# PORT///A/// Wharves Strengthening Project at Cargo Wharves I – VII 2010 – 2014



### **Project Team**

Dorian K. Valdes, P.E. – Assistant Director (Retired) Elizabeth Ogden – Director of Architecture, Engineering & IT Art Tillberg – Chief of Construction Juan Bergouignan – Project Manager

# Waterside Inspections



### **Project Team**

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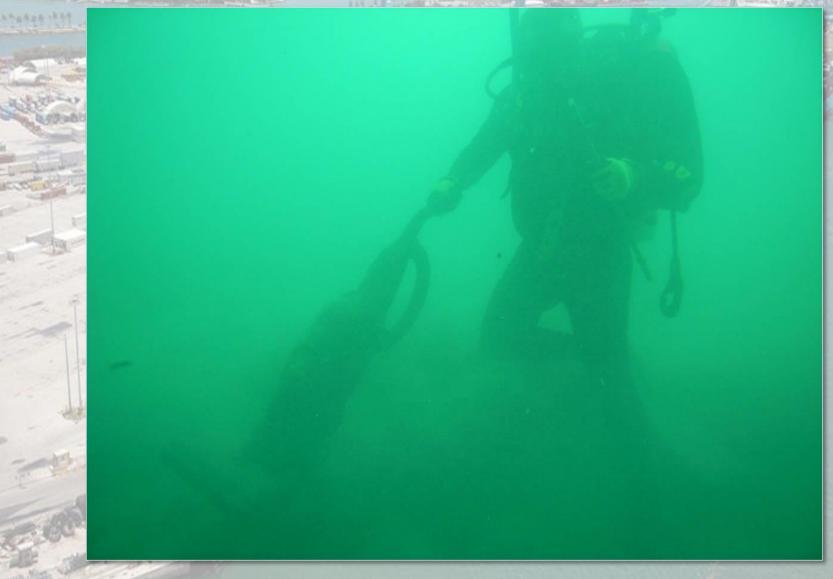
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Chuck Sinclair, P.E. – Project Executive Wes Dortch, P.E. – Project Manager Frank Proctor, P.E. – Project Engineer Stephen Mersdorf, P.E. – Project Engineer

Paul Starr, Ph.D., P.E. – Project Manager: Wharves 1, 6 and 7 Casey Long, P.E. – Project Manager: Crane Tie Downs Antonio Arthay, P.E. – Project Engineer: Crane Tie Downs

William Pitcher, P.E. – Project Principal Bill Crowe, P.E. – Project Manager / Special Inspector Juan Hernandez, PSP – Contract Administration / Scheduler Jose Cordoves – Sr. Field Engineer / Project Manger (NOVA)





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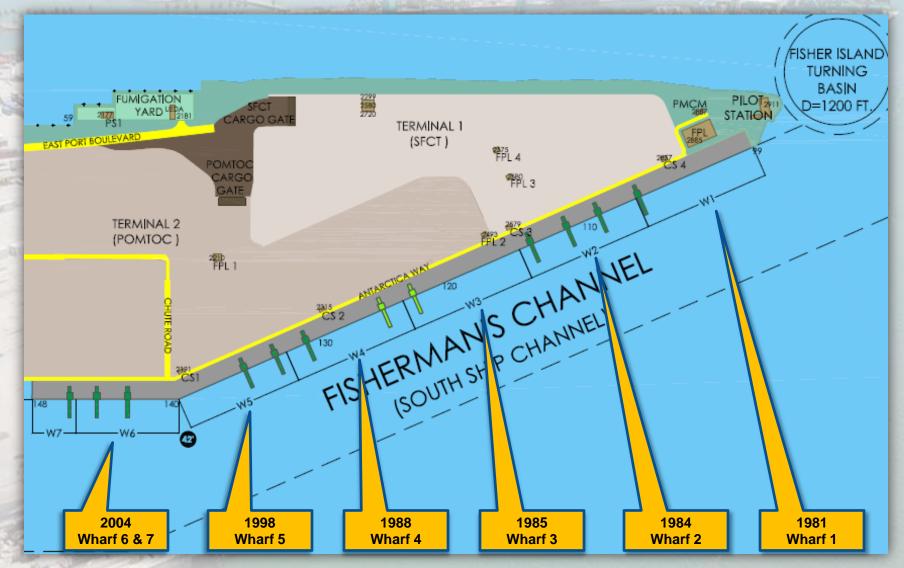
Luis Simon – Project Executive Alf Neumann – Project Manager Brad Payne – Lead Superintendent

