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MARCH 22, 2023
HIPi ANNUAL UPDATE





HIPI ANNUAL UPDATES

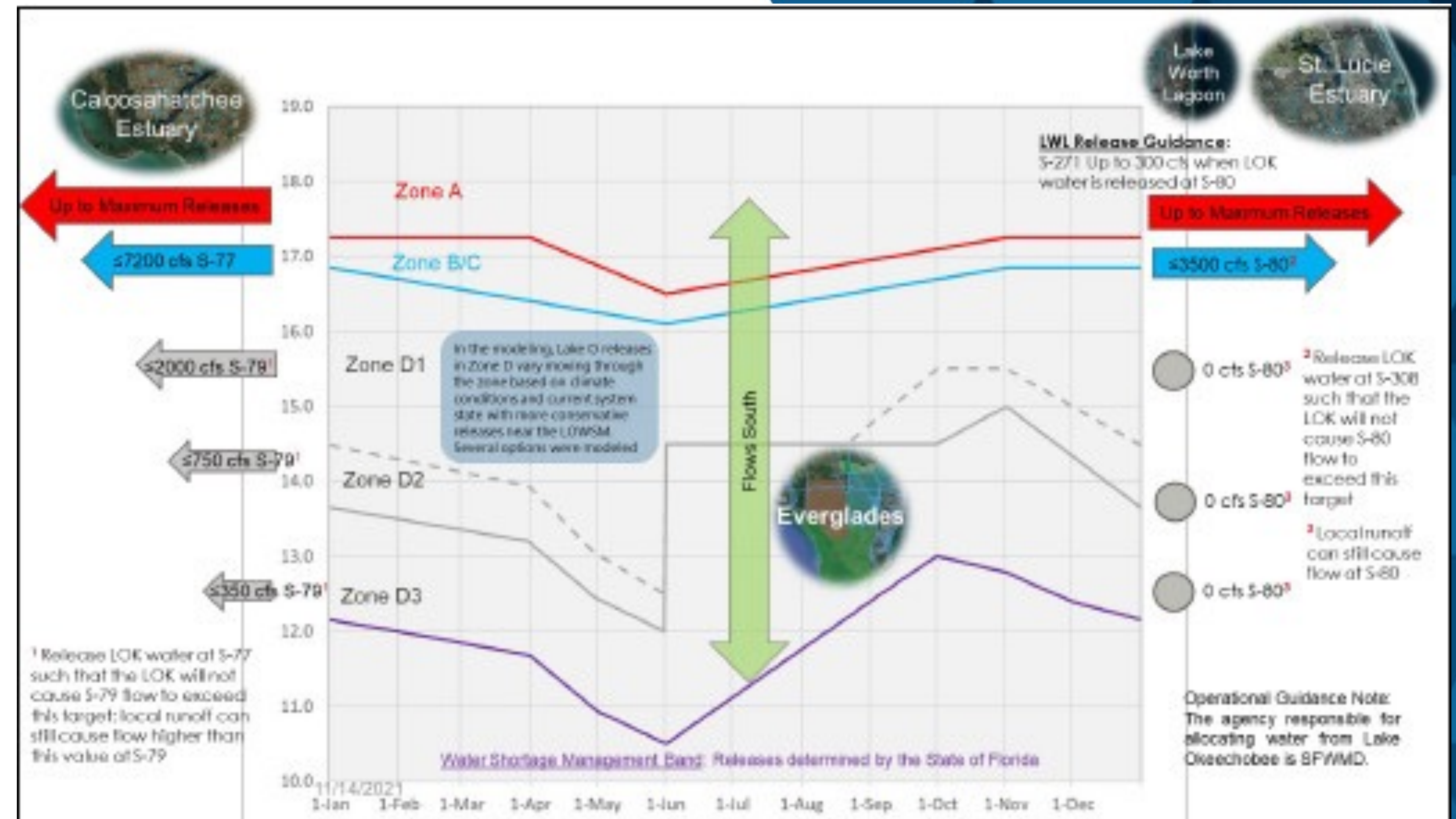
- ▶ County Update
- ▶ FDOT Safety Improvement
- ▶ MacArthur Blvd Resiliency
- ▶ 4 mile Beach Project
- ▶ MacArthur Dunes
- ▶ Bathtub Beach Project
- ▶ Sea Turtle Update



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COUNTY UPDATES

- ▶ LOSOM
- ▶ Rural Lifestyle Amendment
- ▶ Septic to Sewer Progress
- ▶ Sailfish Sands





