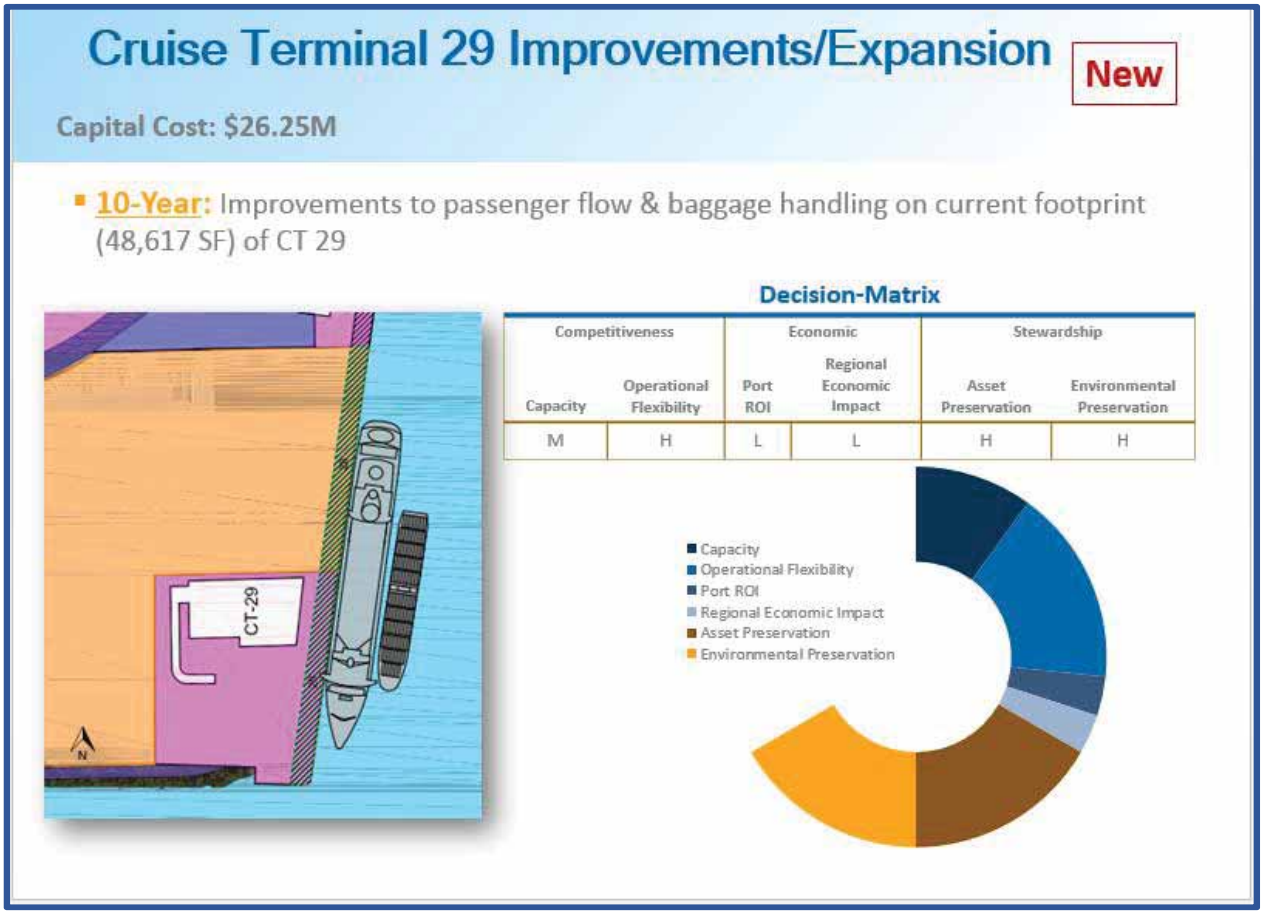
Berths 16, 17, and 18 New Bulkheads (4). New bulkheads will be constructed for Berths 16, 17, and 18. The circle in Figure 5.4-5 shows the project location.

Figure 5.4-5
BERTHS 16, 17, AND 18 NEW BULKHEADS



Cruise Terminal 29 Improvements and Expansion (Design/Construction) (5). Improvements to the Port's Intracoastal Waterway Southport Access Channel as part of the USACE deepening and widening program will provide greater operational flexibility for the Port to handle cruise ships at Berth 29. The current footprint of Cruise Terminal 29 is 48,617 SF. Additionally, filling of the Tracor Basin (see discussion below), will provide a longer berth and allow the facility to service ground operations more efficiently. For these reasons and the Port's commitment to continue modernizing its cruise facilities, the Port will undertake a detailed planning and design study of Cruise Terminal 29 to select the best alternative for expanding and upgrading it. Figure 5.4-6 shows the location of the Cruise Terminal 29 project. Although this project has a low return on investment to the Port, its operational advantages make it a sound choice for implementation.

Figure 5.4-6
CRUISE TERMINAL 29 IMPROVEMENTS/EXPANSION

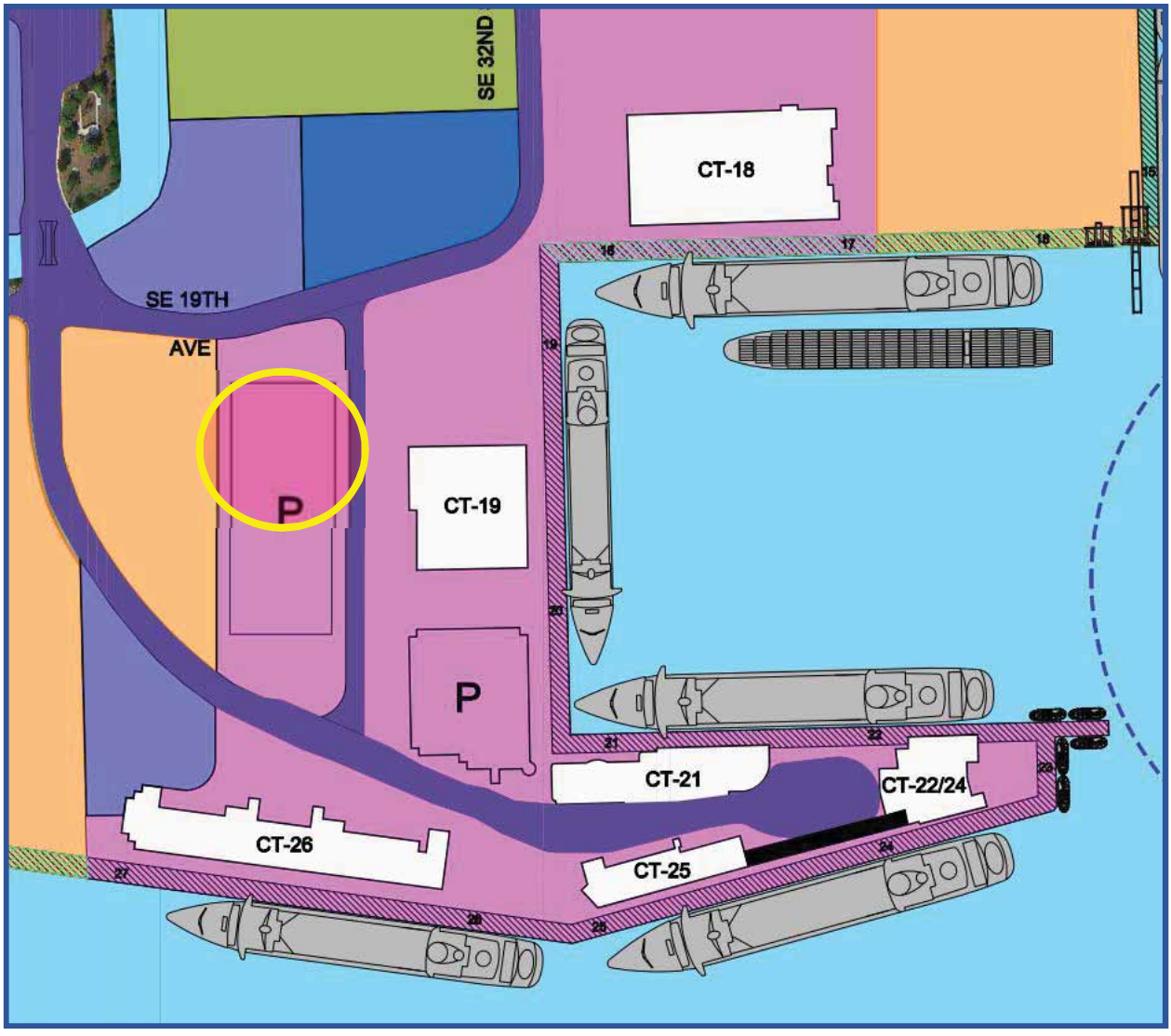


Multimodal Facility - Phase 1 (6). This passenger multimodal center will integrate an at-grade ground transportation area with a structured parking facility above to serve the Midport cruise terminals. When fully completed, the multimodal facility will provide 4,000 additional parking spaces at Midport and will have an elevated transport concourse with moving walkways to

connect the Midport cruise terminals. The multimodal center will provide a central location for the loading/unloading of buses, shuttles, and taxis and will relieve congestion at peak times in front of the cruise terminals.