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### **ODEBRECHT**

# History – Cargo Wharf



## Wharves I - VII Strengthening Program

#### **Purpose:**

Accommodate the ACOE Miami Harbor Deepening Project to Dredge Channels to minus 50 feet

#### Scope:

- Strengthen 6,100 feet of Wharves along the Fisherman's Channel
- Install New Mooring Bollards and Replace Waterside Utility (water & electrical) Stations
- Upgrade Wharf Surface Drainage Systems

#### Timeline:

- Actual Construction Start September 26, 2011
- Construction Completion May, 2014

#### Cost:

Awarded Amount for Construction \$57 M





### **Project Design Criteria**

- Design dredge depth increase from 42'/46' to 50' (+2')
  - Construction progress must be compatible with USACE dredge schedule
  - Secure permits within schedule constraint
- Design Vessel Mooring/Berthing loads
  - Super-Post-Panamax (22-wide; 200,000 displacement tonnage)
  - Accommodate larger mooring loads install new 150-ton Bollards

#### 🗹 Maintain crane outreach

- Maintain uniform berthing face
- 13-wide @ Post-Panamax Cranes / 20-wide @ Super-Post-Panamax Cranes

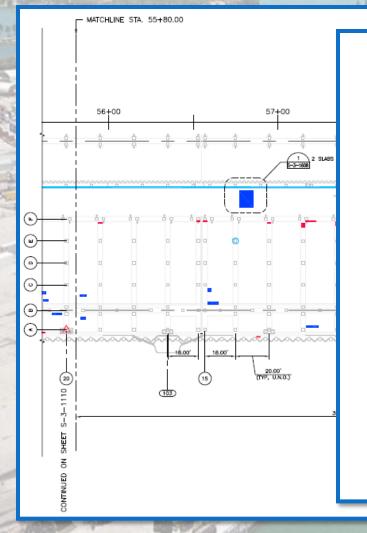
#### Minimize cost

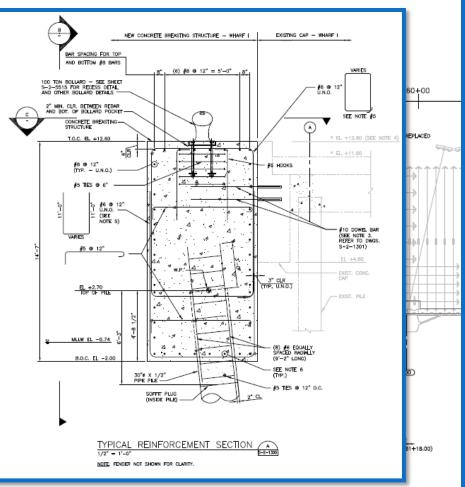
- Minimize impacts to revenue generating operations
- Re-use existing fenders / accommodate future fenders
- Maintain existing crane rail beams