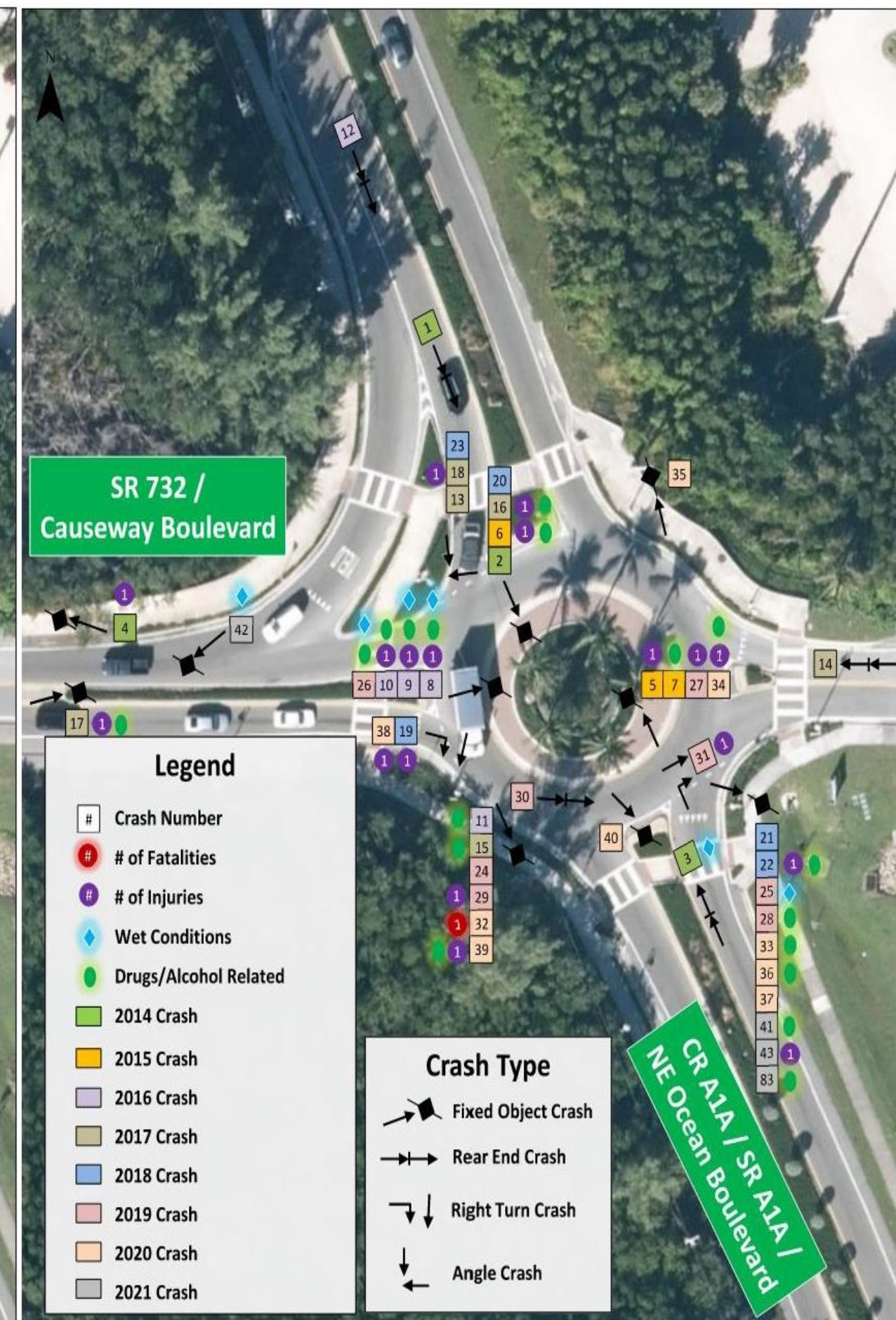
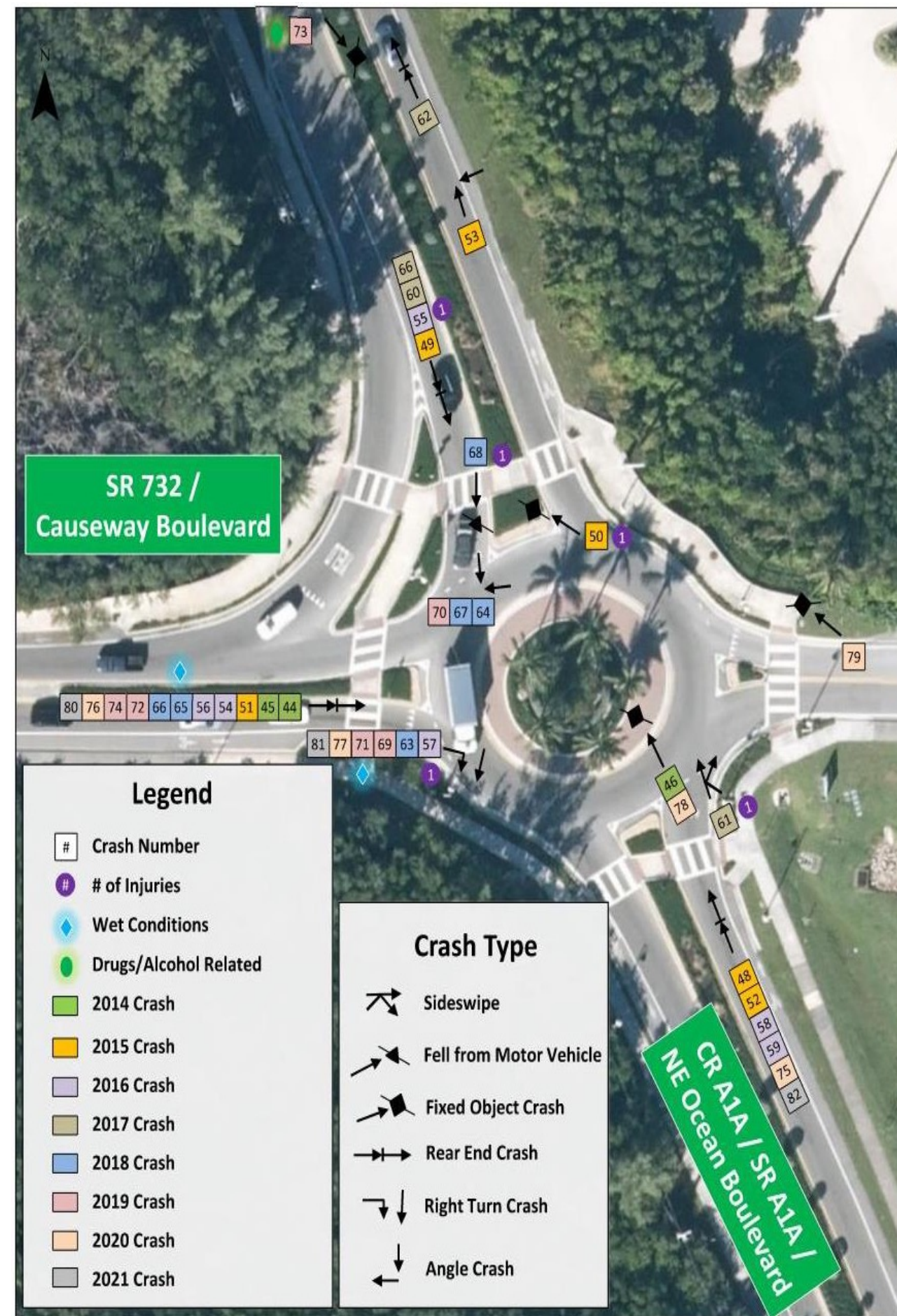
HUTCHINSON ISLAND FDOT PROJECT

- ▶ Impetus of project
- ▶ Lighting and Safety Improvements
- ▶ Current Status



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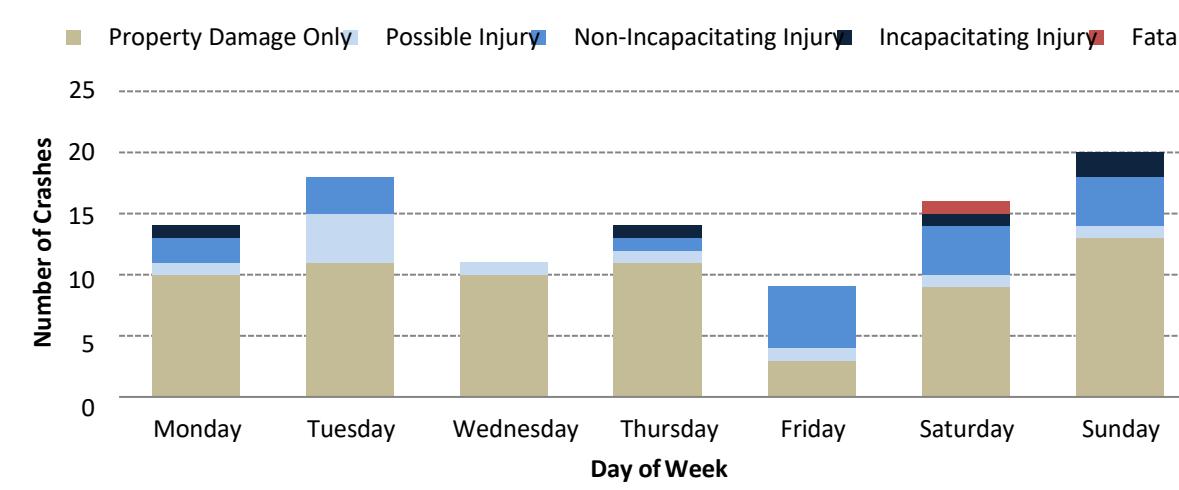
CRASH DATA