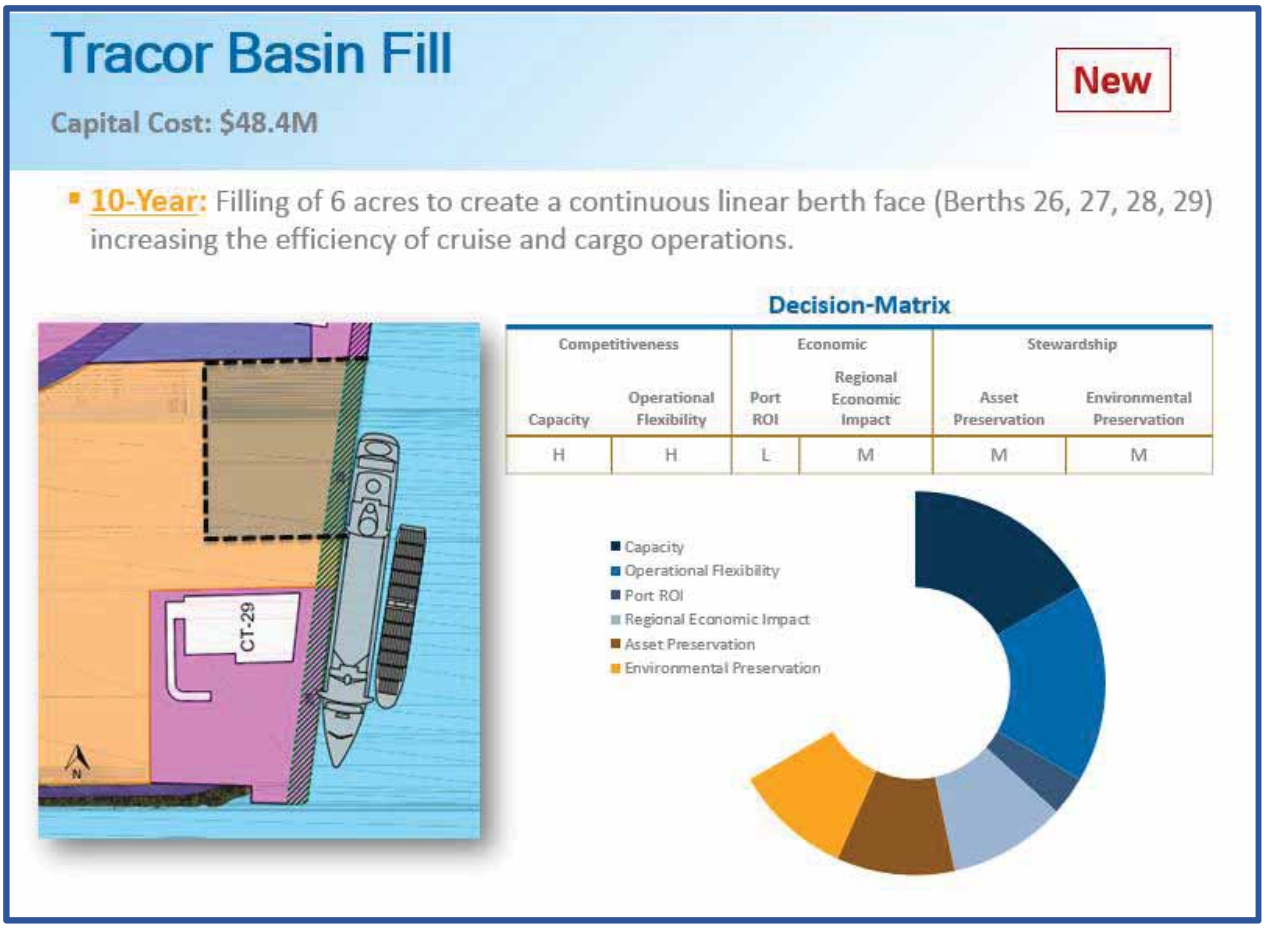
In the 10-Year Vision Plan, only the first phase of the multimodal facility will be built, which will include a structured parking facility with approximately 2,000 parking spaces. Phase 1 will not provide the elevated transport concourse and moving walkways to connect the Midport cruise terminals. Figure 5.4-7 shows the location and size of the multimodal facility in Phase 1.

Figure 5.4-7
MULTIMODAL FACILITY AT MIDPORT



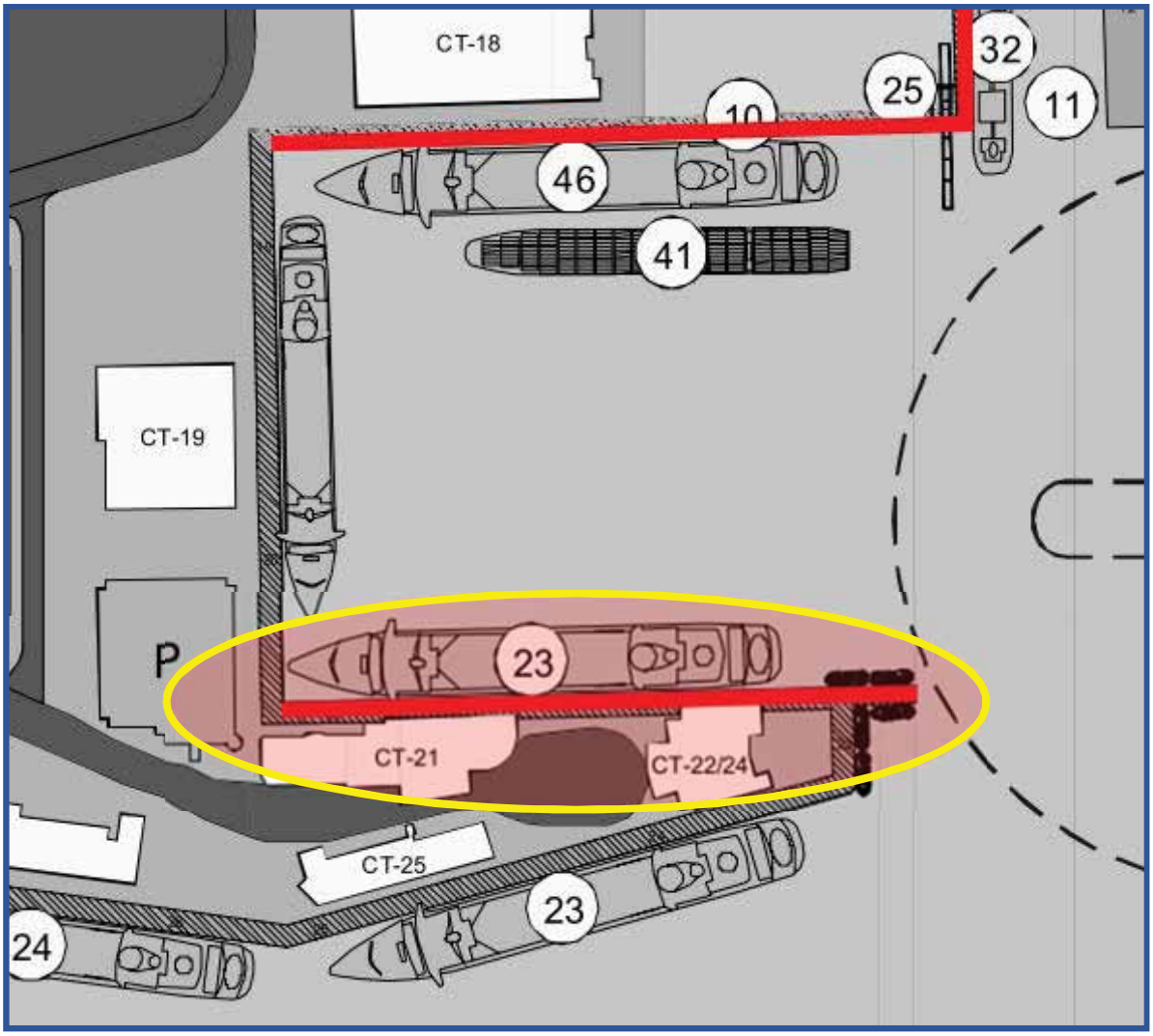
Tracor Basin Fill (7). This project includes the total fill of the Tracor Basin (approximately six acres), lengthening Berth 29 to the north and creating a continuous berth length of 2,800 LF from Berth 27 to Berth 29. This project will allow larger cruise vessels to call at Cruise Terminal 29, will provide more efficient provisioning and loading operations, and will connect the operations at Cruise Terminal 29 with the Midport cruise operations at Berths 24-27. Container operations will also benefit with an additional 6 acres of storage, creating better connectivity to the Southport yards and berths. Figure 5.4-8 shows the location of this project. Although this project has a low return on investment to the Port, its operational advantages make it a sound choice for implementation.

Figure 5.4-8
TRACOR BASIN FILL



Berths 21 and 22 New Bulkheads (8). New bulkheads will be constructed for Berths 21 and 22. The circle in Figure 5.4-9 shows the location of these bulkheads.