Wharf I Design

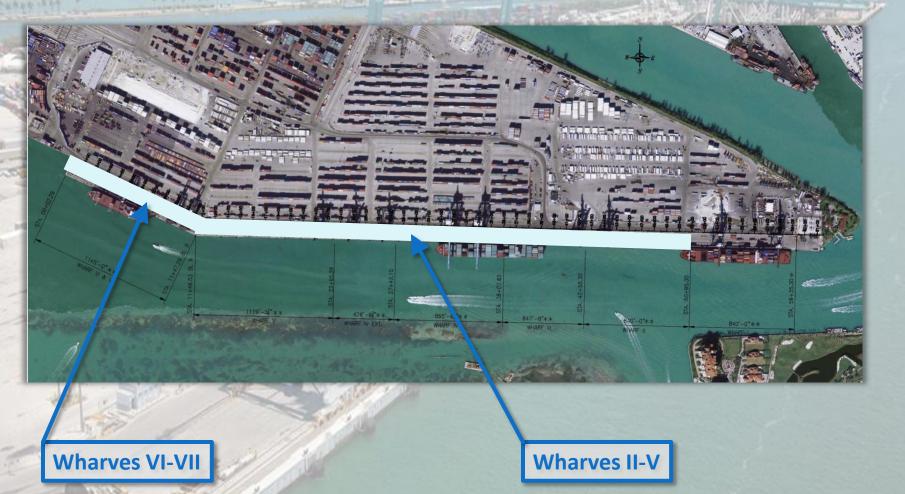




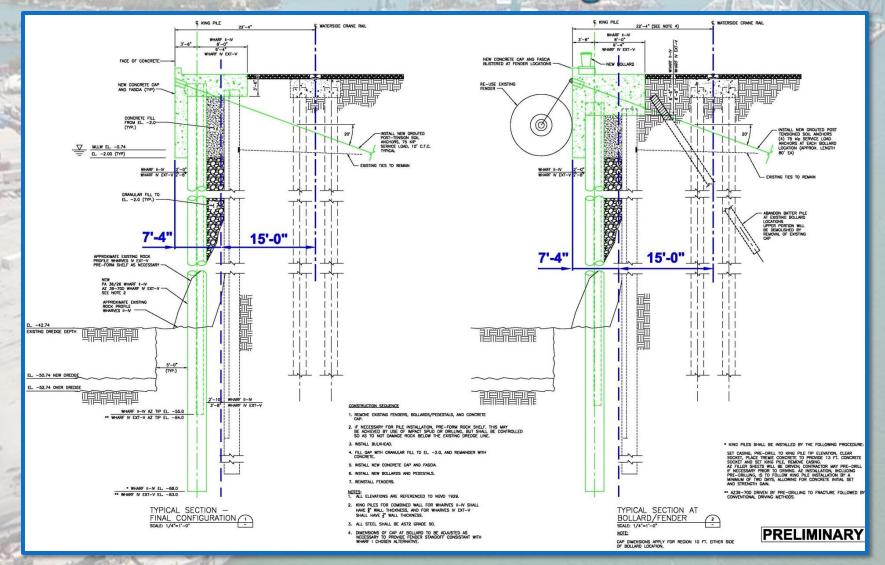
Wharf I Repairs

#### **Wharf I Breasting Structures**

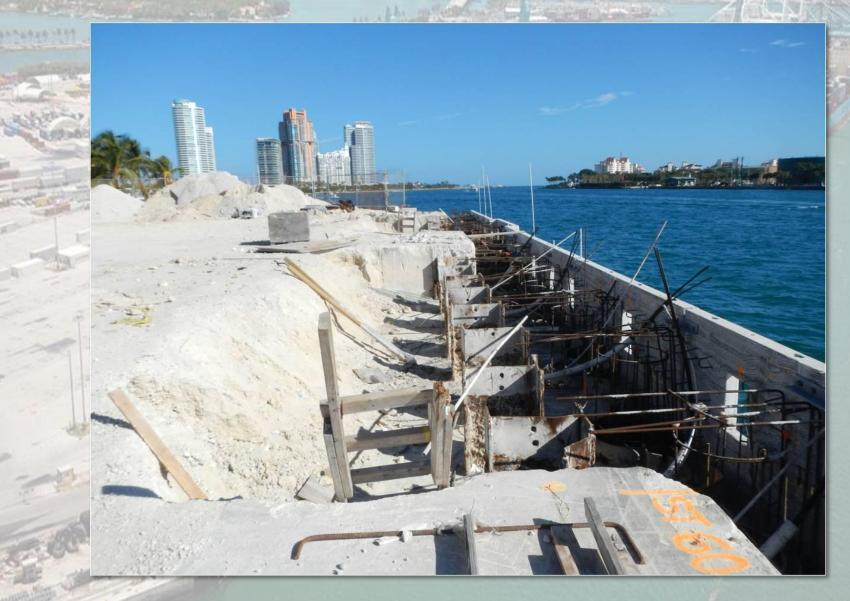




Wharf II-V Design



# **Onsite Inspections and Reporting**





## **Onsite Inspections and Reporting**







### **Onsite Inspections and Reporting**

All Onsite Reporting and Inspections are performed using Ruggedized Tablets with Cloud Access