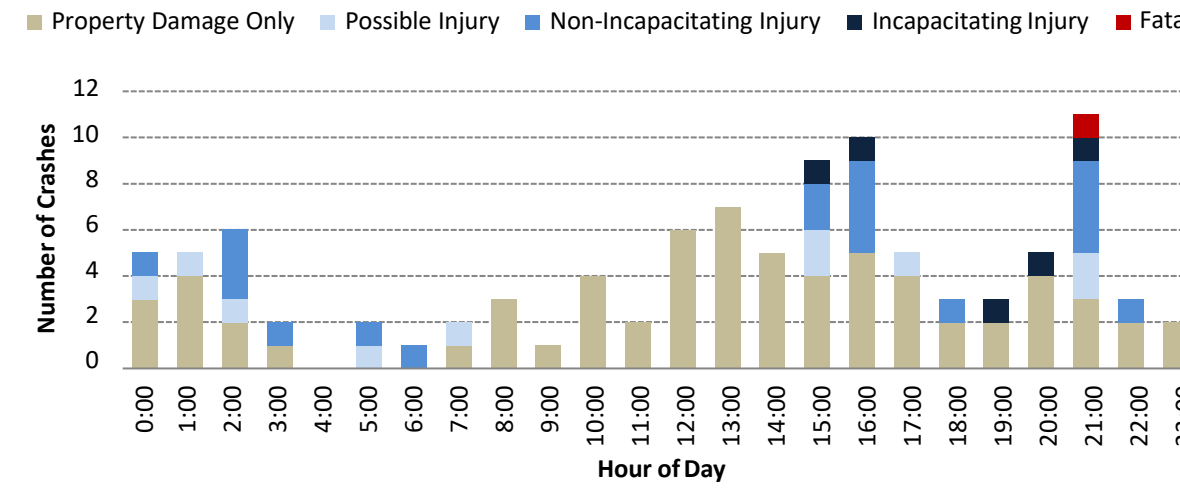


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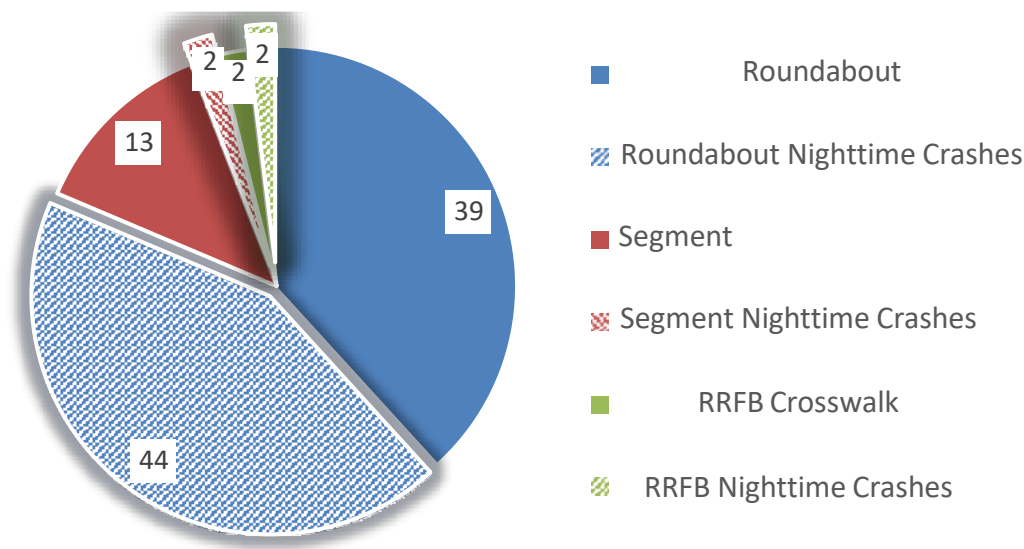
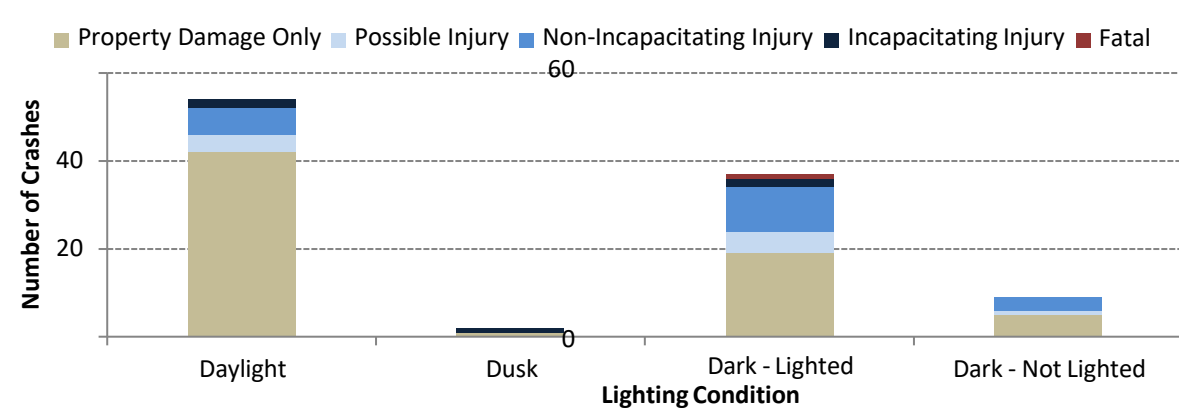
Crashes by Day of Week and Severity



