



TOWN OF HILLSBORO BEACH
1210 Hillsboro Mile, Hillsboro Beach, Florida 33062
January 24, 2023 | 10:00 AM

SPECIAL COMMISSION MEETING

MAYOR DEBORAH L. TARRANT
VICE MAYOR IRENE KIRDAHY
COMMISSIONER VICKY FEAMAN
COMMISSIONER BARBARA BALDASARRE
COMMISSIONER JANE REISER

TOWN MANAGER WILLIAM 'MAC'SERDA, ICMA-CM
TOWN ATTORNEY DONALD J. DOODY, ESQ
TOWN CLERK SHERRY D. HENDERSON, CMC

CALL TO ORDER AND ROLL CALL

PLEDGE OF ALLEGIANCE

I. PRESENTATIONS

II. DISCUSSION & POSSIBLE ACTION

- A.** Pre-Project Update, Discussion and Possible Action on the Town of Hillsboro Beach and City of Deerfield Beach Joint Beach Renourishment Project.

Presented by Coastal Protection Engineering and Moffatt & Nichol

III. ADJOURNMENT

PLEASE TAKE NOTICE AND BE ADVISED that if any interested person desires to appeal any decision made by the Town Commission, Special Master or any other Boards or Commissions of the Town with respect to any matter considered at this meeting or hearing, such interested person will need a record of the proceedings and for such purpose may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. The meeting/hearing may be continued from day to day, time to time, place to place, as may be found necessary during the aforesaid meeting. IN ACCORDANCE WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) THIS DOCUMENT CAN BE MADE AVAILABLE IN AN ALTERNATE FORMAT (LARGE PRINT) UPON REQUEST AND SPECIAL ACCOMMODATIONS CAN BE PROVIDED UPON REQUEST WITH THREE (3) DAYS ADVANCE NOTICE. Please contact Sherry D. Henderson, Town Clerk at (954) 427-4011 Town Hall - 1210 Hillsboro Mile, Hillsboro Beach, FL 33062. Shenderson@townofhillsborobeach.com

HILLSBORO/DEERFIELD BEACH NOURISHMENT PROJECT

PRE-PROJECT UPDATE



Special Commission Meeting
January 24, 2023



Coastal Protection Engineering

Tara Brenner, PG, PE, Sr. Coastal Engineer (CPE)



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PROJECT TEAM



Coastal Protection Engineering (CPE)

Thomas Pierro, PE, D.CE, Principal Engineer

Thomas Campbell, PE, D.CE, Principal Advisor

Tara Brenner, PG, PE, Sr. Coastal Engineer

Stacy Buck, Sr. Marine Biologist

Dylan Nestler, PE, Coastal Engineer



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Moffatt & Nichol (M&N)