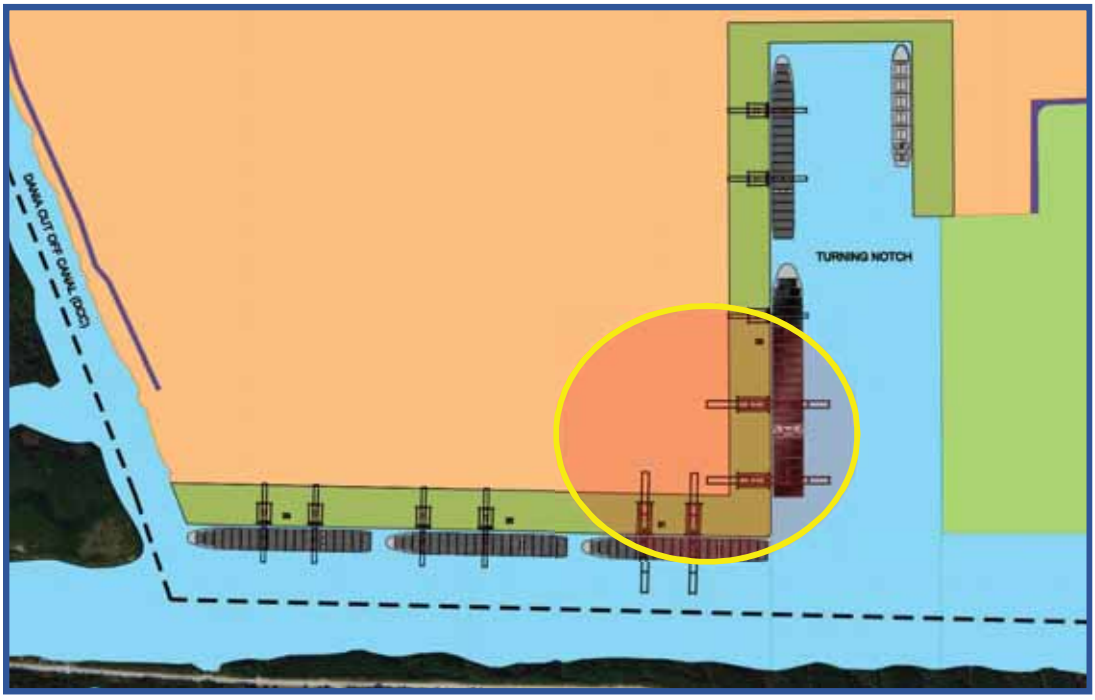
Figure 5.4-9
BERTHS 21 AND 22 NEW BULKHEADS



5.4.3 Southport

Two Super Post-Panamax Cranes (9). Two additional gantry cranes will be added to Southport to serve larger vessels. The gauge is expected to be between 120 and 125 feet, This addition will provide a total of 11 gantry cranes at Southport - four super post-Panamax cranes plus seven existing low-profile cranes. Crane details are provided in Section 5.3.3 above. Figure 5.4-10 shows the location of these two additional cranes, along with the two cranes from the 5-Year Plan.

Figure 5.4-10
LOCATION OF SOUTHPORT CRANES

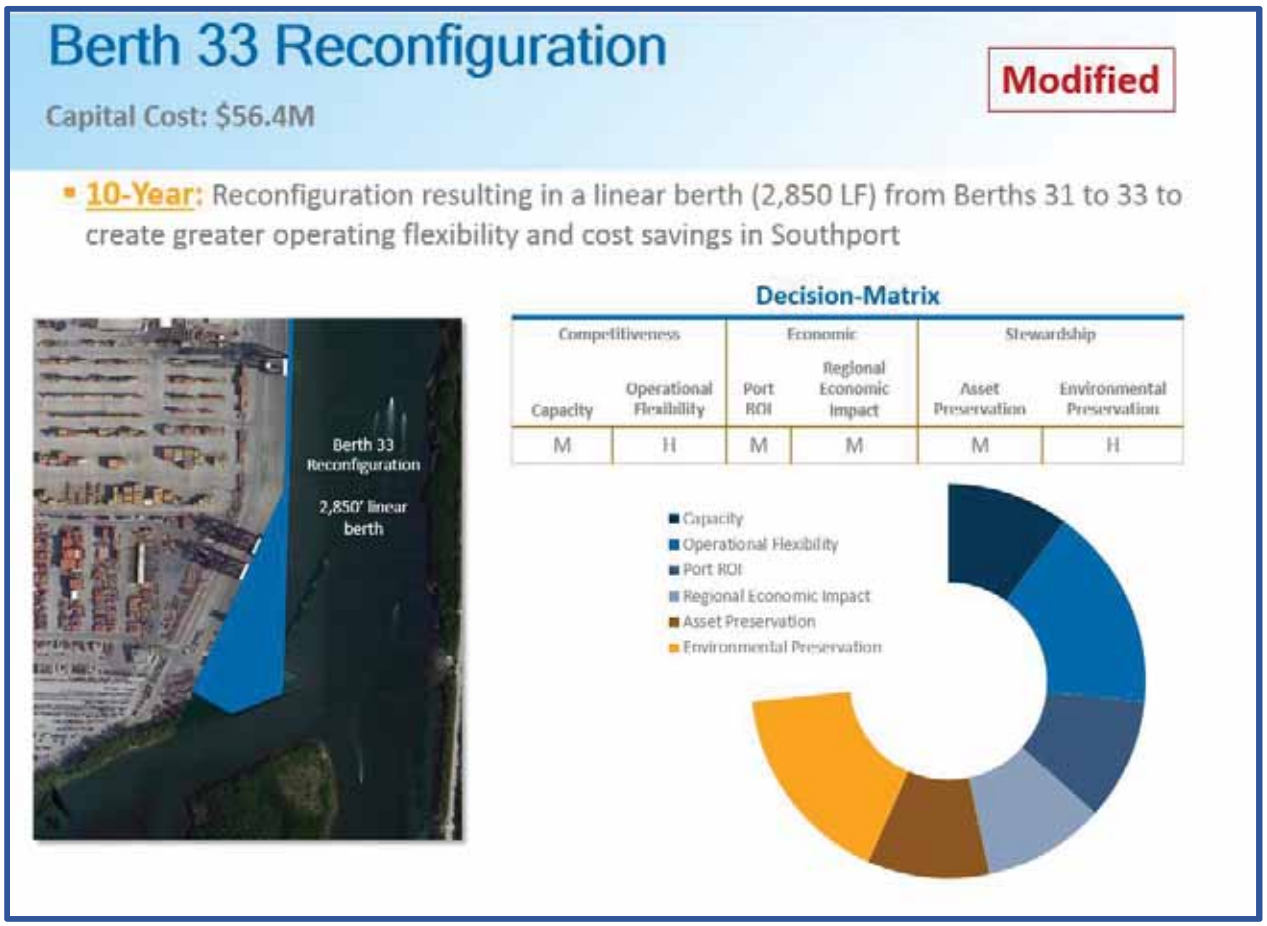


Container Yard Densification Improvements (10). After the turning notch is extended, the increase in Southport cargo throughput will require storage densification in the container yards. The existing top-pick-based container-handling operations provide low storage density and take up more space for equipment maneuvering within the yard. This project installs the necessary site infrastructure to accommodate future rubber-tired gantry (RTG) cranes to increase container storage densification in the Southport terminal yards. It will include trenches for RTG runways, racks for refrigerated containers, K-rail, new runway striping, and terminal signage. The cost of the new equipment is not part of this project.

Berth 33 Reconfiguration (11). Berths 33 B and C will be demolished and Berth 33A will be realigned and filled, creating approximately 2.3 acres of new container yard space. The reconfiguration will result in a continuous linear berth of 2,850 LF for Berths 31, 32, and 33. This reconfiguration will create greater operating flexibility and cost savings by removing the need to articulate the tracks for the new super post-Panamax gantry cranes. This project includes

demolition of marine structures, new berth construction, placement of fill, and container yard pavement. Figure 5.4-11 shows the conceptual design of this project.

Figure 5.4-11
BERTH 33 RECONFIGURATION



USACE Deepening and Widening Program (12). The construction of the USACE deepening and widening program described in Section 5.3.4 is anticipated to begin in the 10-year time frame.

Figure 5.4-12 shows the final 10-Year Vision Plan and Figure 5.4-13 shows the bulkhead projects planned for the 10-year time frame.

LEGEND

CONVENTION CENTER	38.8 ACRES	PROTECTED ENVIRONMENTAL AREA	130.66 ACRES
CRUISE AREA	108.26 ACRES	STORMWATER RETENTION AREA	15.16 ACRES
LIQUID BULK / PETROLEUM	214.94 ACRES	CRUISE WHARF/BERTH	±7,887 LF
COMMERCIAL	39.87 ACRES	SHARED CONTAINER/CRUISE BERTH	±3,134 LF
BREAK BULK	10.12 ACRES	PUBLIC CONTAINER WHARF/BERTH	±6,270 LF
CONTAINER AREA	340.96 ACRES	CRUISE TERMINAL/BUILDING	
FLORIDA POWER AND LIGHT	54.80 ACRES	PARKING	
CEMENT/DRY BULK	12.25 ACRES	CULVERT / BRIDGE	
WAREHOUSE AREA	21.67 ACRES	PORT SECURITY GATE	
OFFICE AREA	23.83 ACRES	DEAD END	
FTZ	18.36 ACRES	AGGREGATE CONVEYOR	
US CUSTOMS & BORDER PROTECTION	8.97 ACRES	PRIMARY ACCESS ROAD	
SPOIL AREA	8.77 ACRES	RAIL LINE	
RAIL YARD	42.23 ACRES	PORT JURISDICTION BOUNDARY	

