



# **Physical Monitoring Overview Beach Management Agreement (BMA)**

## Annual Stakeholder Meeting

December 4, 2014





**BMA Annual  
Stakeholder  
Meeting**

# Physical Monitoring Data

- Aerial Photography
- Beach and Bathymetric Surveys
- Data Analysis and Reporting



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Meeting**

# Aerial Photography

- Collected 2 times per year
- Fight Window Based on Tide, Water Clarity, Cloud Cover and Sea Conditions
- Town and County Initiatives
- Tied to Biological Monitoring Protocol



## BMA Annual Stakeholder Meeting

# Beach and Bathymetric Surveys

- Collected on Annual Basis
- Post Storm
- Construction Projects

## 2014 Surveys

- Town (R-76 to R-134)
- County (R-135-R-164)



## **BMA Annual Stakeholder Meeting**

# **Data Review and Analysis**

- Annual Monitoring Analysis and Reporting
- Volumes, Shorelines and Sediment Budget
- Project Certification






**BMA Annual  
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# Programmatic Improvements

- 2014 Physical Survey Coverage
- Analysis Peer Review
- Morphodynamic Analysis
- Analysis North of LWI

**NOTES:**  
 1. HORIZONTAL DATUM IS STATE PLANE COORDINATE SYSTEM NAD83, FLORIDA EAST ZONE, IN FEET. VERTICAL DATUM IS NAVD IN FEET.  
 2. DATE OF AERIAL PHOTOGRAPHY IS JUNE 2013.

**LEGEND**

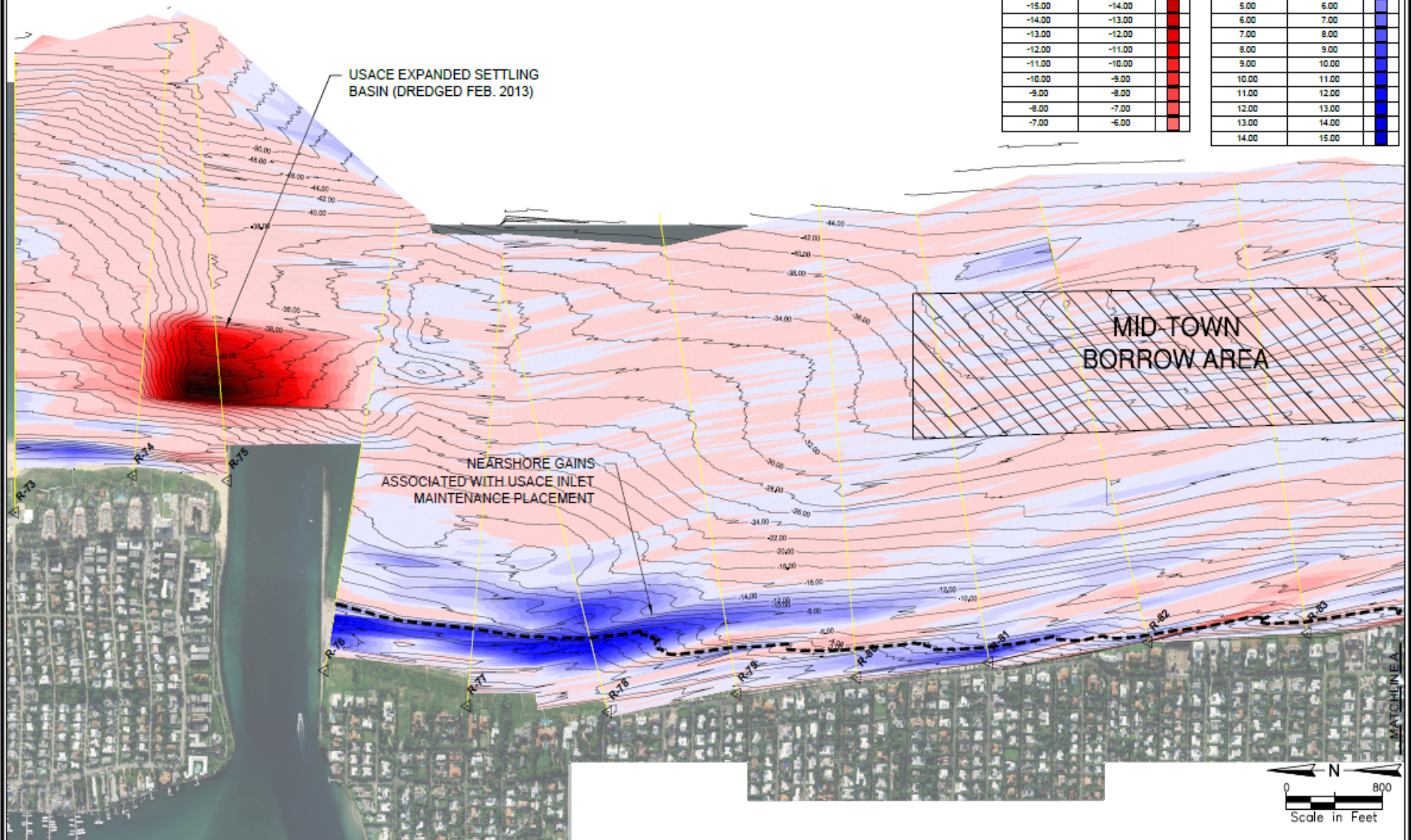
	JULY 2013 MEAN HIGH WATER
	MONITORING SURVEY (JULY 2013)
	DEP MONUMENTS