Tim Blankenship, PE, Coastal Engineer

Jackie Brower, PE, PhD, Coastal Engineer & Scientist

Pete Seidle, PE, Coastal Engineer

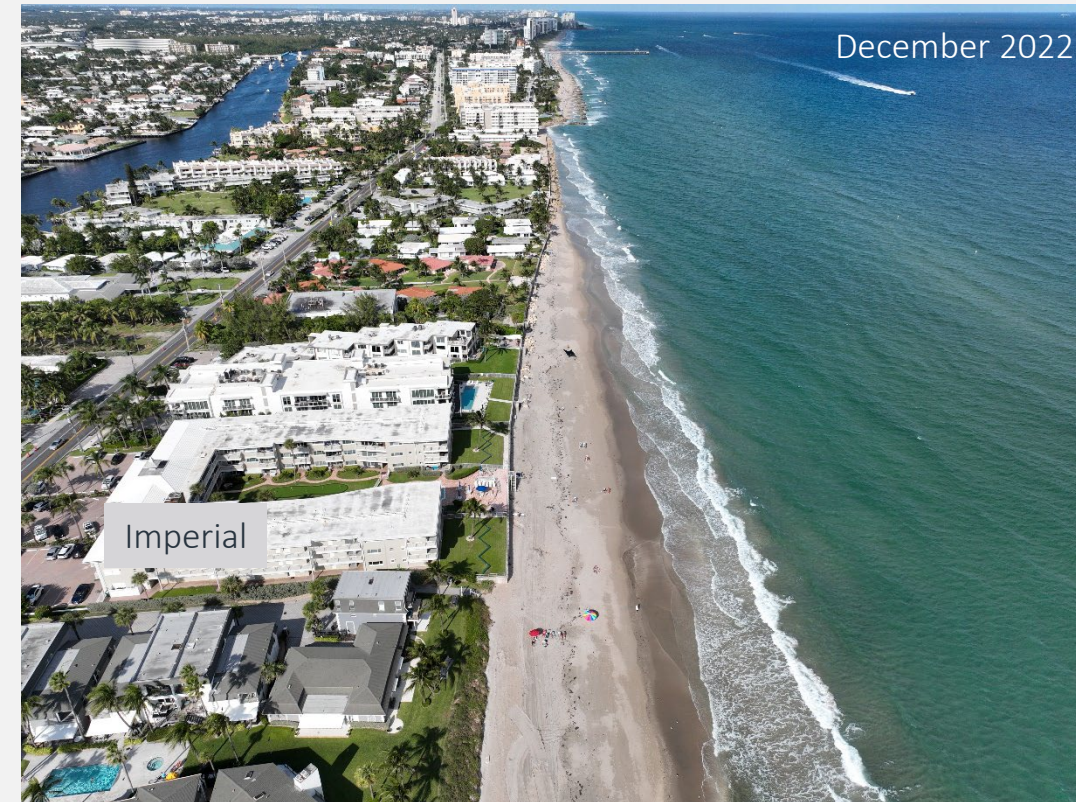


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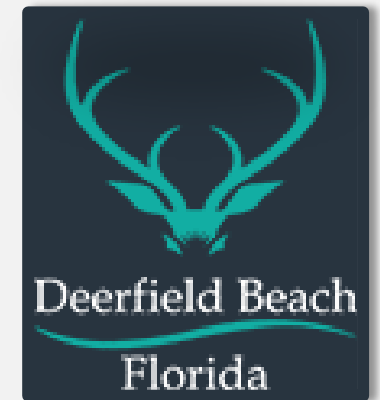
OCTOBER 2022 COMMISSION MEETING

- Beach Conditions Based on Summer 2022 Survey
 - Recent storm events (Ian and Nicole)
 - Winter 2022 survey available now
- Preliminary Project Volumes
- Potential Cost Sharing Partners
 - FEMA, FDEM
 - State (LGFR)
 - Broward County (TBD)
- Preliminary Project Costs
- Preliminary Construction Schedule



PRIMARY PROJECT OBJECTIVES

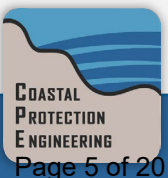
- Joint beach nourishment with City of Deerfield Beach
- Comply with Oct. 2020 Settlement Agreement
- Utilize FEMA Dorian funds
- Seek cost sharing from State and County
- 1st project to be complete in 2023