KEYNOTES

1. EXISTING PORT ADMIN OFFICE
2. FLORIDA DEPT. OF AGRICULTURE
3. FLORIDA FISH AND WILDLIFE CONSERVATION FACILITY
4. EXISTING OFFICES AND WAREHOUSES
5. PRIVATE DEVELOPER
6. CLIFF BERRY PROPERTY
7. POTENTIAL FOR DEVELOPMENT
8. EXISTING MIDPORT RAIL SPUR ALIGNMENT
9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 50' GAUGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (394' X 1,225') PHASE II (507' X 1,225')
12. EXPAND SLIP 2 (507' X 907') PHASE 1 (397' X 1,150') PHASE II (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. MIGRATION PORTAL MONITORS
15. FUTURE DRY STORAGE MARINA/POL SITE
16. EXISTING RORO PIER
17. EXISTING WHARF FOR BANANA CARGO AND CRUISE
18. NOT USED
19. MARLINE TRACK
20. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF-PORT (9,000' INTERMODAL CONTAINER TRAIN & 7,200' AGGREGATE TRAIN)
21. ELLER DRIVE
22. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
23. MEGA CRUISE VESSEL (1,152' LOA X 150' BEAM)
24. CRUISE VESSEL (950' LOA X 116' BEAM)
25. MOBILE HARBOR CRANE
26. FPL DISCHARGE CANAL (RESTRICTED AREA-MANATEE PROTECTION ZONE)
27. CONVENTION CENTER AREA
28. FUTURE FPL POWER LINE EASEMENT
29. FUTURE STATE OWNED CONSERVATION AREA
30. NOT USED
31. SUPER POST-PANAMAX CONTAINER VESSEL (>1,200' LOA X 160' BEAM, 8,000 TEUs)
32. CEMENT 4-HOLD VESSEL (660' LOA X 90' BEAM)
33. PANAMAX TANKER PETROLEUM VESSEL (700' LOA X 106' BEAM)
34. CONTAINER RORO VESSEL (660' LOA X 90' BEAM)
35. EXISTING SLIP 1 (366' X 1,200') PHASE I (425' X 1,200') PHASE II (475' X 1,200')
36. CBP OPERATIONS IN EXISTING BUILDINGS
37. BRIDGE
38. NOT USED
39. RELOCATED GATE
40. EXPANDED TURNING NOTCH (600' X 2,400')
41. SUPERPANAMAX CONTAINER VESSEL (800' LOA X 95' BEAM)

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PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGLADE
10-YEAR VISION PL
YEARS 2020-2023

N - BULKHEADS

LEGEND

CONVENTION CENTER	38.6 ACRES	PROTECTED ENVIRONMENTAL AREA	61.52 ACRES
CRUISE AREA	108.26 ACRES	STORM WATER RETENTION AREA	54.09 ACRES
LIQUID BULK / PETROLEUM	314.94 ACRES	CRUISE WHARF/BERTH	±7,867 LF
COMMERCIAL	39.87 ACRES	SHARED CONTAINER/CRUISE BERTH	±3,134 LF
BREAK BULK	18.12 ACRES	PUBLIC CONTAINER WHARF/BERTH	±6,273 LF
CONTAINER AREA	340.96 ACRES	CT-# CRUISE TERMINAL/BUILDING	
FLORIDA POWER AND LIGHT	59.85 ACRES	P PARKING	
CEMENT/ORY BULK	12.25 ACRES	CULVERT / BRIDGE	
WAREHOUSE AREA	21.67 ACRES	PORT SECURITY GATE	
OFFICE AREA	23.83 ACRES	DEAD END	
FTZ	18.38 ACRES	AGGREGATE CONVEYOR	
US CUSTOMS & BORDER PROTECTION	8.67 ACRES	PRIMARY ACCESS ROAD	
SPOIL AREA	6.77 ACRES	RAIL LINE	
RAIL YARD	42.23 ACRES	PORT JURISDICTION BOUNDARY	

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9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 50' GAGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (294' X 1,225') PHASE III (603' X 1,225')
12. EXPAND SLIP 2 (920' X 900') PHASE 1 (290' X 1,150') PHASE III (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. RADIATION PORTAL MONITORS
15. FUTURE DRY STORAGE MARINA/SPOIL SITE
16. EXISTING RORO PIER
17. EXISTING WHARF FOR BANANA CARGO AND CRUISE
18. NOT USED
19. MAINLINE TRACK
20. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF-PORT (9,000' INTERMODAL CONTAINER TRAIN & 7,200' AGGREGATE TRAIN)
21. ELLER DRIVE
22. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
23. MEGA CRUISE VESSEL (1,150' LOA X 150' BEAM)
24. CRUISE VESSEL (950' LOA X 116' BEAM)
25. MOBILE HARBOR CRANE
26. FPL DISCHARGE CANAL (RESTRICTED AREA-MANATEE PROTECTION ZONE)
27. CONVENTION CENTER AREA
28. EXISTING FPL POWER LINE EASEMENT
29. FUTURE STATE OWNED CONSERVATION AREA
30. NOT USED
31. CONTAINER VESSEL (900' LOA X 106' BEAM, 4800 TEUs
32. CEMENT 4-HOLD VESSEL (660' LOA X 90' BEAM)
33. PANAMAX TANKER PETROLEUM VESSEL (700' LOA X 106' BEAM)
34. CONTAINER RORO VESSEL (660' LOA X 96' BEAM)
35. EXISTING SLIP 1 (296' X 1,200') PHASE I (425' X 1,200') PHASE II 475' X 1,200')
36. CBP OPERATIONS IN EXISTING BUILDINGS
37. BRIDGE
38. NOT USED
39. RELOCATED GATE
40. EXPANDED TURNING NOTCH (800' X 2,400')
41. SUB-PANAMAX CONTAINER VESSEL (660' LOA X 96' BEAM)

Revision	By	Approved	Date

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Drawn By: MTF
Approved By:
Date: 05/28/14
Meeting: –

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGLADE
10-YEAR VISION PL
YEARS 2020-202

5.4.4 10-Year Vision Plan Cost Estimates

Reasonable order-of-magnitude cost estimates are provided in Table 5.4-1 for each project discussed in the 10-Year Vision Plan. For projects that were also identified in the 2009 Plan cost estimates have been updated to reflect the 2014 conditions. For new projects in the 2014 Plan, new cost estimates were prepared. Cost estimate details are provided in Appendix H.

Table 5.4-1
10-YEAR PROJECT COST ESTIMATES
(In millions of 2014$)

10-Year Vision Plan: 2020-2023		
Port Area	**Project**	**Cost**
Northport	Slip 1 New Bulkheads- Phase 1 (Berths 7 and 8)	$29.50
	Cruise Terminal 4 Parking Garage	$36.00
	Berths 14 and 15 New Bulkheads	$27.40
Midport	Berth 16,17, and 18 New Bulkheads	$25.50
	Cruise Terminal 29 Improvements/Expansion	$26.25
	Multimodal Facility-Phase 1	$39.30
	Tracor Basin Fill	$48.40
	Berths 21 and 22 New Bulkheads	$20.50
Southport	Super Post Panamax Cranes (2)	$30.00
	Container Yard Densification Improvements	$33.70
	Berth 33 Reconfiguration	$56.40
Portwide	USACE Deepening and Widening Construction	$368.00
TOTAL		**740.95**

5.5 The 20-Year Vision Plan (2024-2033)

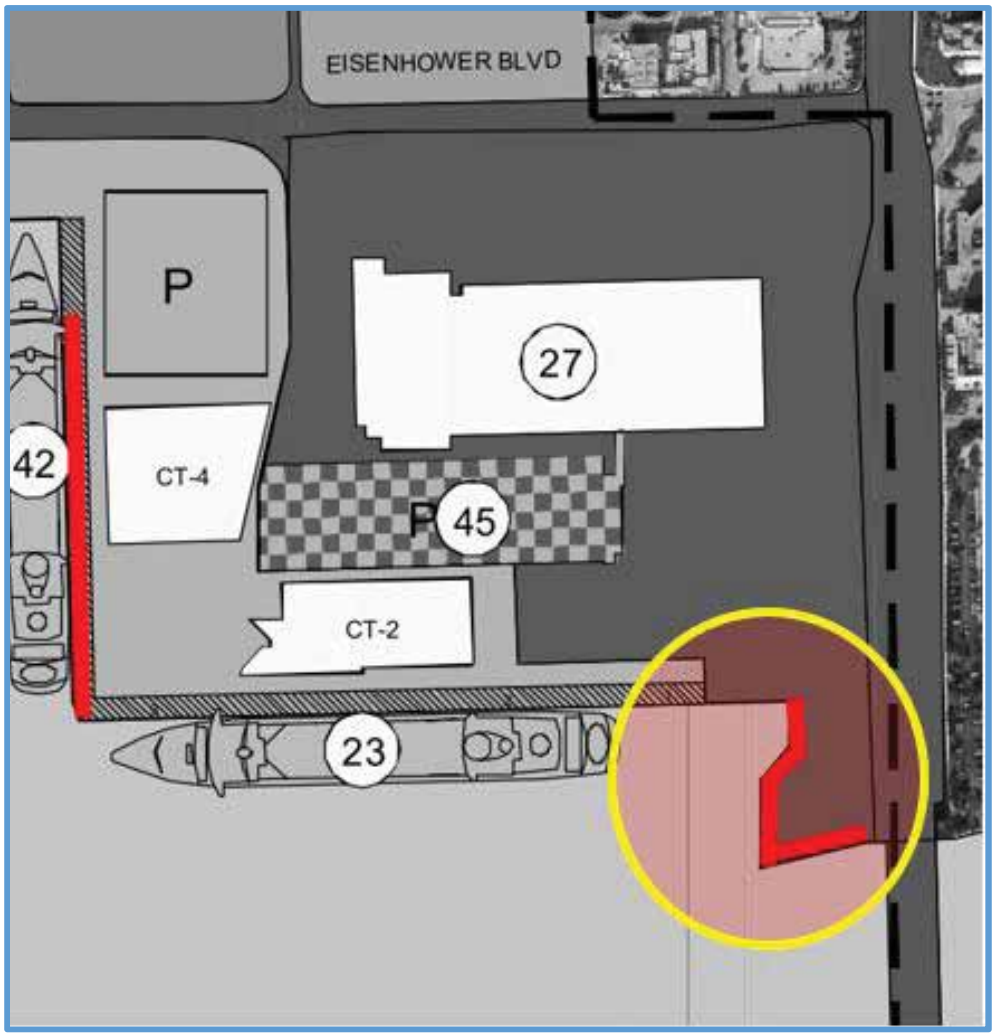
Figure 5.5-1 shows the locations of the projects proposed for inclusion in the 20-Year Vision Plan both those that were previously included in the 2009 Plan and those that are new to this 2014 Plan or are modified from the 2009 Plan. These projects are described and illustrated below.