**ELEVATION CHANGES (ft) FROM DEC. 2012 TO JULY 2013**

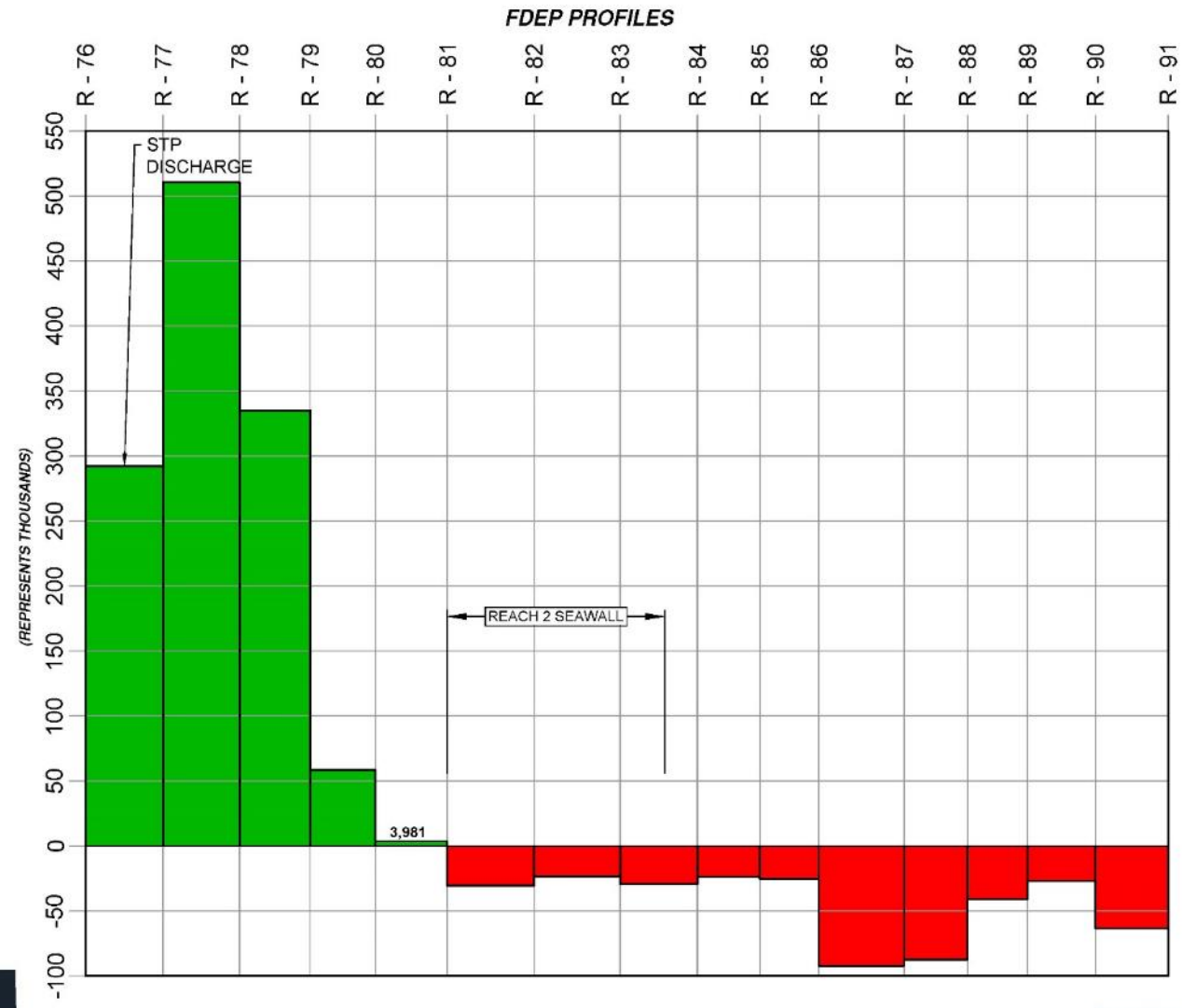
Minimum Elevation	Maximum Elevation	Color
-26.00	-25.00	
-25.00	-24.00	
-24.00	-23.00	
-23.00	-22.00	
-22.00	-21.00	
-21.00	-20.00	
-20.00	-19.00	
-19.00	-18.00	
-18.00	-17.00	
-17.00	-16.00	
-16.00	-15.00	
-15.00	-14.00	
-14.00	-13.00	
-13.00	-12.00	
-12.00	-11.00	
-11.00	-10.00	
-10.00	-9.00	
-9.00	-8.00	
-8.00	-7.00	
-7.00	-6.00	

**ELEVATION CHANGES (ft) FROM DEC. 2012 TO JULY 2013**

Minimum Elevation	Maximum Elevation	Color
-6.00	-5.00	
-5.00	-4.00	
-4.00	-3.00	
-3.00	-2.00	
-2.00	-1.00	
-1.00	0.00	
0.00	1.00	
1.00	2.00	
2.00	3.00	
3.00	4.00	
4.00	5.00	
5.00	6.00	
6.00	7.00	
7.00	8.00	
8.00	9.00	
9.00	10.00	
10.00	11.00	
11.00	12.00	
12.00	13.00	
13.00	14.00	
14.00	15.00	



1990-2013 VOLUME CHANGES ABOVE -26.2' NAVD  
(CY PER LINEAL FOOT)