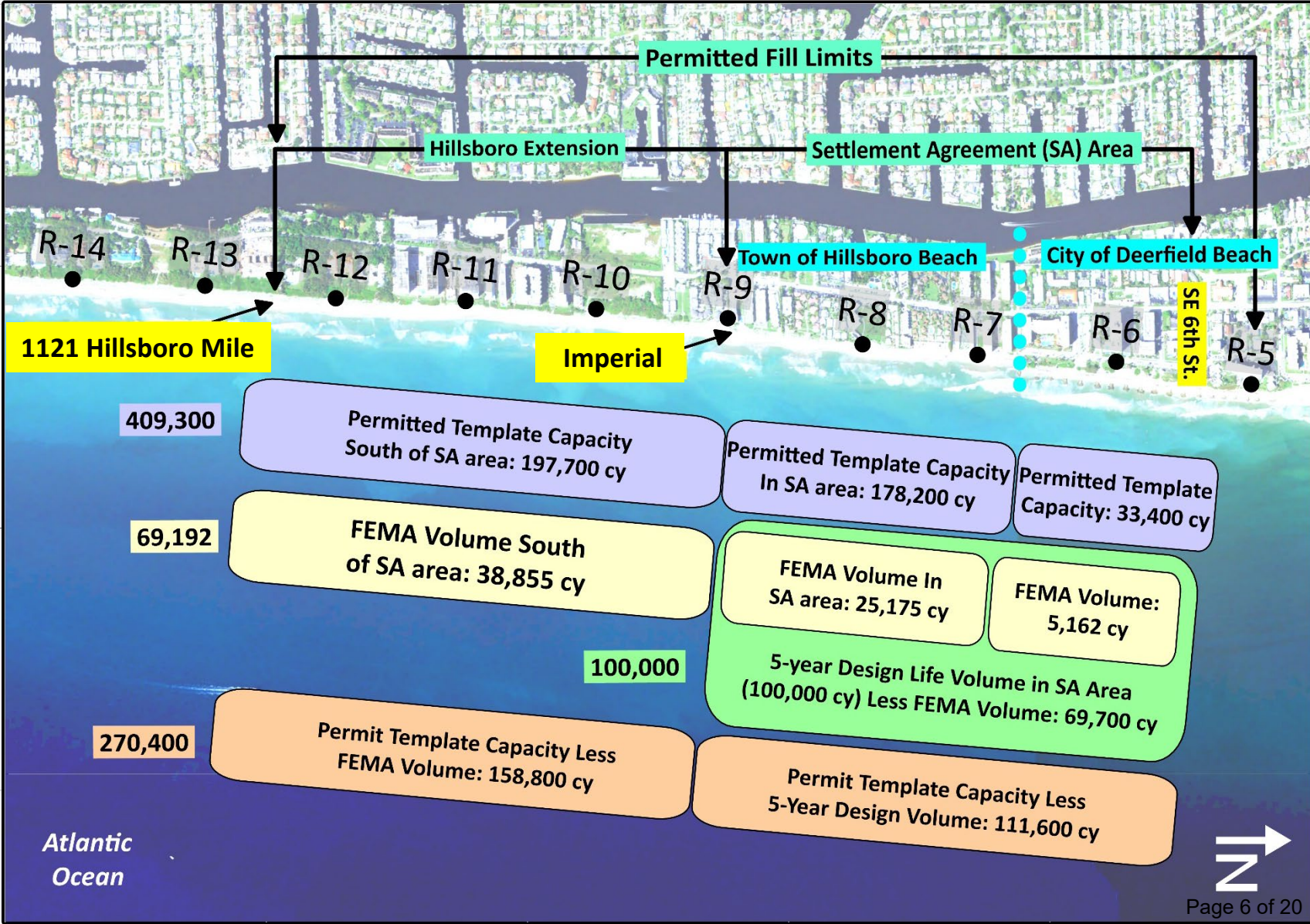
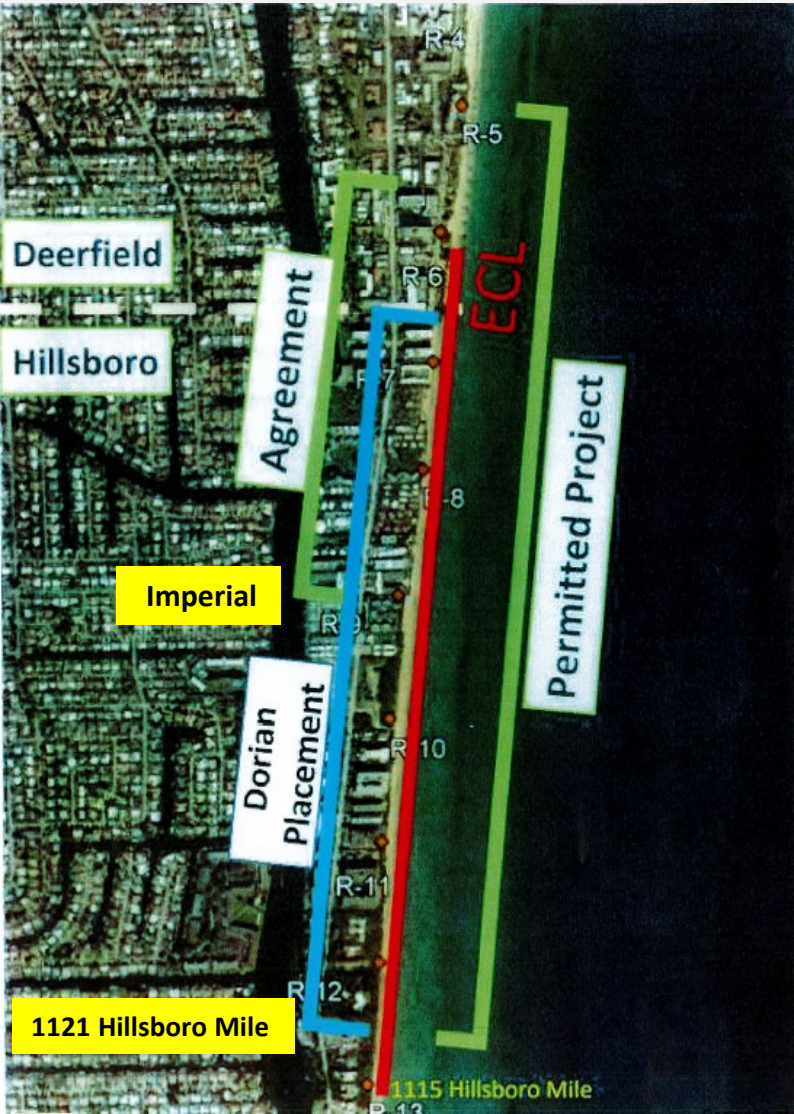
Today: Present bid results and related information for project decision making and budget discussion



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UPDATED VOLUMES BASED ON DECEMBER 2022 SURVEY