Figure 5.5-1
20-YEAR VISION PLAN PROJECT LOCATION MAP

5.5.1 Northport

Berths 1A, 1B, 1C, and 1D New Bulkheads (1). New bulkheads will be constructed for Berths 1A, 1B, 1C, and 1D in the 20-Year Vision Plan: The circle in Figure 5.5-2 show the locations of these new bulkheads. While this area has been identified for the potential Convention Center expansion and hotel development, this project has been retained for planning purposes.

Figure 5.5-2
NEW BULKHEADS BERTHS 1A, 1B, 1C, AND 1D



Slip 2 New Bulkheads and Widening (Berths 4, 5, and 6) (2) New bulkheads will be constructed for existing Berths 4 and 5 in Slip 2 and for the connection between these two berths. The new bulkhead for Berth 5 will be positioned so that the overall width of Slip 2 can accommodate a 1,040-foot LOA cruise ship on the north side and a general cargo vessel on the south.

As shown in Figure 5.5-3, Slip 2 will be widened from approximately 286 LF to 475 LF. According to the recommended construction schedule for the new bulkheads, this widening will

take place when the existing Berths 4 and 5 require new bulkheading. The circle in Figure 5.5-3a shows the bulkhead locations

Figure 5.5-3
SLIP 2 WIDENING

Figure 5.5-3a
SLIP 2 BULKHEADS

Slip 3 New Bulkheads and Widening (Berths 11, 12, and 13) (3). This project, which is Phase 3 of the Petroleum Slip Expansion discussed in Section 5.3.1, addresses new bulkheads at Berths 11, 12, and 13 in Slip 3. The 2009 Plan called for a widening of Slip 3 to the north by 250 LF for the eastern half (Berth 12). In this 2014 Plan, Phase 3 has been modified from its 2009 description to maintain a wider pier for topside infrastructure. The new project description includes widening Slip 3 to the north by 175 LF, from 300 LF to 475 LF; this new bulkhead (Berths 12 and 13) is 1,230 LF in length, no change from the current dimension. This project includes dredging, consistent with the proposed USACE channel deepening and widening program, approximately half of the overall Slip 3 paralleling Berths 12 and 13, and the demolition of the topside petroleum piping and loading infrastructure. Environmental remediation is included in the total project cost. Figures 5.5-4 and 5.5-4a illustrate Slip 3 and the proposed bulkhead improvements.

Figure 5.5-4
PETROLEUM SLIP EXPANSION PHASE 3 SLIP 3 NEW BULKHEADS AND RECONFIGURATION

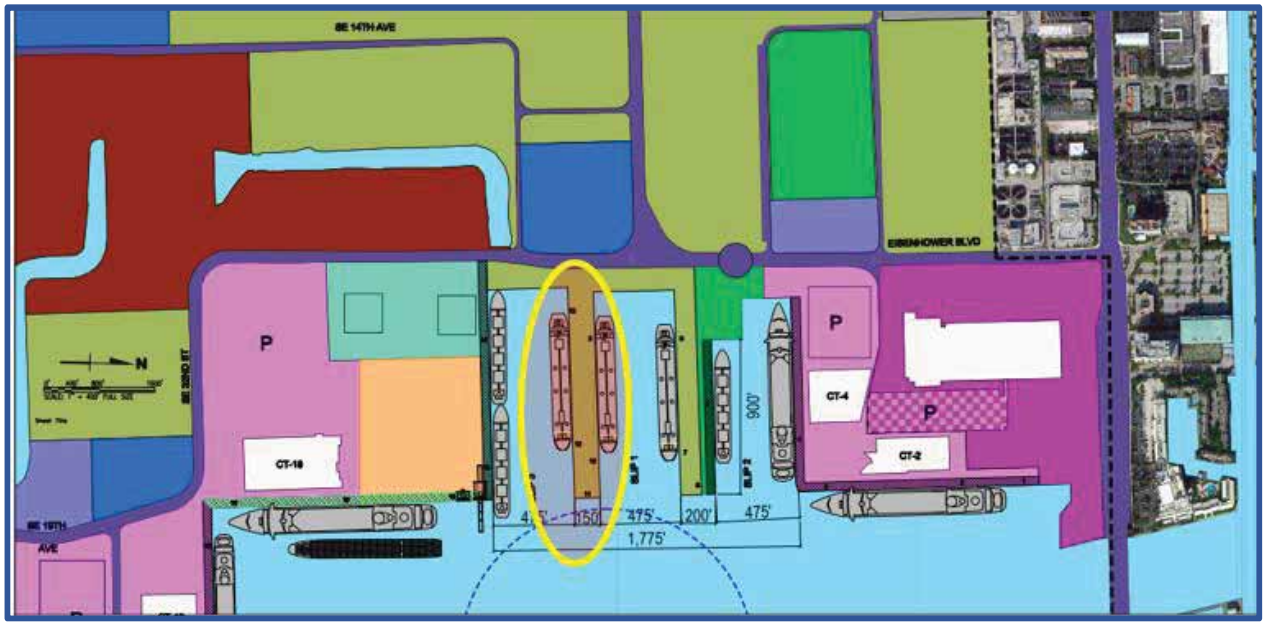
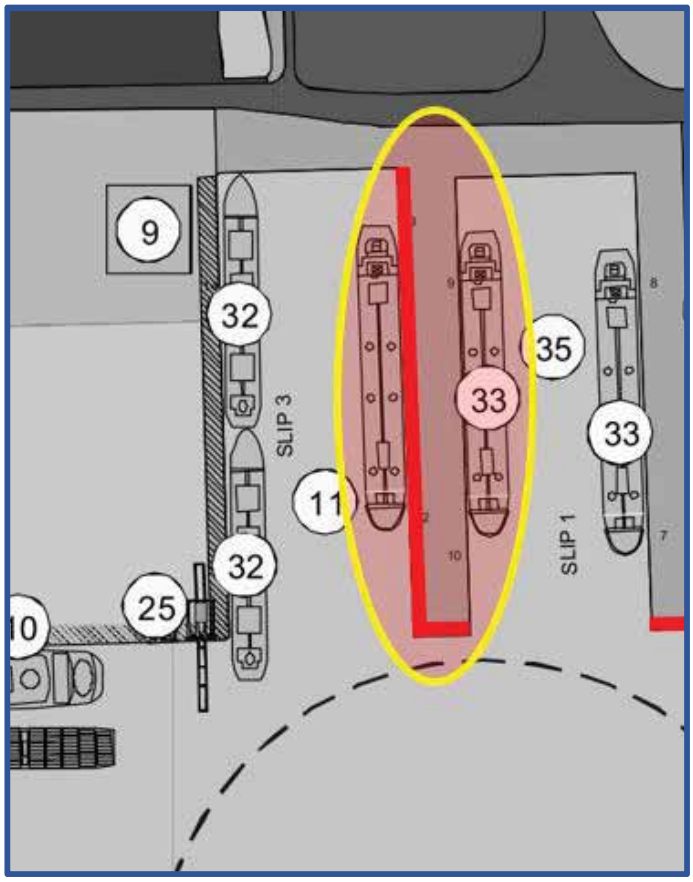