↑ ACCRETION  
↓ EROSION

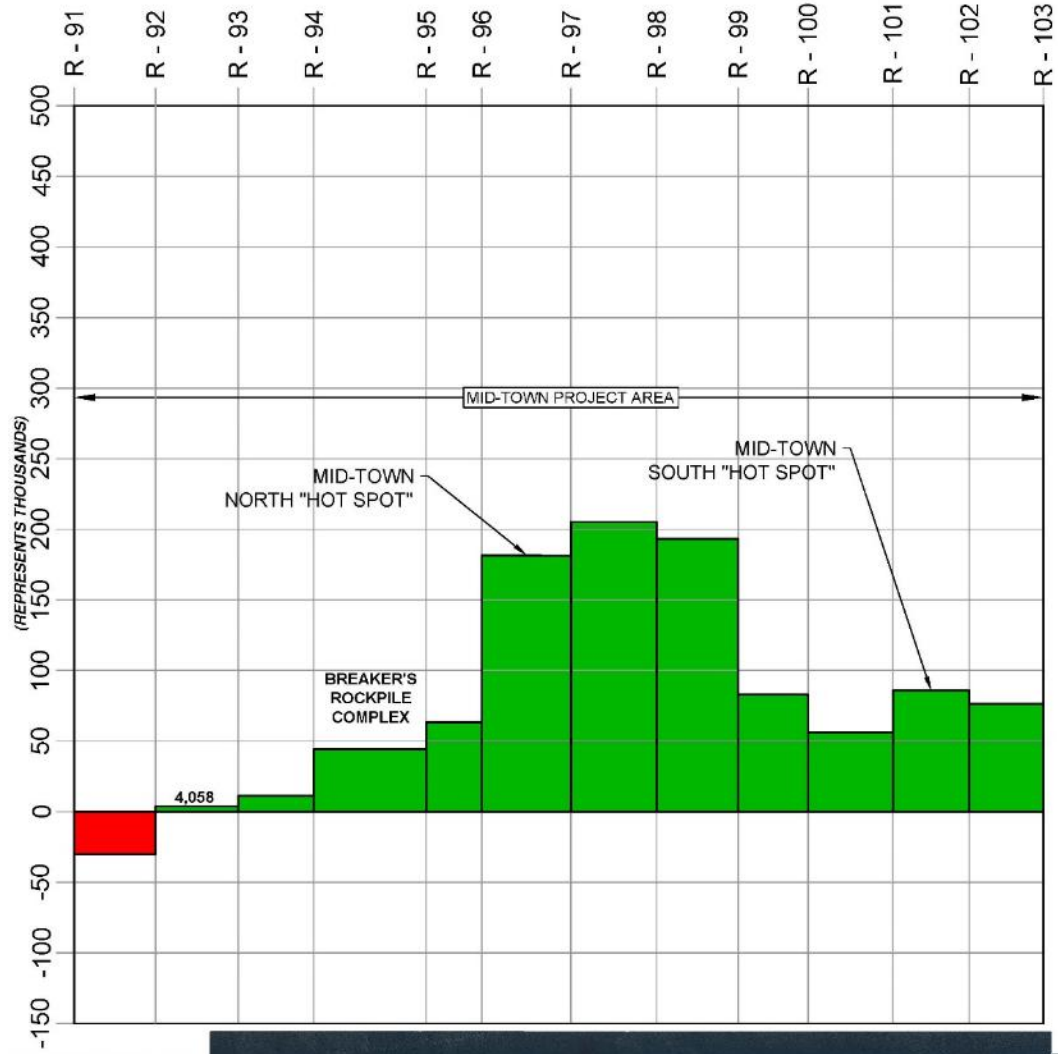
NOTES: 1. DATE OF AERIAL PHOTOGRAPHY IS JUNE 2013.





FDEP PROFILES

1990-2013 VOLUME CHANGES ABOVE -26.2' NAVD  
(CY PER LINEAL FEET)



↑ ACCRETION  
↓ EROSION

NOTES: 1. DATE OF AERIAL PHOTOGRAPHY IS JUNE 2013.