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PROJECT NAME PORTMIAMI Wharves DATE 01/02/2013 DAY:			t: Cargo Wharves I to VII	SUBSTANTIAL COMPLETION INSPECTION PUNCH LIST (Sta. 44+50 to 50+95) Phase 2.10 E-CONCRETE PLACEMENT VERIFICATION REPORT			
ARCHITECT/ENGINEER HDR / Halcrow			A/E/ PROJECT F			022	
GEN CONTRACTOR GC - Odebrecht			GC PROJECT F			022	
CE&I CONSULTANT Atkins/KACO/NO	AVC		CE&I PROJECT F	INSPECTION DATE 08/29/2013 CROW CONCRETE PLACEMENT	NT No.		
Weather 🔀 Sun 📄 Fog 🔀 Cloud	Rain	Max Tempe	rature 32-50 51-70	Cargo Ops. Electrical Mechanical Structural Civil HT DATE ISSUED 10/6/	/12		
Wind 💌 Still 📃 Mod 🔛 High		Hu	midity Dry 🗙 Mod	Other IOVA / KACO		AND	
Photographs Taken Today				PUNCH LIST ITEMS			
FIELD MANPOWER			MAJOR EQUIP	ITEM:         5         LOCATION         TYPICAL         ITEM:         6         LOCATION:         E111 & E109         10/6/12         TIME         11:30 AM			
CONTRACTOR: ODEBRECH	Manual	Non-	Qty DESCRIPTION / TY	3+75 TO 26+50			
Project Manager		Manual 1	1 JOHN DEERE 444K FRONT LOAD				
Superintendent	1		1 JCB 506C HL FORK LIFT				
General Foreman Administrative	1		1 KOBELCO 135SR LC TRACK HOE V 1 CASE 580 M COMBINATION BAC	VERIFICATION DATA	DATE	DATE	
Tradesmen	5		2 GENERATOR / LIGHT PLANT	This REMARKS	NOTED	RESOLVED	
Laborers (TWO FROM OSI)	10		1 JLG 800AJ MAN LIFT	CLEARANCE AT LANDSIDE FORM TO BE 3"	10/6	10/6	
TOTALS	17		7	LEAN DEBRIS CAPS WOOD PAPER THROUGHOUT FORM	10/6	10/6	
		Non-	,	COMPLETE VISQUEEN INSTALL	10/6	10/6	
SUB-CONTRACTOR: BOSS	Manual	Manual	Qty DESCRIPTION / TY	RETRIEVE MAGNET POLE WER MID CAP LONGITUDINAL #7 AFTER WORKERS EXIT	10/6	10/6 10/6	
Project Manager NOT ONSITE Superintendent			NO MAJOR EQUIPMENT	WER MID CAP LONGITUDIIVAL #7 AFTER WORKERS EXIT	10/6	10/6	
General Foreman	1			DESCRIPTION: COMPLETE STRIPING REPLACEMENT DESCRIPTION: CONTRACTOR TO CONFIRM BAY			
Administrative				AT CANE RAIL BEAMS ASPHALT FUNCTION WITH PORT ELECTRICIAN.			
Tradesmen	5			PATCH			
Laborers				DATE COMPLETED: ACCEPTED BY: DATE COMPLETED: ACCEPTED BY:			
TOTALS	6 Manual	0 Non-	0 DESCRIPTION / TY	ITEM:         7         LOCATION:         W111         ITEM:         8         LOCATION:         46+60			
Project Manager	Manual	Manual	DESCRIPTION / T	ITEM: 7 LOCATION: W111 ITEM: 8 LOCATION: 48+60			
Superintendent			1 LINK BELT 218 HYLAB CRANE				
General Foreman	1		1 APE 300 HAMMER WITH EXTENS	PULABLE WATER			
Administrative	6		1 APE 300 HAMMER W/ CAN GRIP 1 BAUER BG25 DRILL RIG			10/6	
Tradesmen Laborers	6		2 GAS POWERED WELDER / GENE			10/6	
			1 CASE 580 N COMBINATION BACK				
TOTALS	7	0	7				
SUB-CONTRACTOR: MALCOLM	Manual	Non- Manual	Qty DESCRIPTION / TY				
Project Manager NOT ONSITE			1 800AJ BOOM LIFT UNITED RENTA				
Superintendent General Foreman	1			FOR THE CEI CONSULTANT:			
Administrative		-		NAME William Crowe, P.E.	11		
Tradesmen	2			Bucon	Nam		
Laborers				DESCRIPTION: CLEAN DEBRIS AND REMOVE MASKING DESCRIPTION: CLEAN HYDRAULIC SPILL ture Sign	nature		
TOTALS	3	0	1	TAPE FROM WATER BAY. TITLE Special Inspector			
•	·`			DATE COMPLETED: ACCEPTED BY: DATE COMPLETED: ACCEPTED BY:			
REPORTED BY			EVIEWED BY William E. (Bil	CEI Consultant AE Consultant, Project Manager, Owner Testing Lab			
(Print Name CE&I I	Field Inspecto	or)	(Print Name				
	MIAMI-D		INTY SEAPORT	MIAMI-DADE COUNTY SEAPORT	MIAMI-DADE COUNTY SEAPORT		
		•••					
3 09o 61+18 × 03-Cont2-R(bid	) × 20	13 080	50+95 × 2013 01F		.2-R(bid) × 2013 08O 50+95 × 2013 01RT copy × 2012 10A 26+50 ×		
D	aily	/ Re	eports	2013 09 13 PHa 59+35 to 61+18 × Punch-lists 013 08 29 PH44+50 TO 50+95 × Rebar Inspectio	ns		