Crashes by Time of Day and Severity

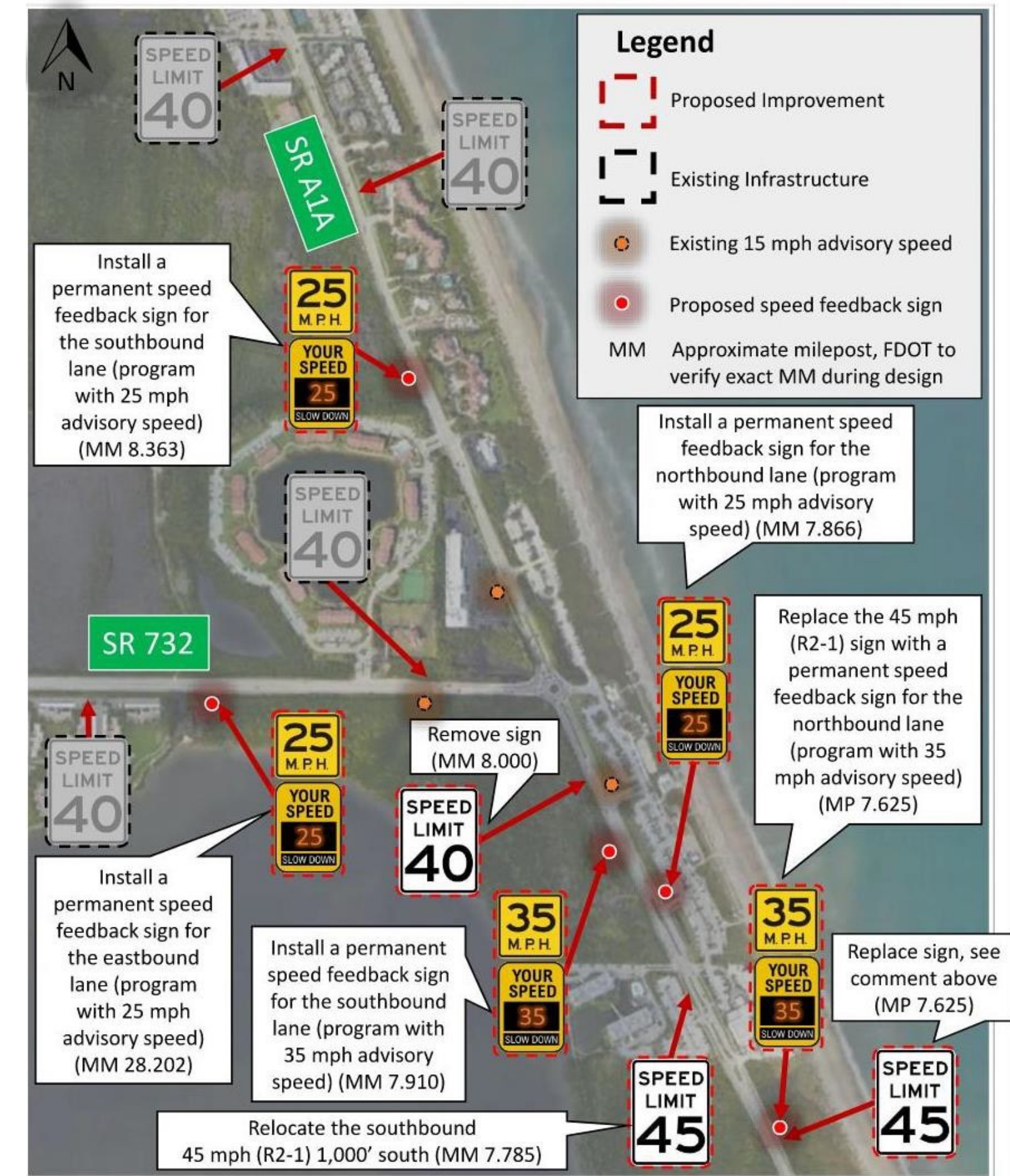


Crashes by Lighting Condition and Severity

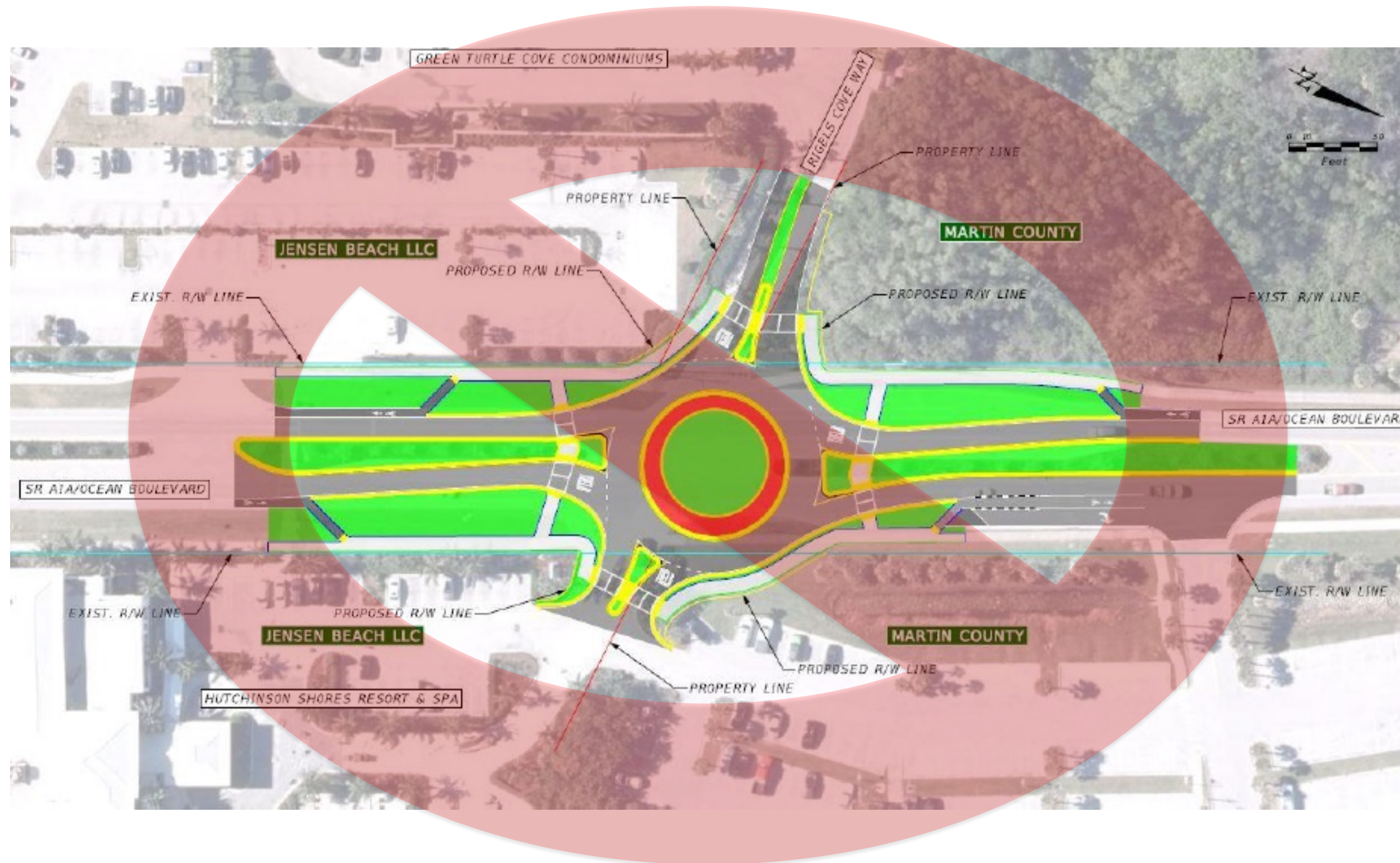


SPEED STUDY & SAFETY

- Posted speed limits:
 - 40-45 mph approaching the study area
 - 15 mph advisory speeds approaching NE Causeway Blvd
- Spot Speed Study:
 - Northbound 85th percentile speed → 45 mph
 - Southbound 85th percentile speed → 49 mph
 - The 85th percentile speed is 47 MPH