REACH 2

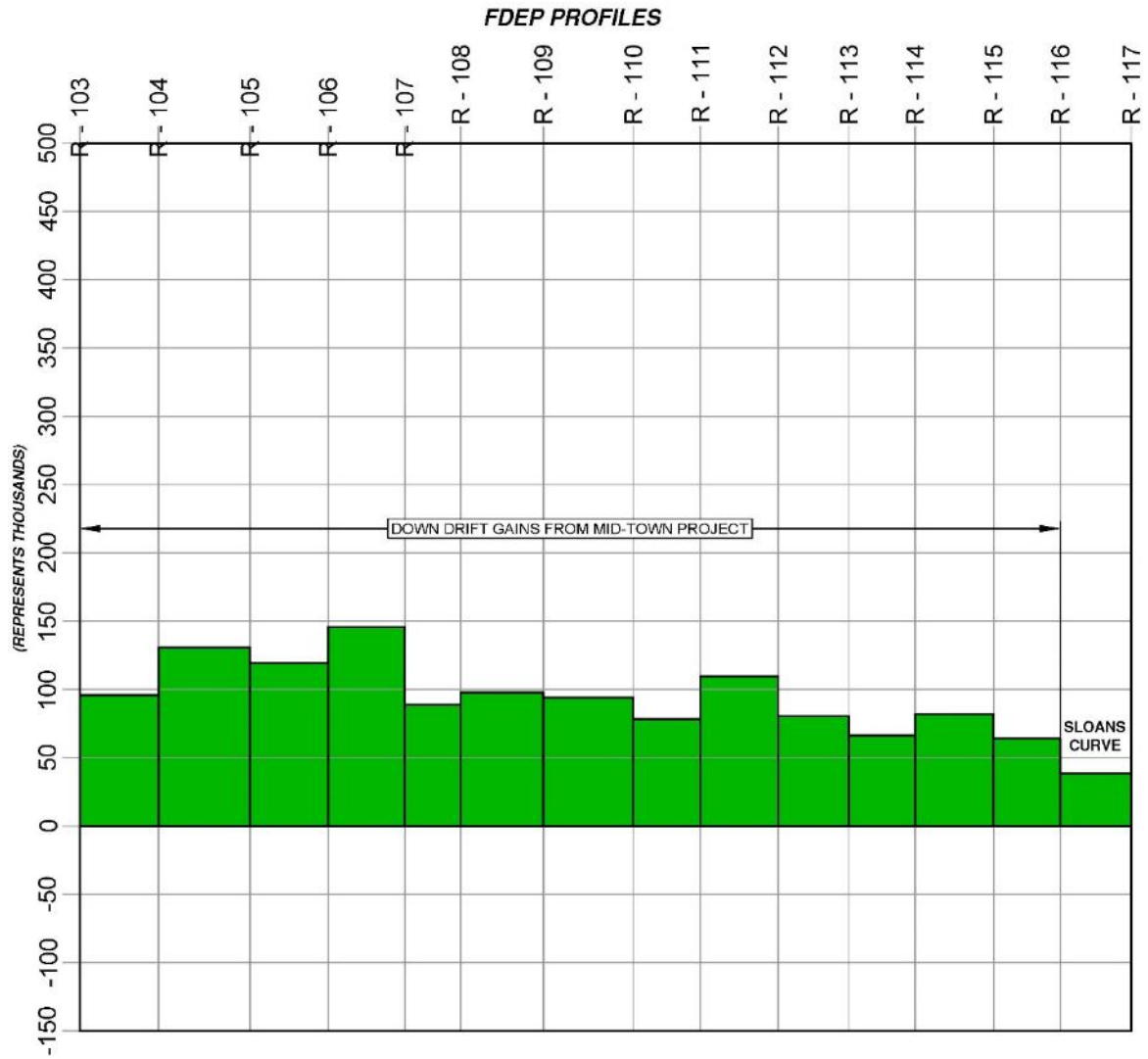
REACH 3

REACH 4

REACH 5



1990-2013 VOLUME CHANGES ABOVE -26.2' NAVD  
(CY PER LINEAL FEET)



NOTES: 1. DATE OF AERIAL PHOTOGRAPHY IS JUNE 2013.

REACH 4

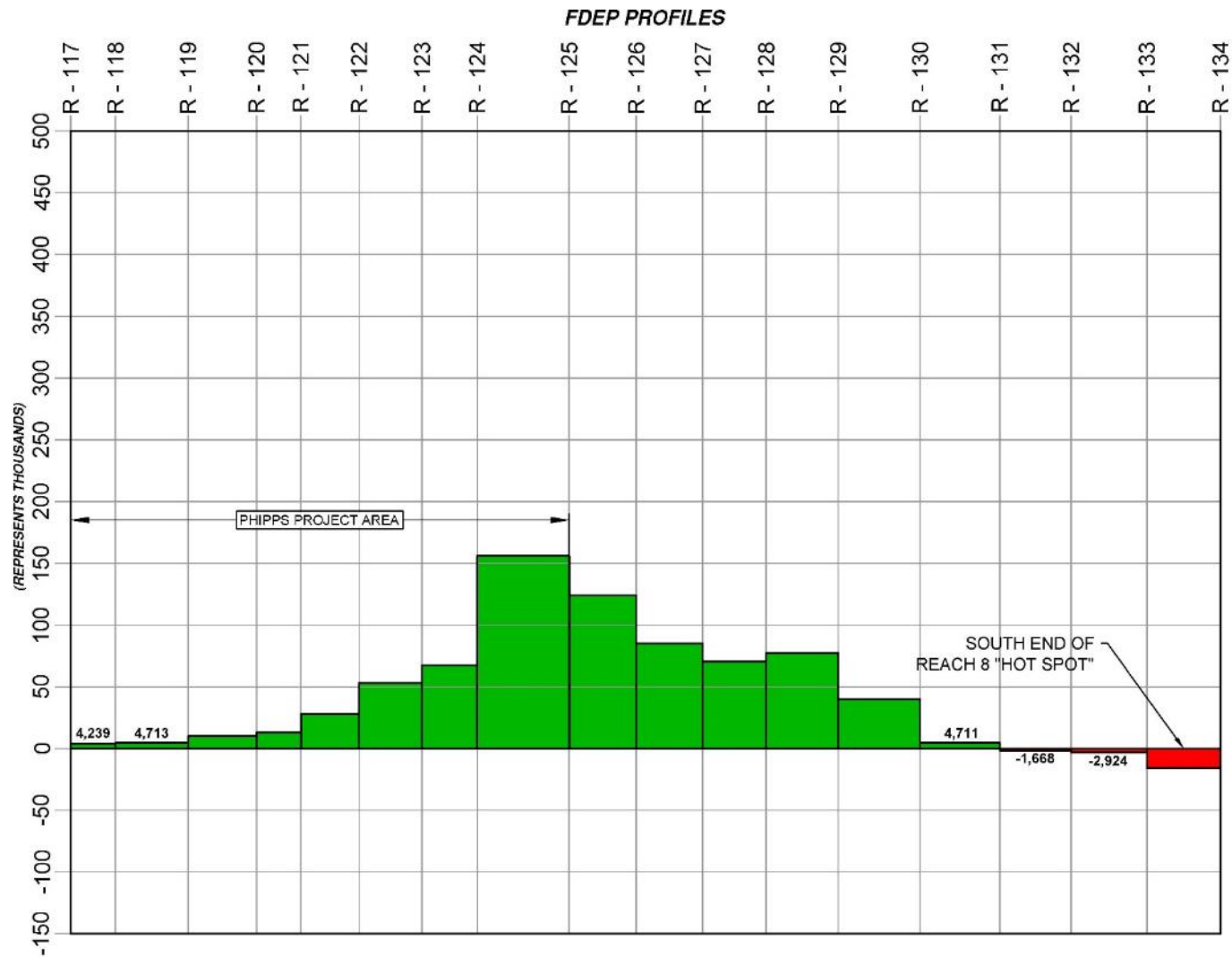
REACH 5

REACH 6

REACH 7



1990-2013 VOLUME CHANGES ABOVE -26.2' NAVD  
(CY PER LINEAL FEET)