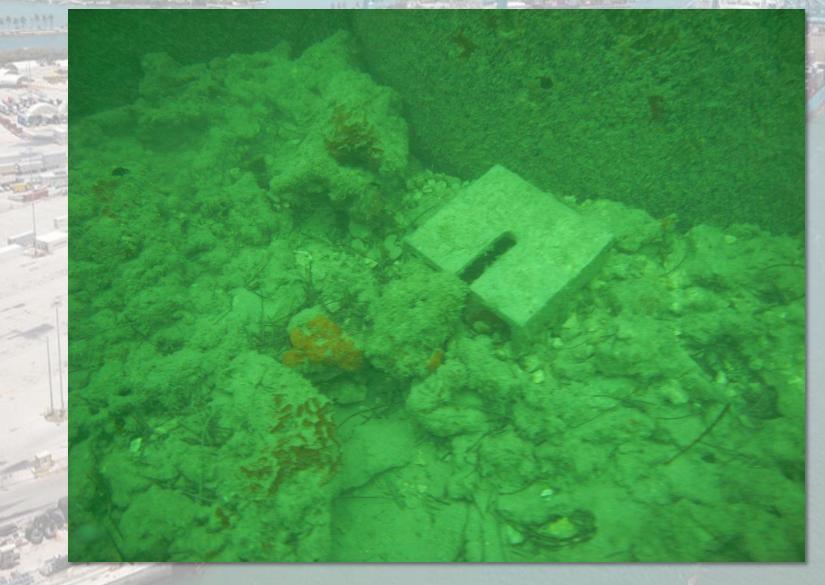


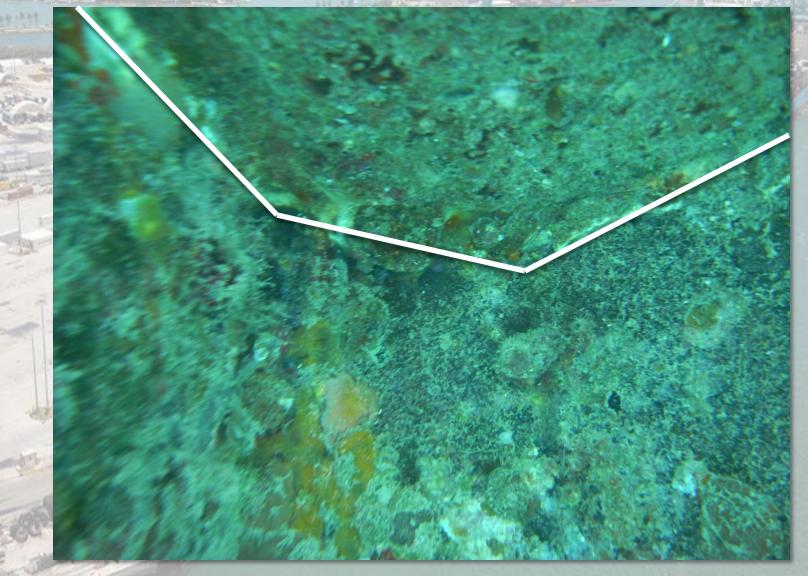


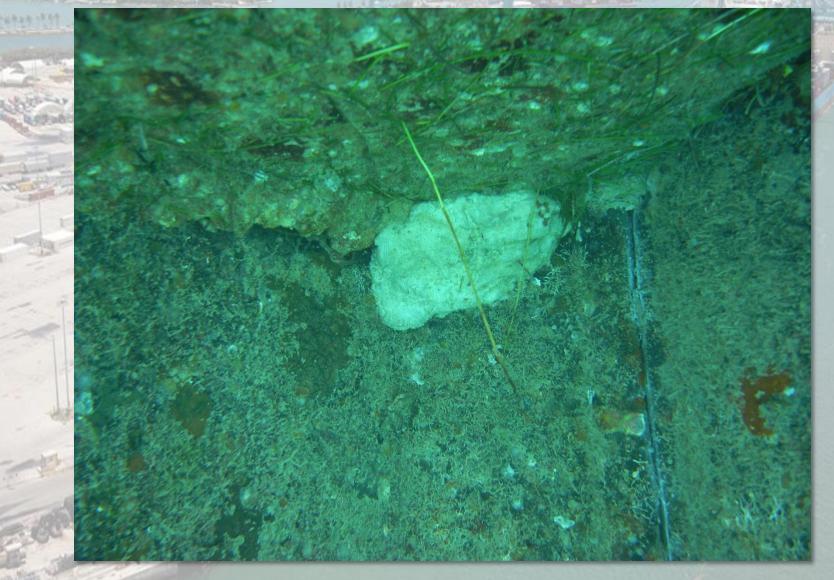