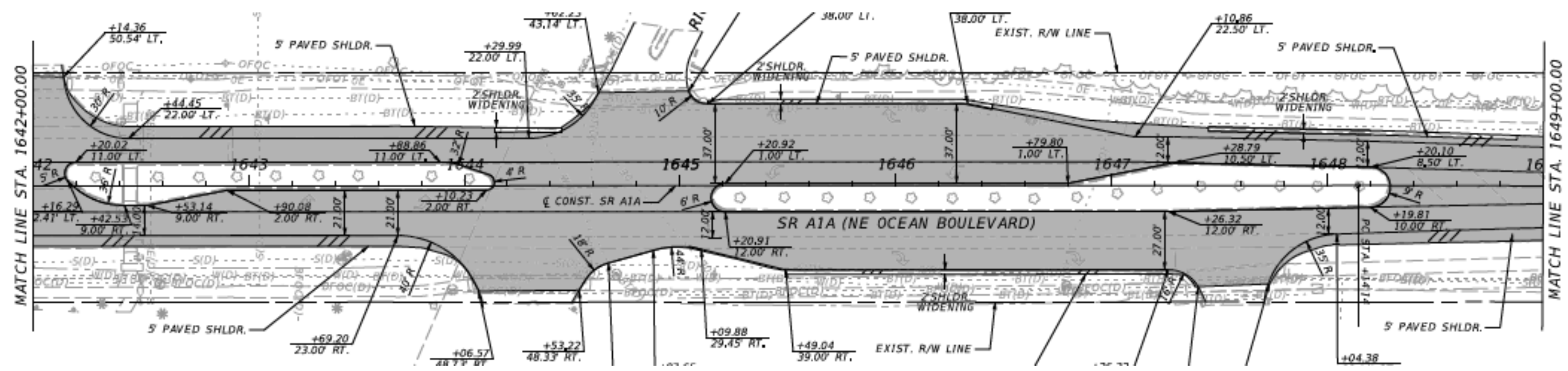
ROUNDAABOUT AT HUTCHINSON SHORES AND OCEAN BLVD



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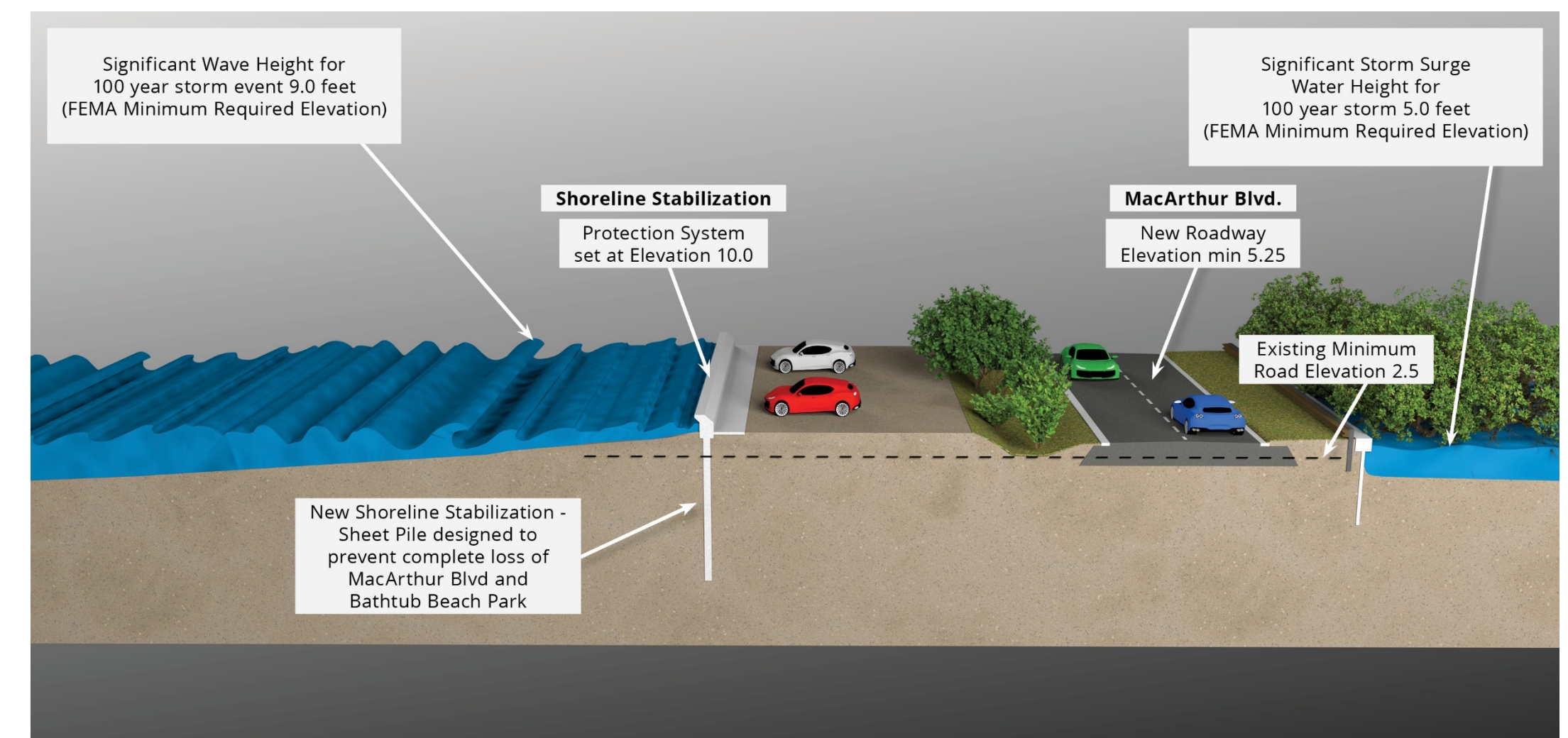
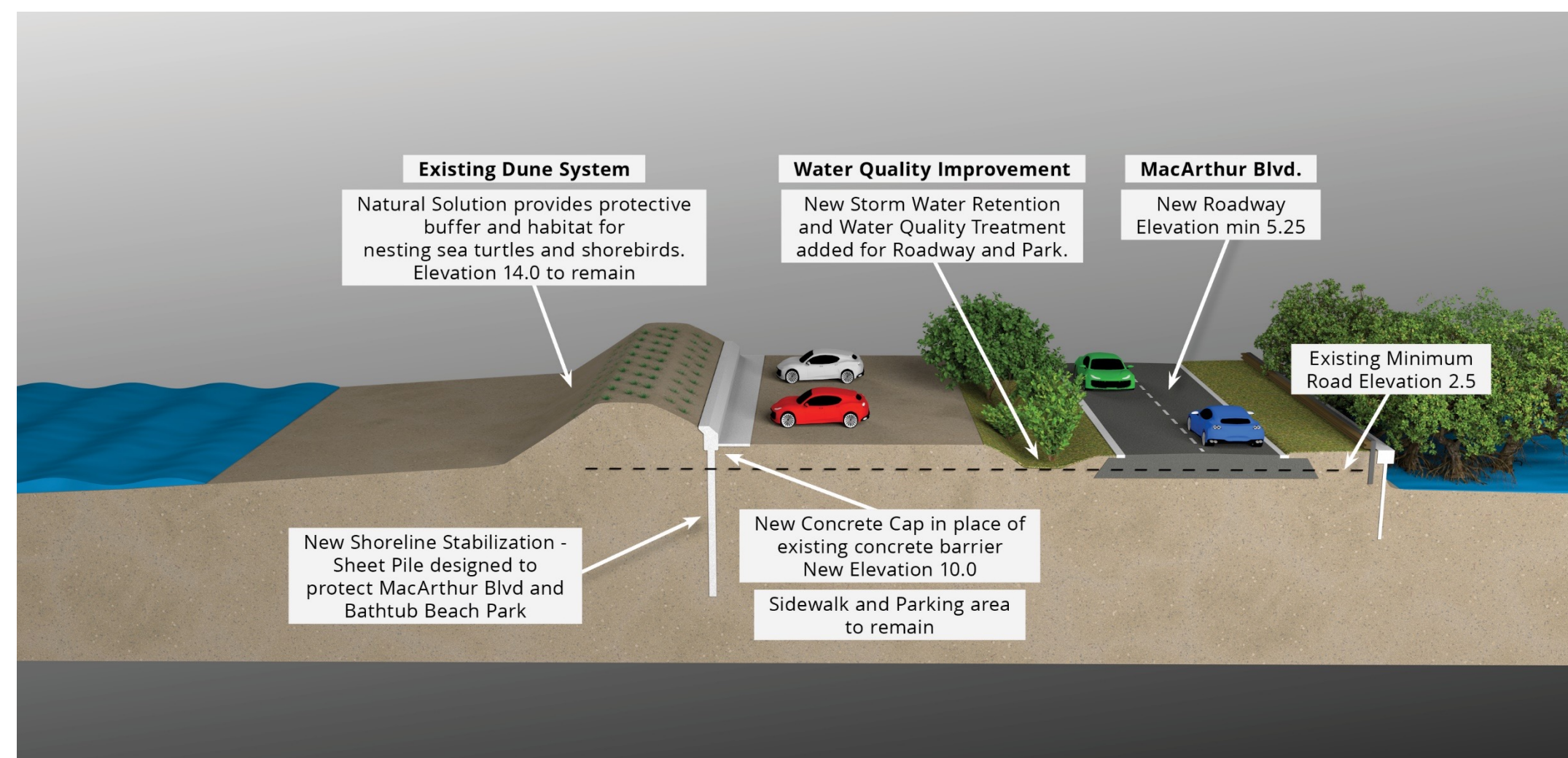
ROUNDAABOUT AT HUTCHINSON SHORES AND OCEAN BLVD