Figure 5.5-4a
PETROLEUM SLIP EXPANSION PHASE 3 SLIP 3 NEW BULKHEADS



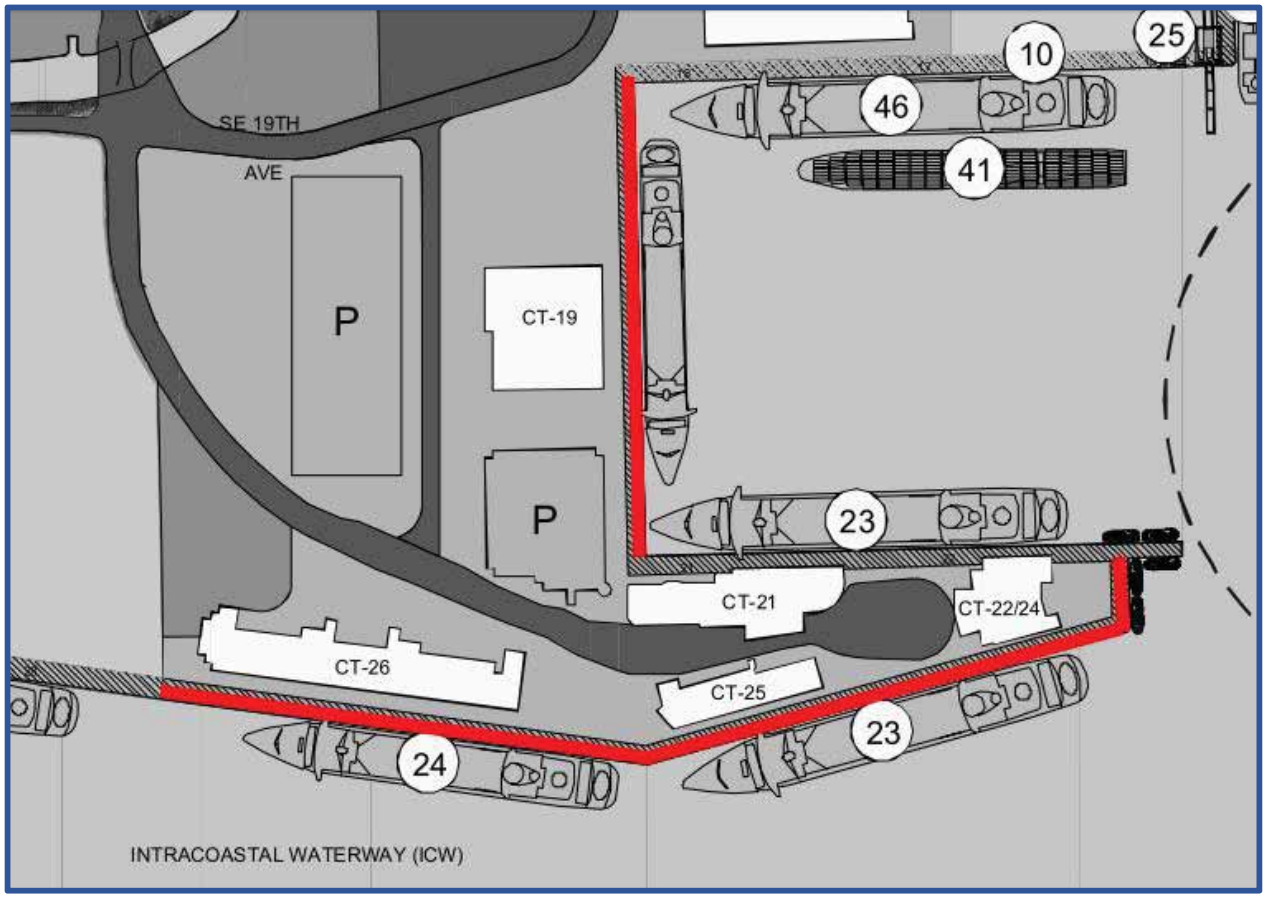
5.5.2 Midport

New Bulkheads (4, 6, 7, 8). New bulkheads will be constructed for the following berths in the 20-Year Vision Plan:

- Berths 19 and 20.
- Berths 23
- Berths 24 and 25
- Berths 26 and 27

The red lines in Figure 5.5-5 show the locations of these new bulkheads.

Figure 5.5-5
MIDPORT BULKHEAD PROJECTS FOR 20-YEAR VISION PLAN



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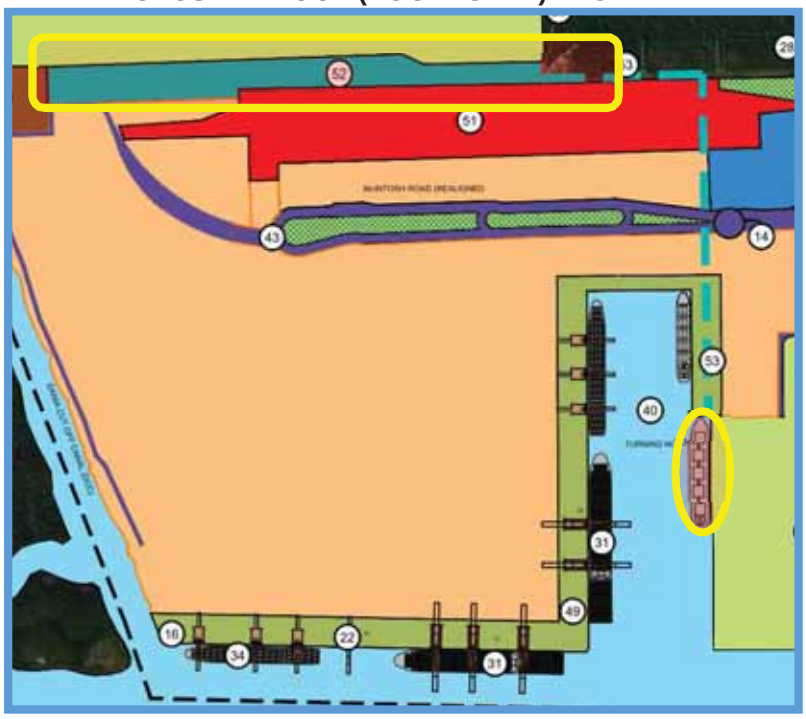
Multimodal Facility – Phase 2 (5). Phase 2 of the multimodal facility will extend the work completed in Phase 1 (see 10-Year Vision Plan discussion and Figure 5.4-7), and will include the addition of 2,000 more spaces and the implementation of the elevated pedestrian moving walkway connecting the 4,000-space parking structure with the Midport cruise terminals. This passenger multimodal center will integrate an at-grade ground transportation area, with a structured parking facility above to serve the Midport cruise terminals. It will provide a central location for the loading/unloading of buses, shuttles, and taxis and will relieve congestion at peak times in front of the cruise terminals.

5.5.3 Southport

Crushed Rock (Aggregate) Facility (9). This facility is envisioned to meet a portion of Florida's needs for crushed rock or aggregate with supplies from off-shore locations. The berth for aggregate vessels will be located on the north side of the turning notch. Material will be transferred via an underground conveyance, crossing McIntosh Road and continuing west of the ICTF tracks to the facility. This project was modified from the 2009 Plan by relocating the previously designated aggregate storage operations to the south to avoid impacts to the ICTF. The new aggregate storage parcel is approximately 20 acres and is located west of the southern half of the ICTF (see Figure 5.5-6).

Figure 5.5-6
CRUSHED ROCK (AGGREGATE) FACILITY



One Super Post-Panamax Crane (10). An additional 120- to 125-foot-gauge gantry crane will be added to Southport to serve larger vessels. This addition will provide a total of 12 gantry cranes at Southport (five super post-Panamax cranes plus seven existing low-profile cranes).

The five new cranes from the 5-Year Master Plan and the 10-Year and 20-Year Vision Plans are shown in Figure 5.5-7.

Figure 5.5-7
SUPER POST-PANAMAX CRANE LOCATIONS

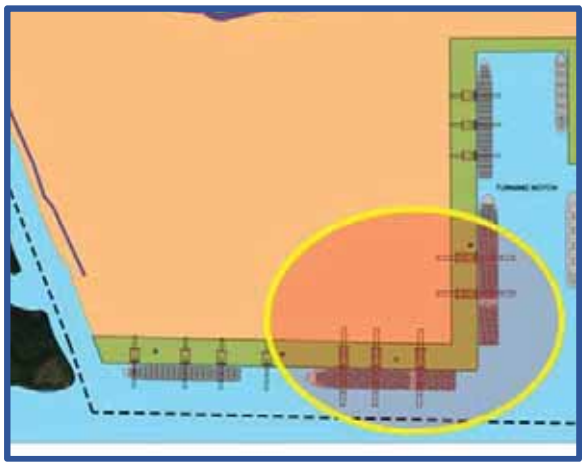


Figure 5.5-8 shows the final 20-Year Vision Plan and Figure 5.5-9 shows the bulkhead projects planned in the 20-year time frame.

LEGEND

CONVENTION CENTER	38.8 ACRES	PROTECTED ENVIRONMENTAL AREA	136.66 ACRES
CRUISE AREA	108.28 ACRES	STORM WATER RETENTION AREA	15.16 ACRES
LIQUID BULK / PETROLEUM	214.84 ACRES	CRUISE WHARF/BERTH	47,867 LF
COMMERCIAL	39.57 ACRES	SHARED CONTAINER/CRUISE BERTH	45,134 LF
BREAK BULK	10.12 ACRES	PUBLIC CONTAINER WHARF/BERTH	46,273 LF
CONTAINER AREA	340.66 ACRES	CRUISE TERMINAL/BUILDING	
FLORIDA POWER AND LIGHT	39.66 ACRES	PARKING	
CEMENTORY BULK	12.26 ACRES	CULVERT / BRIDGE	
WAREHOUSE AREA	21.67 ACRES	PORT SECURITY GATE	
OFFICE AREA	23.83 ACRES	DEAD END	
FTZ	16.38 ACRES	AGGREGATE CONVEYOR	
US CUSTOMS & BORDER PROTECTION	8.67 ACRES	PRIMARY ACCESS ROAD	
SPOIL AREA	6.77 ACRES	RAIL LINE	
RAIL YARD	42.23 ACRES	PORT JURISDICTION BOUNDARY	