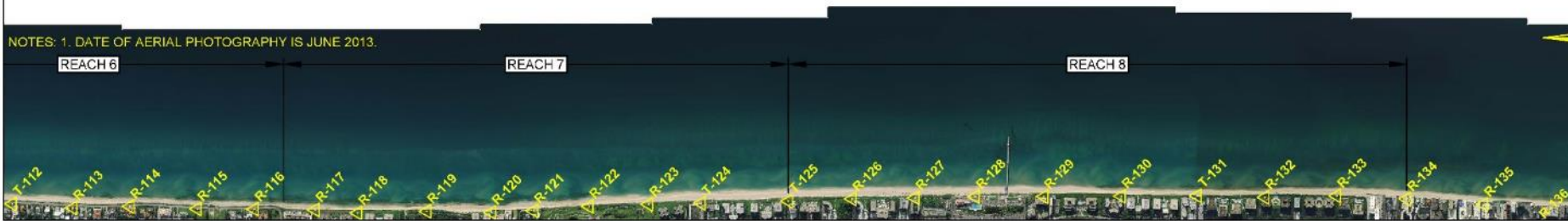


NOTES: 1. DATE OF AERIAL PHOTOGRAPHY IS JUNE 2013.

REACH 6

REACH 7

REACH 8



↑ ACCRETION  
↓ EROSION



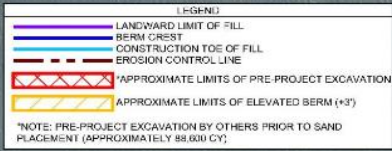


**BMA Annual  
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# 2014-15 Construction Projects

- North Mid-Town Project Segment
- South Mid-Town Project Segment
- Phipps Park (Truck Haul)
- Reach 8 Dune (Truck Haul)

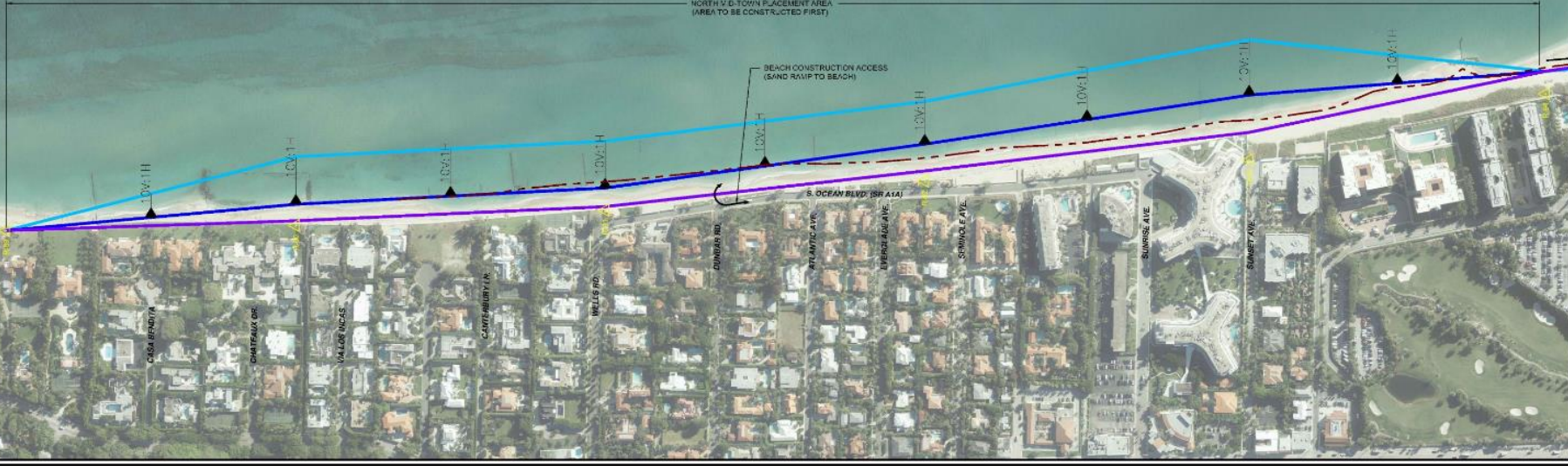
# North Mid-Town Project Segment



MATCHLINE A

REFER TO DRAWING NUMBER 6 FOR OFFSHORE INGRESS/EGRESS AND PIPELINE CORRIDORS (NEAR SHORE HARD BOTTOM TO BE AVOIDED)






NORTH MID-TOWN PLACEMENT AREA (AREA TO BE CONSTRUCTED FIRST)



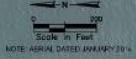
# South Mid-Town Project Segment

MATCHLINE A

**LEGEND**

-  LANDWARD LIMIT OF FILL
-  BERM CRE-ST
-  CONSTRUCTION TOE OF FILL
-  EROSION CONTROL LINE
-  APPROXIMATE LIMITS OF PRE-PROJECT EXCAVATION
-  APPROXIMATE LIMITS OF ELEVATED BERM (+3')

\*NOTE: PRE-PROJECT EXCAVATION BY OTHERS PRIOR TO SAND PLACEMENT (APPROXIMATELY 68,800 CY)