BID RESULTS

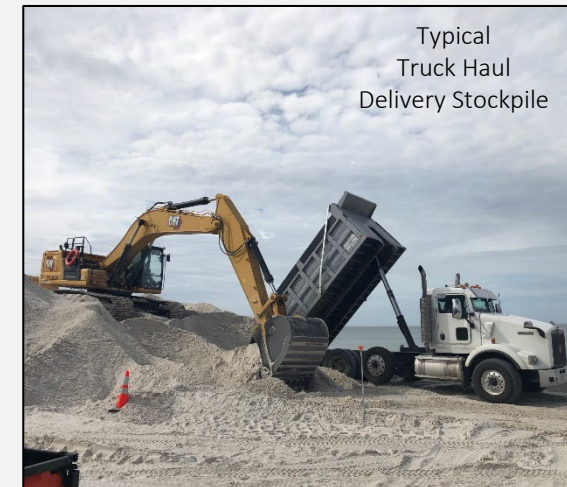
■ Ebb Shoal Dredging

- 1 bidder – Great Lakes Dredge & Dock
- Key results
 - Mobilization/Demobilization: \$3,975,000
 - Settlement Agreement Area: \$13.55/cy
 - Hillsboro Extension: \$26.50/cy



■ Truck Haul

- 1 bidder – Eastman Aggregates
- Key results
 - Mobilization/Demobilization: \$250,000
 - Settlement Agreement Area: \$124/cy
 - Hillsboro Extension: \$125/cy



DREDGE PROJECT COORDINATION

- Contracting & Local Agreements

- City of Boca Raton – 1/6

- Awarded GLDD Base Bid
 - City Manager approved for Interlocal Agreement development

- City of Deerfield Beach – 1/24

- Interlocal Agreement (ILA) with City of Boca Raton
 - Award GLDD Bid Alternates
 - Memorandum of Understanding (MOU) with Town of Hillsboro Beach
 - CPE construction services proposal

- City of Hillsboro Beach – 1/24

- Construction Budget/Volume Discussion
 - Discuss project options for construction

- Target Construction Window: March/April 2023



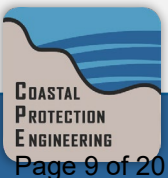
POTENTIAL COST SHARE SOURCES



- Hurricane Dorian Storm Repair (64,030 cy):
 - 75% by Federal Emergency Management Agency (FEMA)
 - 12.5% by FL Department of Emergency Management (DEM)
- State of FL Local Government Funding Request (LGFR) Program
 - Joint Settlement Agreement Project Area qualified for 50% state cost sharing after FEMA/DEM funding
- Broward County: TBD
- Local Partners:
 - City of Boca Raton - Inlet Dredging Mob/Demob
 - City of Deerfield Beach - Settlement Agreement Area
 - Town of Hillsboro Beach - Settlement Agreement Area and Extension



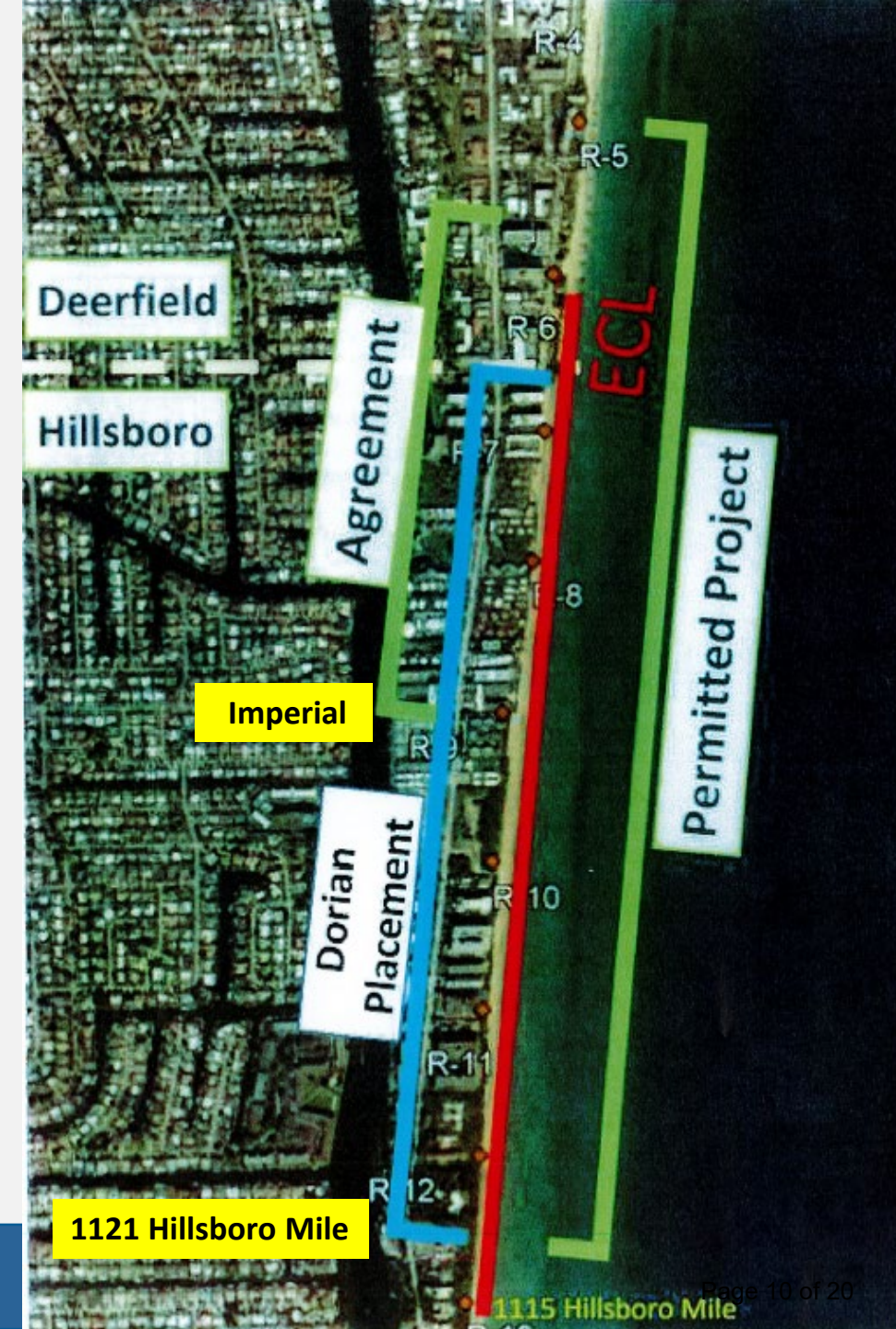
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SAND PLACEMENT AREA