KEYNOTES

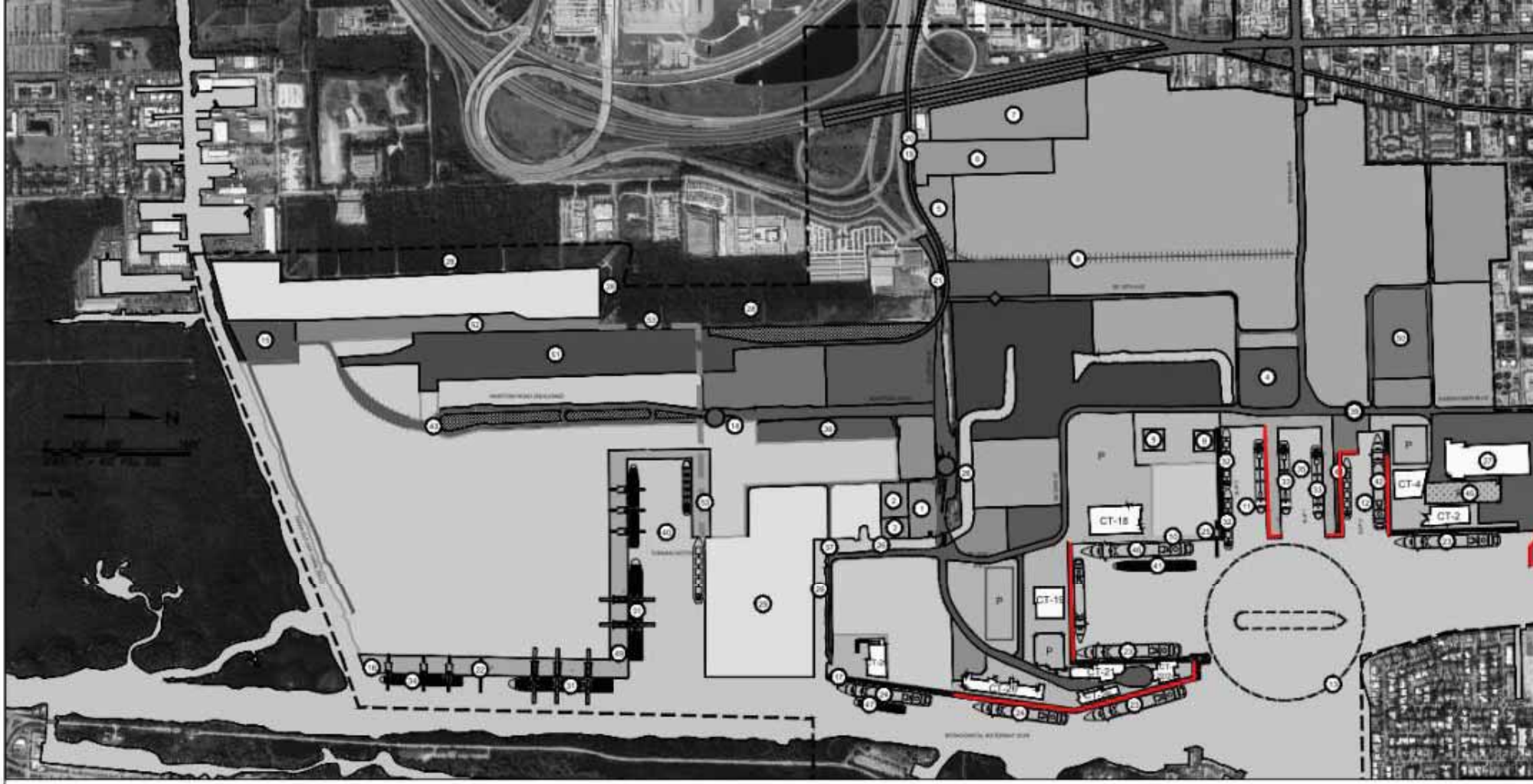
1. EXISTING PORT ADMIN OFFICE
2. FLORIDA DEPT. OF AGRICULTURE
3. FLORIDA FISH AND WILDLIFE COMMISSION FACILITY
4. EXISTING OFFICES AND WAREHOUSES
5. PRIVATE DEVELOPER
6. CLIFF BERRY PROPERTY
7. CHEEKY PROPERTY POTENTIAL FOR DEVELOPMENT
8. EXISTING MIDPORT RAIL SPUR ALIGNMENT
9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 52' GAGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (344' X 1,225') PHASE 1 (637 X 1,225')
12. EXPAND SLIP 2 (637 X 497') PHASE 1 (397 X 1,150') PHASE 1 (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. RADIATION PORTAL MONITORS
15. FUTURE DRY STORAGE MARINA/POOL SITE
16. EXISTING RORO PIER
17. EXISTING WHARF FOR BAHAMA CARGO AND CRUISE
18. NOT USED
19. MAINLINE TRACK
20. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF-PORT (9,200' INTERMODAL CONTAINER TRACK & 7,200' AUTOMOBILE TRACK)
21. ELLER DRIVE
22. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
23. MEGA CRUISE VESSEL (1,150' LOA X 150' BEAM)
24. CRUISE VESSEL (950' LOA X 110' BEAM)
25. MOBILE HARBOR CRANE
26. FPL DISCHARGE CANAL (RESTRICTED AREA MANATEE PROTECTION ZONE)
27. CONVENTION CENTER AREA
28. EXISTING FPL POWER LINE EASEMENT
29. FUTURE STATE OWNED CONSERVATION AREA
30. NOT USED
31. SUPER POST-PANAMAX CONTAINER VESSEL (14,000' LOA X 193' BEAM, 8,800 TEUs)
32. CEMENT 4-HOLD VESSEL (660' LOA X 90' BEAM)
33. PANAMAX TANKER PETROLEUM VESSEL (740' LOA X 106' BEAM)
34. CONTAINER RORO VESSEL (650' LOA X 90' BEAM)
35. EXISTING SLIP 1 (344' X 1,225') PHASE I (425' X 1,225') PHASE II (475' X 1,225')
36. CBP OPERATIONS IN EXISTING BUILDINGS
37. BRIDGE
38. NOT USED
39. RELOCATED GATE
40. EXPANDED TURNING NOTCH (637 X 2,400')
41. SUB-PANAMAX CONTAINER VESSEL (650' LOA X 90' BEAM)

Portions of plans shown are on property not owned or leased by Port Everglades. Schemes are for discussion purposes only and are not intended as notice of intent to acquire that property. This plan is intended merely as a planning device and is in no way intended to limit the rights of property owners in said area. All areas are approximate and only shown for planning purposes.

AECOM

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGLADE
20-YEAR VISION PL
YEARS 2024-203



LEGEND

	CONVENTION CENTER	58.6 ACRES		PROTECTED ENVIRONMENTAL AREA	108.98 ACRES
	CRUISE AREA	108.26 ACRES		STORM WATER RETENTION AREA	15.18 ACRES
	LIQUID BULK / PETROLEUM	314.94 ACRES		CRUISE WHARF/BERTH	±7,887 LF
	COMMERCIAL	39.87 ACRES		SHARED CONTAINER/CRUISE BERTH	±3,134 LF
	BREAK BULK	18.12 ACRES		PUBLIC CONTAINER WHARF/BERTH	±6,273 LF
	CONTAINER AREA	340.96 ACRES	CT-4	CRUISE TERMINAL/BUILDING	
	FLORIDA POWER AND LIGHT	59.85 ACRES	P	PARKING	
	CEMENT/DRY BULK	12.25 ACRES		CULVERT / BRIDGE	
	WAREHOUSE AREA	21.67 ACRES		PORT SECURITY GATE	
	OFFICE AREA	23.83 ACRES		DEAD END	
	FTZ	18.38 ACRES		AGGREGATE CONVEYOR	
	US CUSTOMS & BORDER PROTECTION	8.67 ACRES		PRIMARY ACCESS ROAD	
	SPOIL AREA	8.77 ACRES		RAIL LINE	
	RAIL YARD	42.23 ACRES		PORT JURISDICTION BOUNDARY	

KEYNOTES

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4. EXISTING OFFICES AND WAREHOUSES
5. PRIVATE DEVELOPER
6. CLIFF BERRY PROPERTY
7. DYNEFY PROPERTY POTENTIAL FOR DEVELOPMENT
8. EXISTING MIDPORT Rail SPUR ALIGNMENT
9. EXISTING CEMENT SILO CLUSTER
10. SHARED WHARF WITH ONE 50' GAGE CRANE AND ONE MOBILE HARBOR CRANE (CRUISE/CONTAINER)
11. EXPAND SLIP 3 (29#' X 1,225') PHASE II (803' X 1,225')
12. EXPAND SLIP 2 (920' X 900') PHASE 1 (28#' X 1,150') PHASE II (475' X 1,150')
13. 1,725' DIAMETER TURNING BASIN FOR 1,150' LOA VESSEL
14. RADIATION PORTAL MONITORS
15. FUTURE DRY STORAGE MARINA/SPOIL SITE
16. EXISTING RORO PIER
17. EXISTING WHARF FOR BANANA CARGO AND CRUISE
18. NOT USED
19. MAINLINE TRACK
20. PROPOSED ARRIVAL/DEPARTURE & STORAGE TRACKS LOCATED OFF-PORT (9,000' INTERMODAL CONTAINER TRAIN & 7,200' AGGREGATE TRAIN)
21. ELLER DRIVE
22. LOW PROFILE CRANE (TYPICAL AT SOUTHPORT
23. MEGA CRUISE VESSEL (1,150' LOA X 150' BEAM)
24. CRUISE VESSEL (950' LOA X 116' BEAM)
25. MOBILE HARBOR CRANE
26. FPL DISCHARGE CANAL (RESTRICTED AREA-MANATEE PROTECTION ZONE)
27. CONVENTION CENTER AREA
28. EXISTING FPL POWER LINE EASEMENT
29. FUTURE STATE OWNED CONSERVATION AREA
30. NOT USED
31. SUPER POST-PANAMAX CONTAINER VESSEL (>1,000' LOA X 160' BEAM, 8000 TEUs)
32. CEMENT 4-HOLD VESSEL (660' LOA X 95' BEAM)
33. PANAMAX TANKER PETROLEUM VESSEL (750' LOA X 109' BEAM)
34. CONTAINER RORO VESSEL (660' LOA X 96' BEAM)
35. EXISTING SLIP 1 (29#' X 1,250') PHASE I (425' X 1,200') PHASE II 475' X 1,200')
36. CBP OPERATIONS IN EXISTING BUILDINGS
37. BRIDGE
38. NOT USED
39. RELOCATED GATE
40. EXPANDED TURNING NOTCH (800' X 2,400')
41. SUB-PANAMAX CONTAINER VESSEL (660' LOA X 96' BEAM)
42. CRUISE VESSEL (1,040 LOA)
43. ONE WAY LOOP ROAD, WITH I INTO GATES
44. GENERAL CARGO/PETROLEU (CURRENTLY AS USED BY PO
45. PARKING FOR CRUISE AND P
46. OASIS CLASS CRUISE VESSE (1,225' LOA X 150' BEAM)
47. CONTAINER BANANA VESSEL
48. NOT USED
49. NEW LOW PROFILE POST PAN
50. NEO BULK STORAGE YARD
51. INTERMODAL RAIL YARD AND
52. ± 8 ACRE AGGREGATE STORA (200,000 MT CAPACITY)
53. AGGREGATE CONVEYOR (BELOW GRADE ± 5650 LF TOT
54. PETROLEUM BARGE (800' LOA
55. GENERALIZED CARGO VESSE

Revision	By	Approved	Date

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Drawn By: MTF
Approved By:
Date: 05/29/14
Meeting:

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

PORT EVERGLADES 20-YEAR VISION PLAN YEARS 2024-2033

Sheet Title: 20 YEA
Project Number: 60018185

5.5.4 20-Year Vision Plan Cost Estimates

Reasonable order-of-magnitude cost estimates are provided in Table 5.5-1 for each project included in the 20-Year Vision Plan. For projects that were also identified in the 2009 Plan, cost estimates have been updated to reflect 2014 conditions; for new projects in the 2009 Plan, new cost estimates were prepared. Details of the cost estimates are provided in Appendix H.