NOTE: AERIAL DATED JANUARY 2014

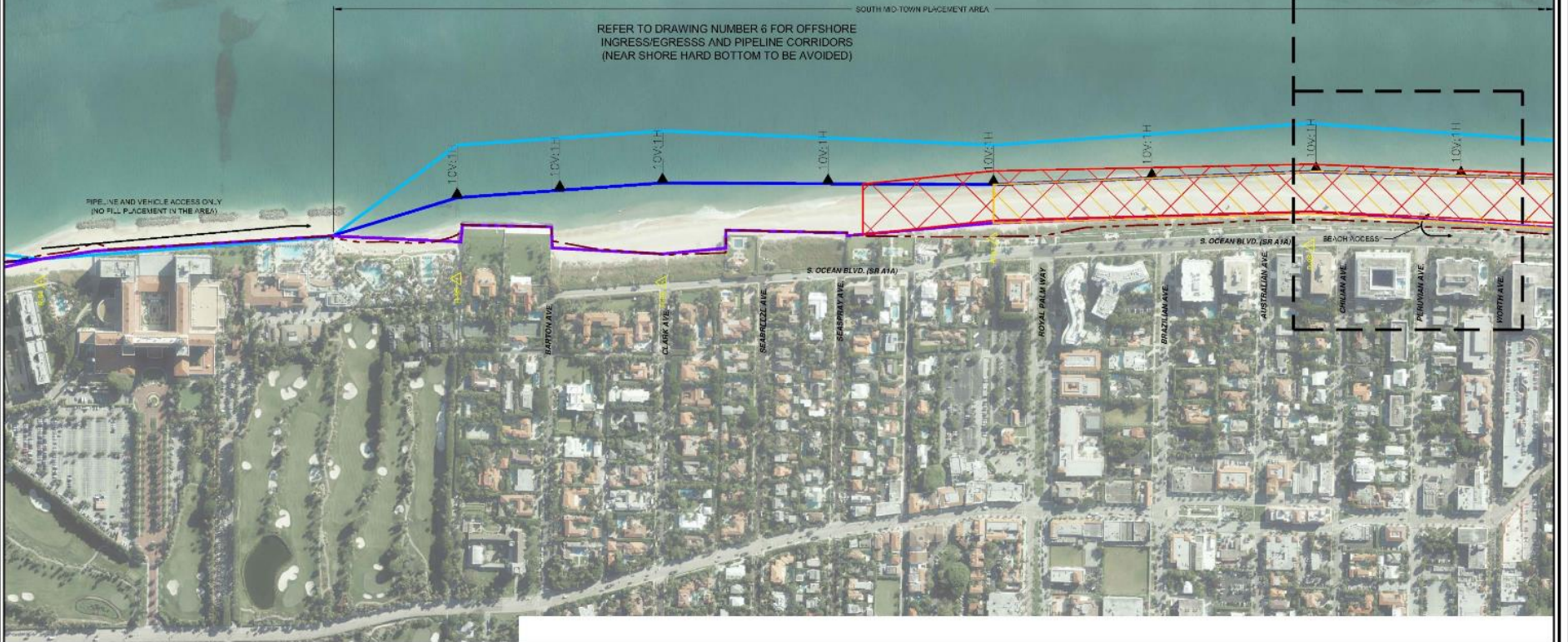
MATCHLINE B



SOUTH MID-TOWN PLACEMENT AREA

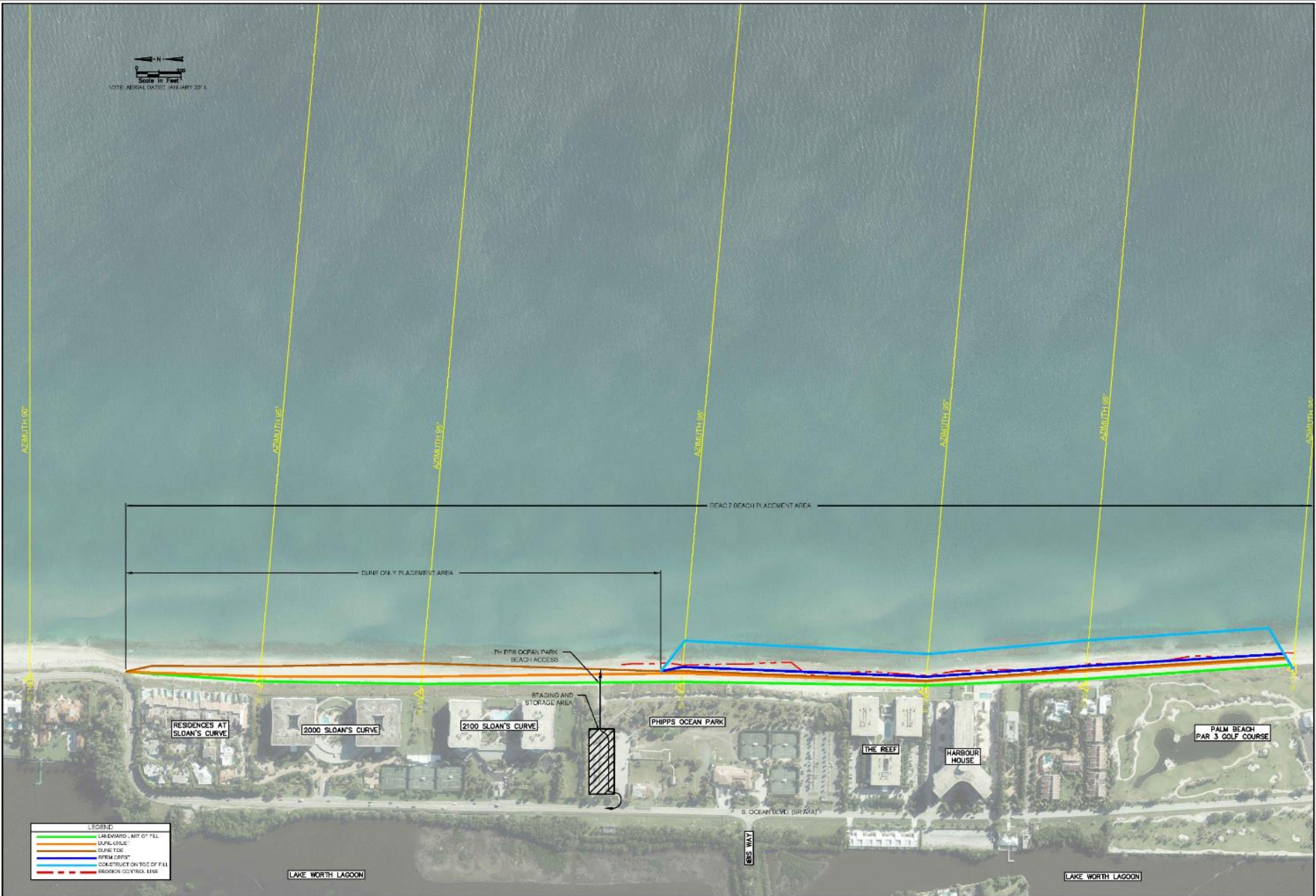
REFER TO DRAWING NUMBER 6 FOR OFFSHORE INGRESS/EGRESS AND PIPELINE CORRIDORS (NEAR SHORE HARD BOTTOM TO BE AVOIDED)