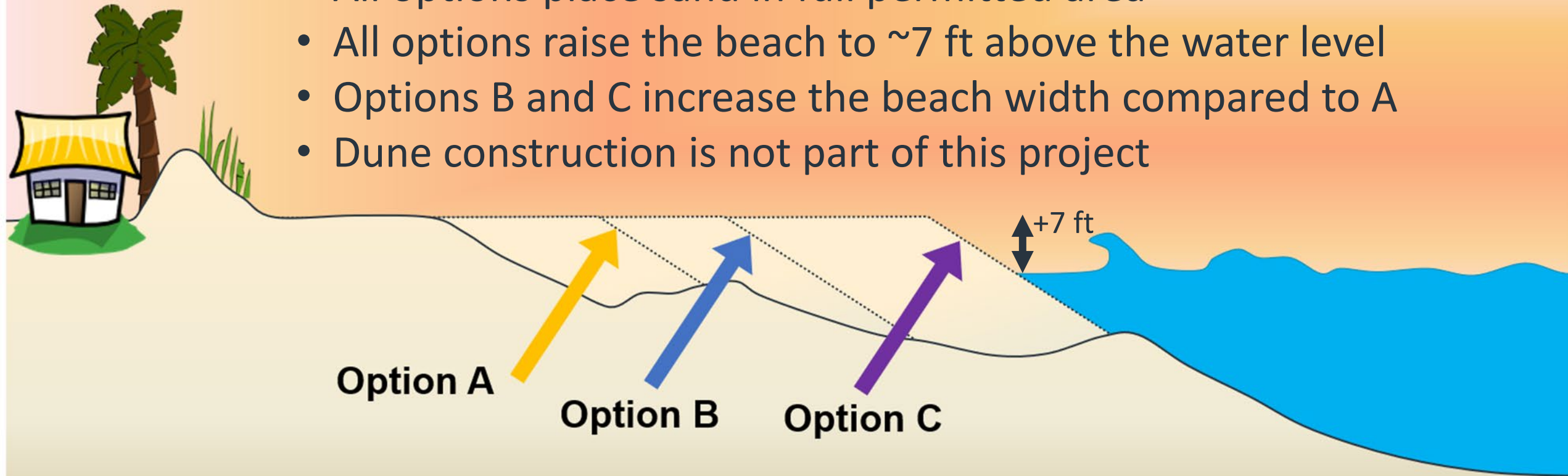
Recommended Plan:

- Place sand in entire permitted area
- Address Dorian FEMA Placement Area:
 - Settlement Agreement Area:
 - 10th Street to Imperial Condo
 - South of Settlement Agreement Area:
 - Imperial Condo to 1121 Hillsboro Mile
- Meet goals of Settlement Agreement
- Consider additional sand for recent storm impacts