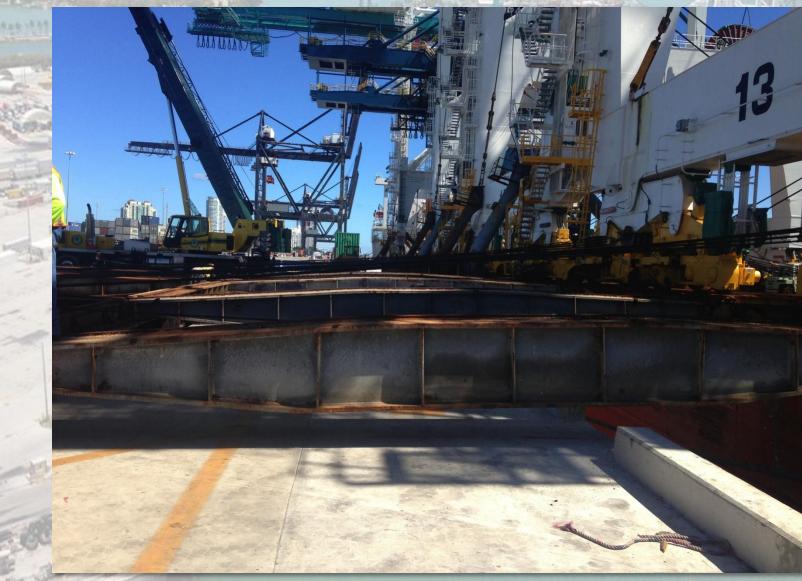








# New Cranes 13 - 16



# New Cranes 13 - 16



# New Cranes 13 - 16