PIPELINE AND VEHICLE ACCESS ONLY (NO FILL PLACEMENT IN THE AREA)





# Phipps Project Segment



Scale in Feet  
 NOTE: AERIAL DATUM: JANUARY 2014

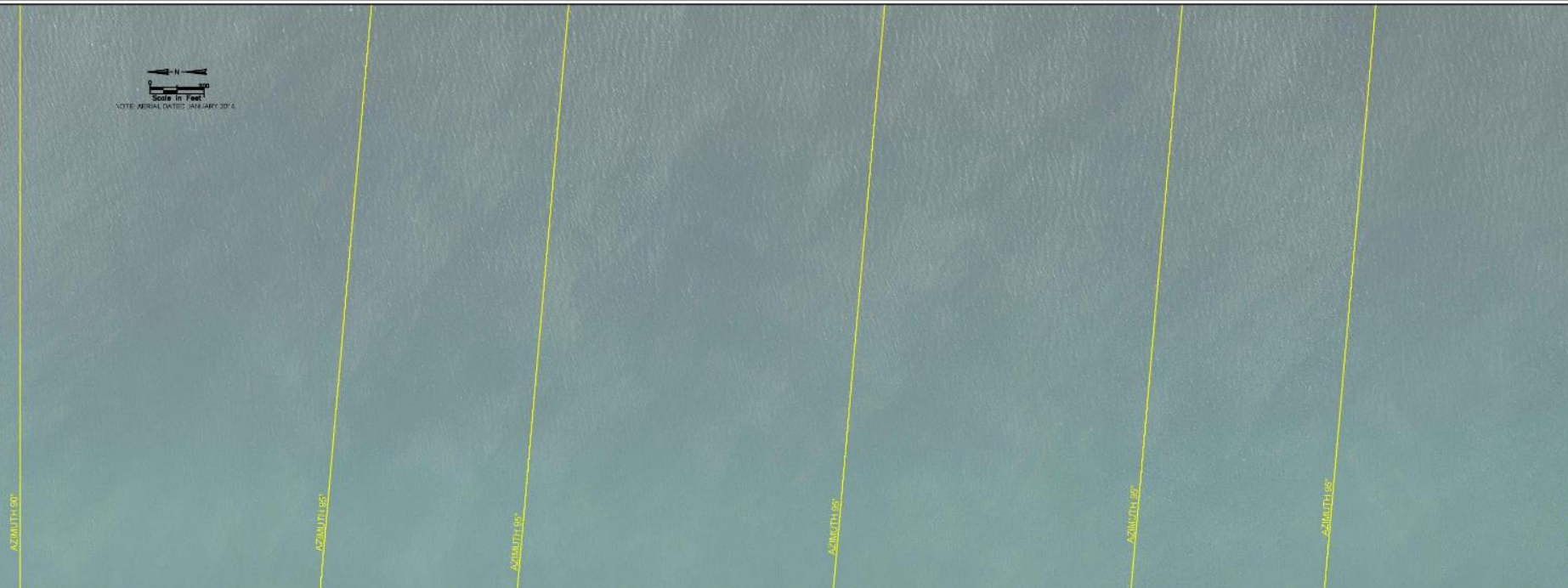
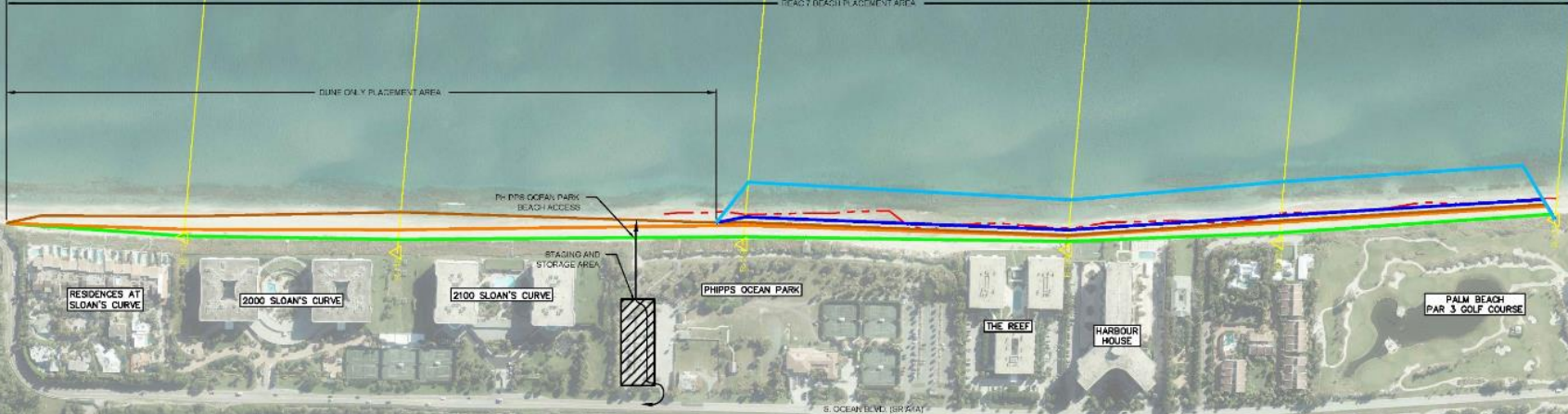
LEGEND