PROJECT OPTIONS

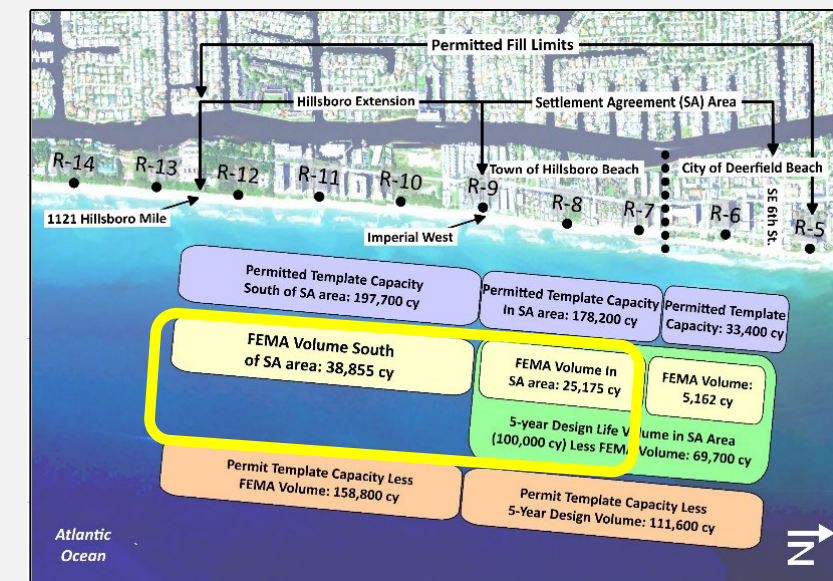
- All options place sand in full permitted area
- All options raise the beach to ~7 ft above the water level
- Options B and C increase the beach width compared to A
- Dune construction is not part of this project



Note: Graphical depiction shown for illustration purposes only and not to scale.

PROJECT OPTION A

- Places Hurricane Dorian FEMA Quantity
- Meets the design goal of the Settlement Agreement



	Area	Sand Volume (cy)	Estimated Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Hillsboro - Settlement Area	70,000	\$1.9 M		\$1 M
	Hillsboro - South Extension	38,855	\$1.6 M		\$0.2 M
	Sum	108,855	\$3.4 M	\$31.59	\$1.2 M

Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.



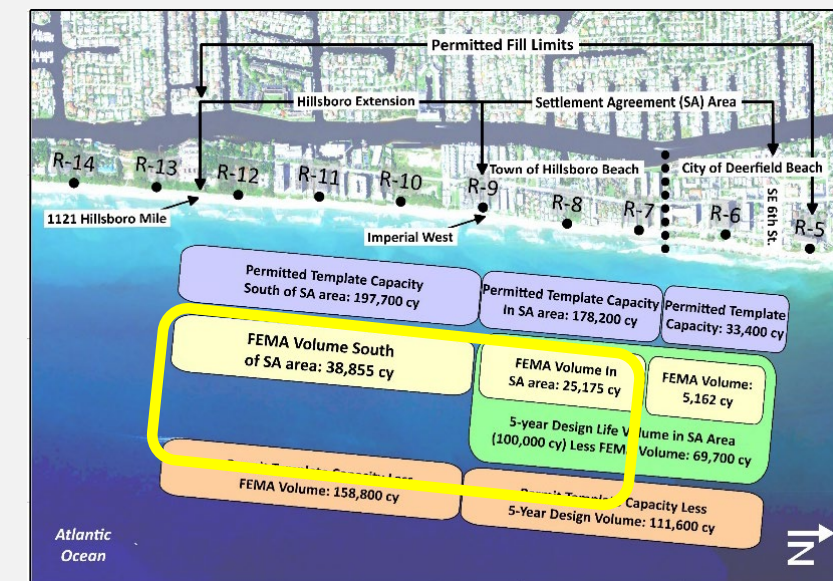
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PROJECT OPTION B1

- Places Hurricane Dorian FEMA Quantity
- Meets the design goal of the Settlement Agreement
- Bid volumes + 25% allowance
- Provides additional sand to offset recent storm impacts



	Area	Sand Volume (cy)	Estimated Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Hillsboro - Settlement Area	132,500	\$3.2 M		\$1.3 M
	Hillsboro - South Extension	62,500	\$2.3 M		\$1.0 M
	Sum	195,000	\$5.5 M	\$27.98	\$2.4 M

Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.