MACARTHUR BOULEVARD RESILIENCY PROJECT

The shoreline stabilization phase will target weak points of MacArthur Boulevard based on recommendations in our resiliency plan.

- ▶ Addresses impacts of sea level rise and strong storms
- ▶ Sheet pile constructed under dune line of Bathtub Reef Beach
- ▶ Reduce flooding of MacArthur Boulevard
- ▶ Reduces damages to utilities above ground and below while allowing access for residents and emergency vehicles



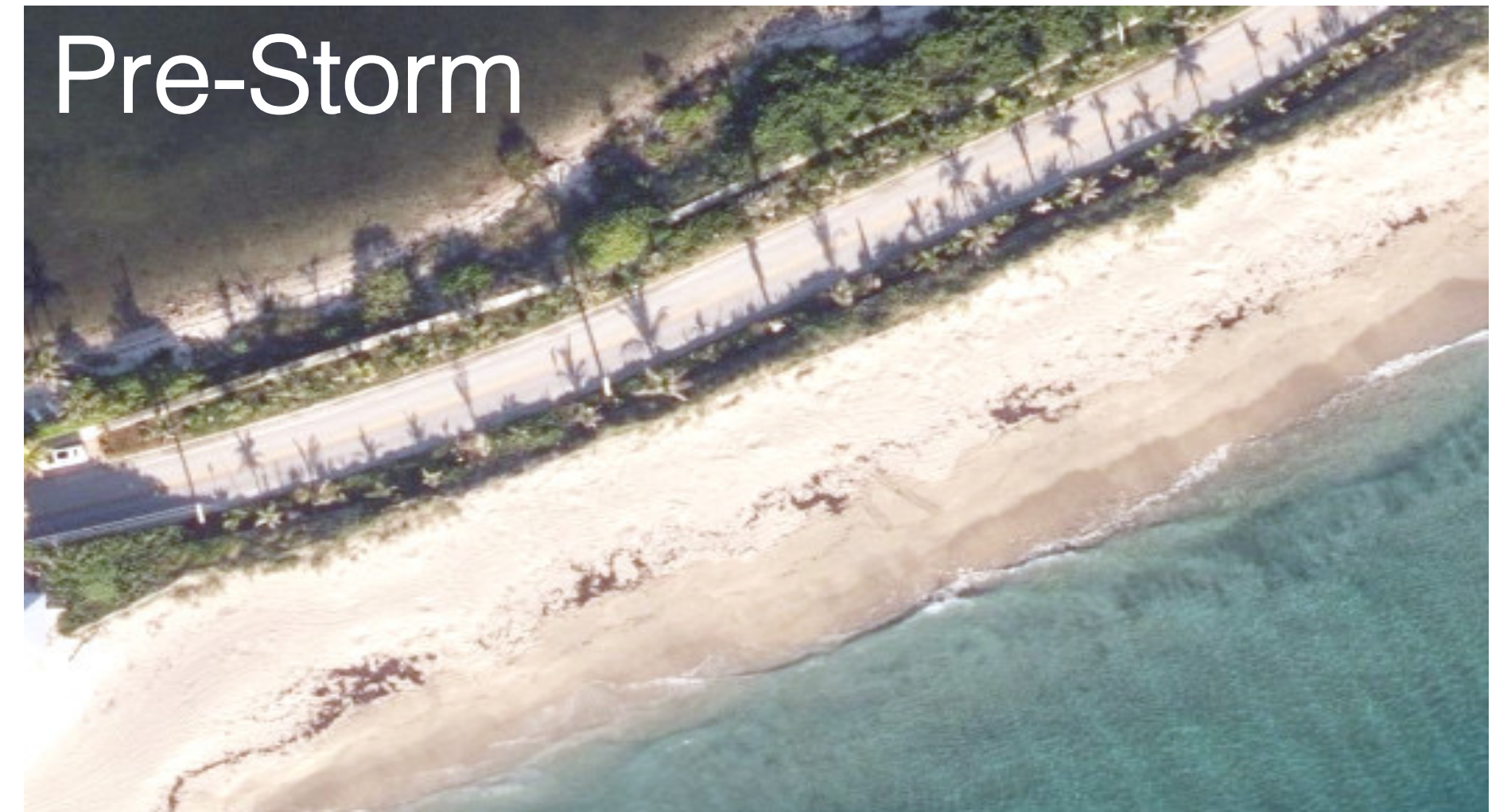
4 MILE BEACH PROJECT NEXT STEPS

- ▶ Detailed analysis of the coastline
- ▶ In-depth study of resilience alternatives
- ▶ New FDEP permit application (with revised template as needed)
- ▶ FCCE funding in response to Hurricane Nicole