[Green Line]	LANDWARD MIT 0' FILL
[Orange Line]	DUNE CRUIS
[Blue Line]	DUNE TOP
[Red Line]	REFILL CRUIS
[Yellow Line]	CONSTRUCT ON TOP OF FILL
[Dashed Red Line]	BROOKIN CONTROL LINE

LAKE WORTH LAGOON

6. OCEAN BLVD. (BR 21A)

LAKE WORTH LAGOON



AZIMUTH 90°

AZIMUTH 95°

AZIMUTH 99°

AZIMUTH 99°

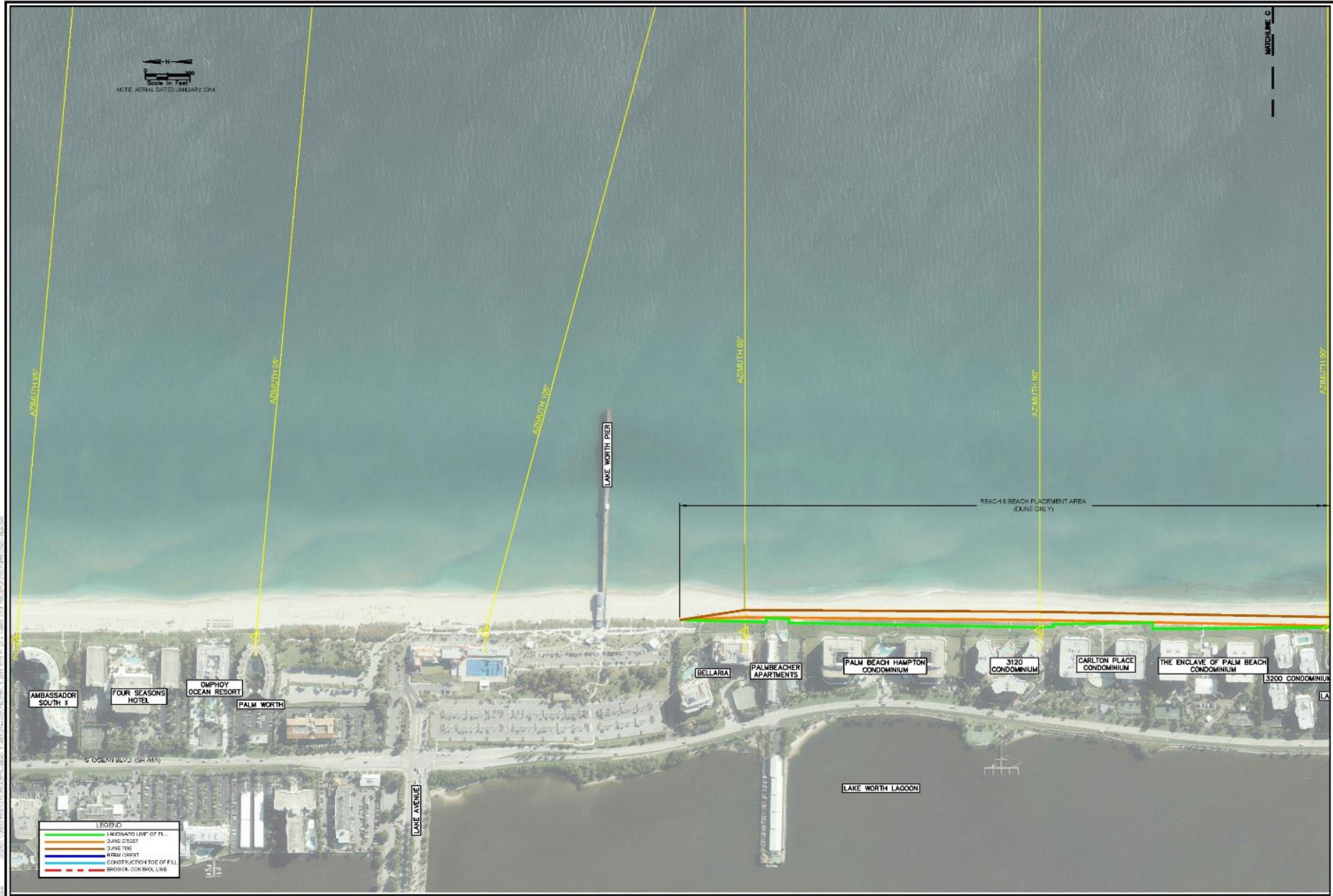
AZIMUTH 97°

AZIMUTH 95°

AZIMUTH 95°



# Reach 8 Project Segment





# Reach 8 Project Segment

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