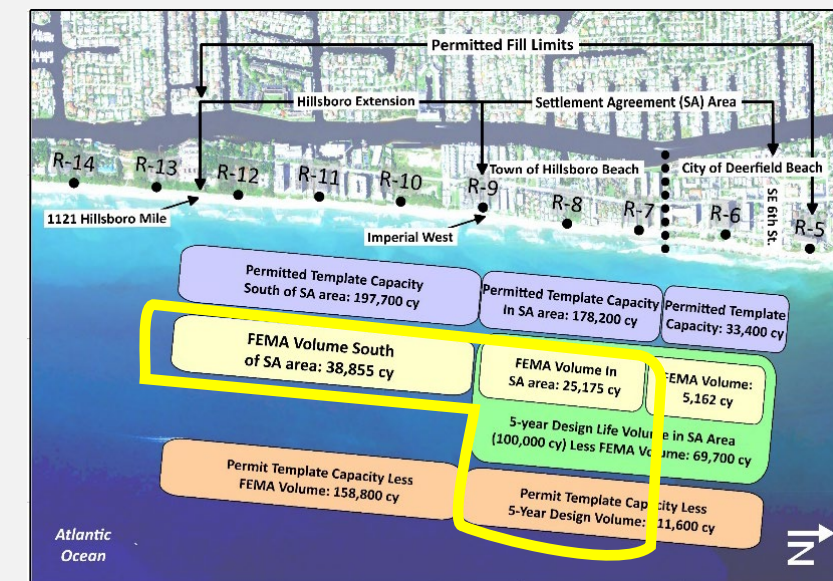
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PROJECT OPTION B2

- Places Hurricane Dorian FEMA Quantity
- Meets the design goal of the Settlement Agreement
- Maximizes FEMA and State cost share
- Provides additional sand to offset recent storm impacts as a feeder beach



	Area	Sand Volume (cy)	Estimated Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Hillsboro - Settlement Area	178,000	\$4.1 M		\$1.8 M
	Hillsboro - South Extension	38,855	\$1.4 M		\$.2 M
	Sum	216,855	\$5.6 M	\$25.60	\$2.0 M



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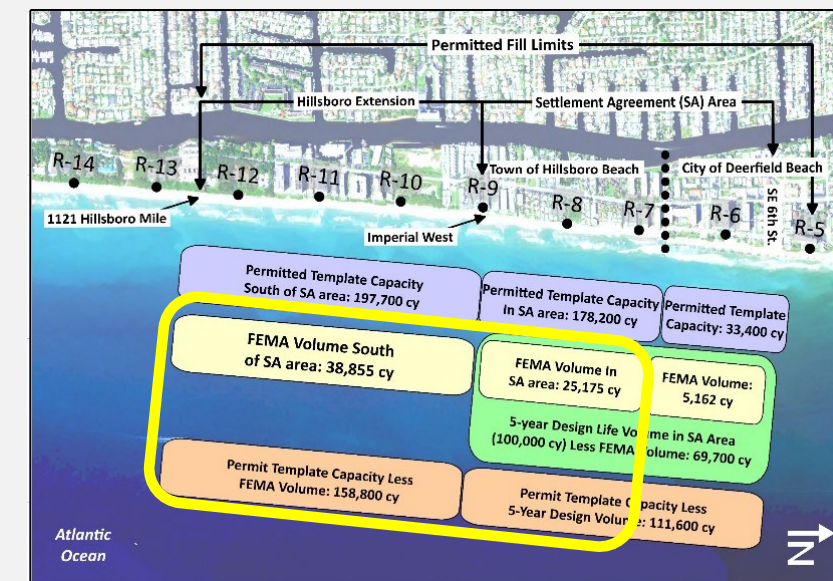
Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.



PROJECT OPTION C

- Fills the permitted template to the limits
- Pending ebb shoal volume availability and budget
- May result in renegotiation with dredge contractor
- Not recommended at this time



	Area	Sand Volume (cy)	Estimated Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Hillsboro - Settlement Area	178,200	\$3.7 M		\$1.6 M
	Hillsboro - South Extension	197,700	\$6.6 M		\$5.5 M
	Sum	375,900	\$10.3 M	\$27.41	\$7.1 M

Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.



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SUMMARY OF PROJECT OPTIONS

Project		Sand Volume (cy)	Est. Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Option A	108,855	\$3.4 M	\$31.59	\$1.2 M
	Option B1	195,000	\$5.5 M	\$27.98	\$2.4 M
	Option B2	216,855	\$5.6 M	\$25.60	\$2.0 M
	Option C	375,900	\$10.3 M	\$27.41	\$7.1 M

Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.