Table 5.5-1
20-YEAR VISION PLAN PROJECT COST ESTIMATE
(In millions 2014$)

20-Year Vision Plan: 2020-2023		
Port Area	**Project**	**Cost)**
Northport	Berths 1A, 1B, 1C, and 1D New Bulkheads	$9.90
	Slip 2 New Bulkheads and Widening (Berths 4, 5, 6)	$50.10
	Slip 3 New Bulkheads and Widening- Phase 3 (Berths 11, 12, 13)	$84.30
Midport	Berth 19, 20 New Bulkheads	$17.00
	Multimodal Facility-Phase 2	$112.40
	Berth 23 New Bulkhead	$3.70
	Berths 24 and 25 New Bulkheads	$12.40
	Berths 26 and 27 New Bulkheads	$20.70
Southport	Crushed Rock (Aggregate Facility) (Public-Private Partnership)	$61.80
	One Super Post Panamax Crane	$15.00
TOTAL		**$387.30**

5.6 Berth Use Summary

5-s 5.6-1 through 5.6-3, on the next pages, summarize anticipated berth use for the 5-Year Master Plan and the 10-Year and 20-Year Vision Plans, respectively, color-coded for each of the following business lines:

- Containerized cargo.
- Non-containerized cargo (Dry-bulk/Neo-bulk).
- Liquid bulk (Petroleum).
- Cruise.

Figure 5.6-1
5-YEAR MASTER PLAN SHOWING SHIP TYPES

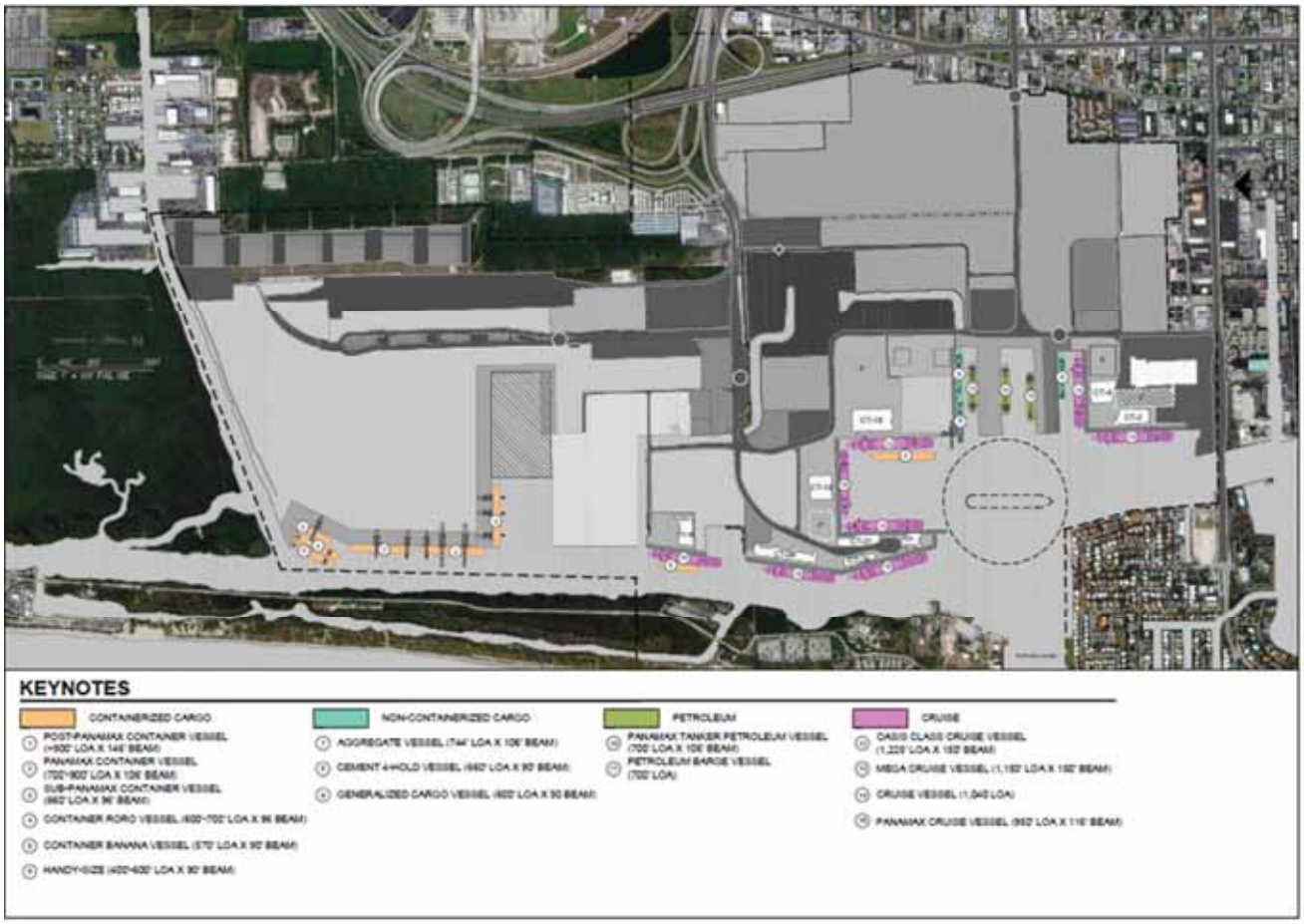

Figure 5.6-2
10-YEAR VISION PLAN SHOWING SHIP TYPES

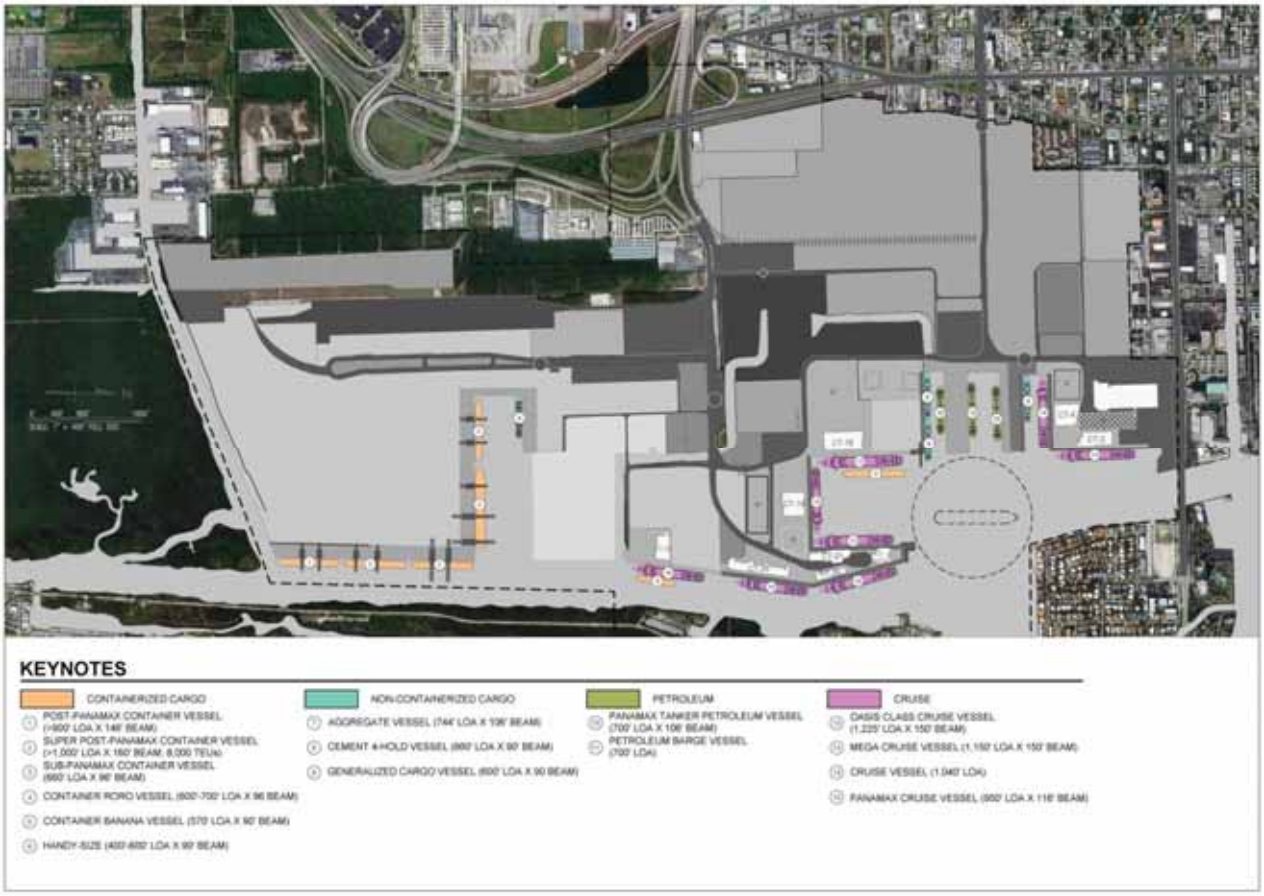

Figure 5.6-3
20-YEAR VISION PLAN SHOWING SHIP TYPES