MACARTHUR DUNE NOURISHMENT NEXT STEPS

- ▶ Project limits are R-27 to R-34
- ▶ Estimate of cubic yardage lost for the area is roughly 66,000 cy
- ▶ Truck haul project



BATHTUB BEACH PROJECT

- ▶ Construction contract out to bid – Summer 2023
- ▶ Proposed construction will begin – Winter 2024
- ▶ Proposed project completion – April 2024



BATHTUB BEACH PROJECT

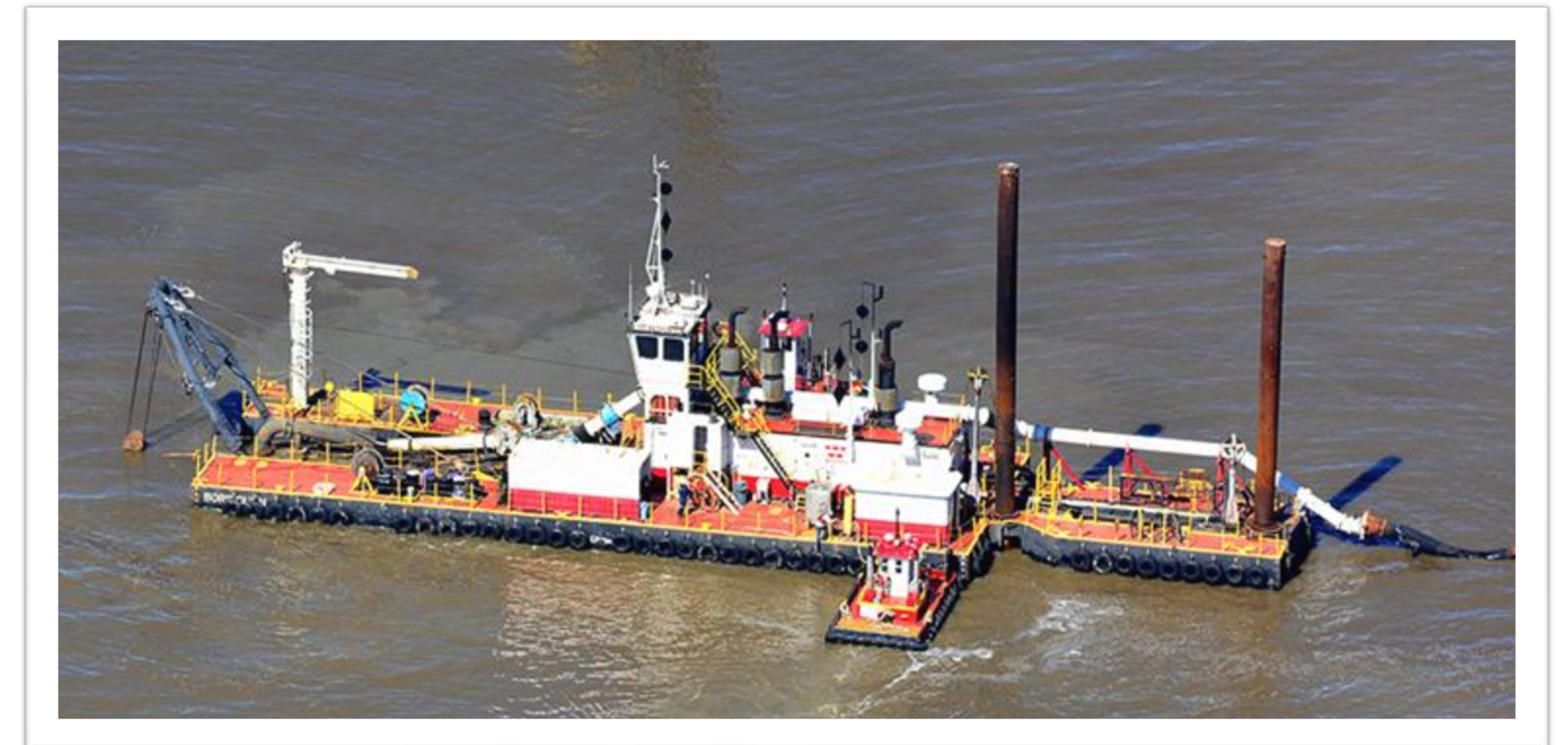
Estimated Project Details

Dredging:

- ▶ Sailfish Point channel first
- ▶ Flood shoal borrow areas
- ▶ Impoundment basin

Placement:

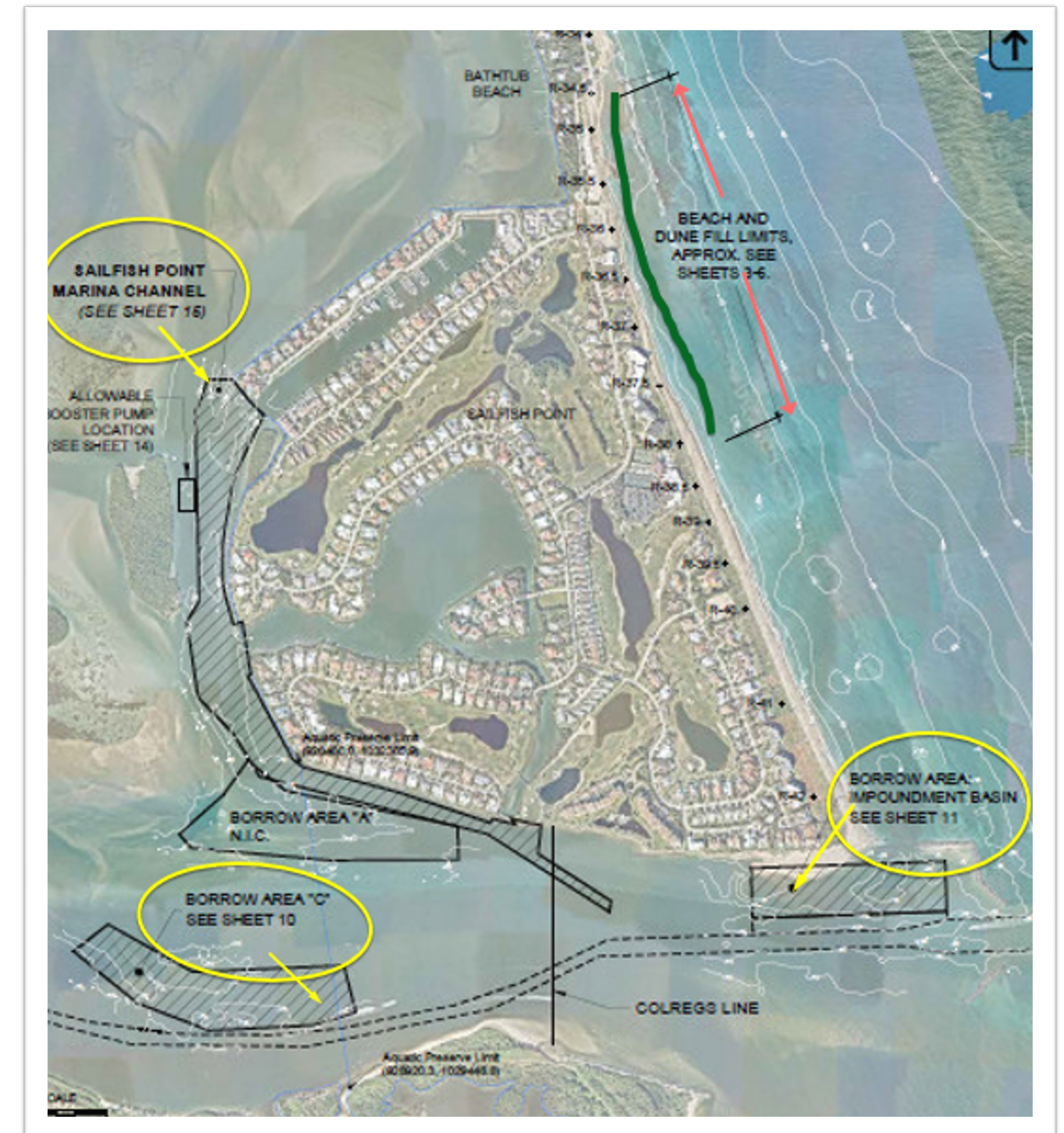
- ▶ Up to 220,000 cubic yards of sand placed
- ▶ Clubhouse through Bathtub Beach Park
- ▶ South to North