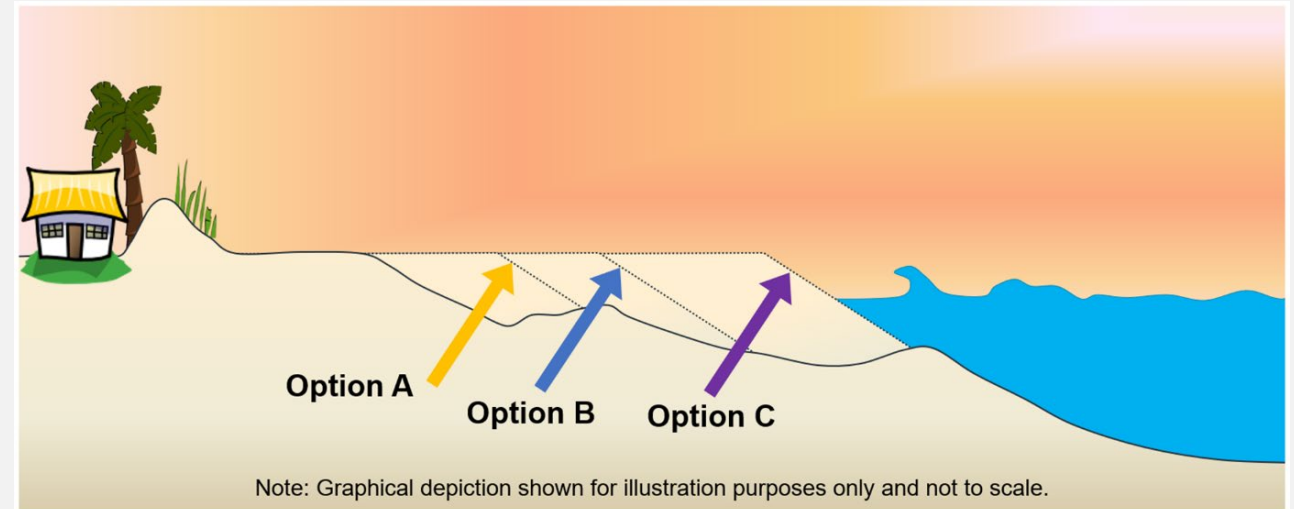
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RECOMMENDATION – OPTION B2

- ✓ Satisfy Settlement Agreement
- ✓ Complete FEMA Dorian Repair
- ✓ Offset recent erosion
- ✓ Maximize State cost share
- ✓ Lowest \$/CY



Project	Sand Volume (cy)	Est. Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
Option A	108,855	\$3.4 M	\$31.59	\$1.2 M
Option B1	195,000	\$5.5 M	\$27.98	\$2.4 M
Option B2	216,855	\$5.6 M	\$25.60	\$2.0 M
Option C	375,900	\$10.3 M	\$27.41	\$7.1 M



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Construction costs includes mobilization, sand placement and soft costs.

Assumed mobilization split based on cubic yardage and that Boca places 200,000 cy and Deerfield places 30,000cy.

FINANCE DIRECTOR DISCUSSION

Assumptions:

- Option B2 - \$5.6M
- \$1M from cash reserves
- \$4.6M draw down loan
- Interest rate: 5%
- FEMA reimbursement within one year
- \$1M financed for remaining term
- Annual loan servicing amounts:
 - 3-year term ~\$367,000/year
 - 5-year term ~231,000/year

Project		Sand Volume (cy)	Est. Total Construction Cost	Construction Overall \$/CY	Hillsboro Share After Reimbursements
	Option A	108,855	\$3.4 M	\$31.59	\$1.2 M
	Option B1	195,000	\$5.5 M	\$27.98	\$2.4 M
	Option B2	216,855	\$5.6 M	\$25.60	\$2.0 M
	Option C	375,900	\$10.3 M	\$27.41	\$7.1 M

*Note: All numbers and estimates are approximate for discussion purposes



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HILLSBORO/DEERFIELD BEACH NOURISHMENT PROJECT

PRE-PROJECT UPDATE



Coastal Protection Engineering

Tara Brenner, PG, PE, Sr. Coastal Engineer

Town of Hillsboro Beach

FDEP Monument	Address	Name
R-6+750	SE 10th Street	
R-7	1231 Hillsboro Mile	Sunrise Ocean Suites
R-8	1221 Hillsboro Mile	The Sea Club
R-9	1195 Hillsboro Mile	Hillsboro Imperial Condo
R-10	1175 Hillsboro Mile	Vacant Lot
R-11	1155 Hillsboro Mile	Hillsboro Ocean Club
R-12	1131 Hillsboro Mile	Private Home
R-13	1111 Hillsboro Mile	Private Home
R-14	1087 Hillsboro Mile	Private Home
R-15	1073 Hillsboro Mile	Kingsley Arms
R-16	1049 Hillsboro Mile	Le Baron Condo
R-17	1041 Hillsboro Mile	Hillsboro Mile Ocean Apts.
R-18	1009 Hillsboro Mile	Private Home
R-19	989 Hillsboro Mile	Private Home
R-20	969 Hillsboro Mile	Private Home
R-21	949 Hillsboro Mile	Private Home
R-22	921 Hillsboro Mile	Private Home
R-23	901 Hillsboro Mile	Hillsboro Club
R-24	Lighthouse	