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BATHTUB BEACH PROJECT

- ▶ Estimated a need of up to 220,000 cubic yards of sand
- ▶ Work South to North
- ▶ Sea Oats will be replaced as needed
- ▶ Bathtub Beach Park will re-open after project conclusion



HOW MANY TURTLE NESTS DID WE HAVE LAST YEAR?

10,930



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Photo Credit: National Park Service

WHAT ARE WE REQUIRED TO DO?

- FDEP grants us the permits for construction
- FWC requires specific monitoring within the permit
- Ecological Associates Inc holds the FWC marine turtle permit
- Biological requirements



WHAT ARE THE BIOLOGICAL REQUIREMENTS?

- Nest Successes/Fatalities
- False Crawls
- Lighting
- Disorientation



WHAT DO WE DO FOR THE SEA TURTLES?



Lighting Evaluations



Nest Marking



Escarpment Surveys



Nest Relocations

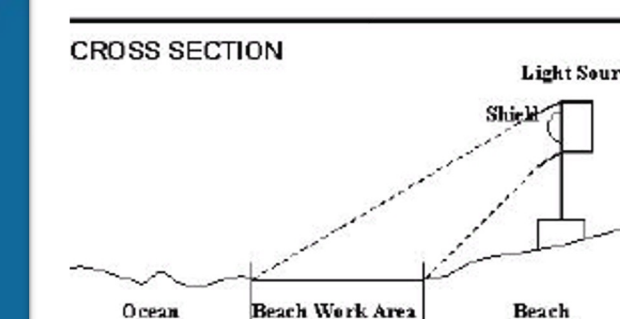
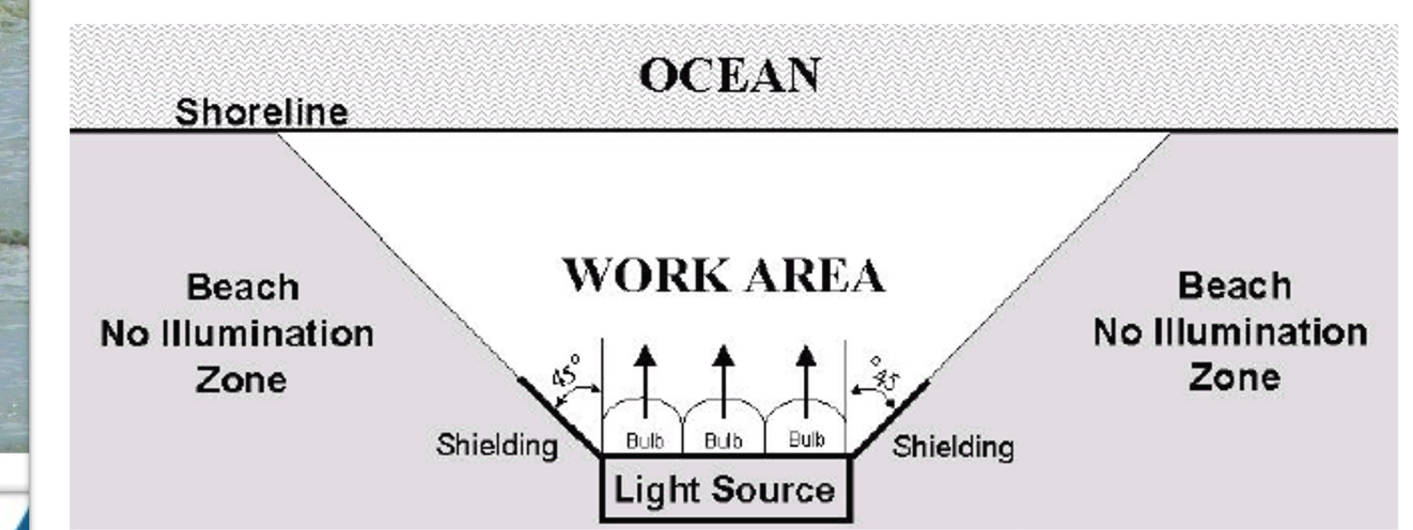
COMPLIANCE MONITORING

Sec. 4.111.C of Martin County Ordinance

Required sea turtle protection plan (STPP). A sea turtle protection plan (STPP) approved by the County in consultation with DEP shall be required for all coastal construction.....

Jurisdictional boundaries applied to sea turtle protection:

1. The area between State Road A1A and the Atlantic Ocean on Hutchinson Island;
2. The area between MacArthur Boulevard and the Atlantic Ocean on Hutchinson Island.
3. The area between Beach Road and the Atlantic Ocean on Jupiter Island;
4. The area between the coastal construction control line (CCCL), established pursuant to F.S. § 161.053, as amended, and the Atlantic Ocean.



**BEACH LIGHTING
SCHEMATIC**



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LIGHTING REQUIREMENTS:

Controlled use, design and positioning of lighting.

- Any and all light fixtures shall be designed or positioned such that they do not cause direct or indirect illumination of areas seaward of the primary dune and the source of light is not directly visible from the beach.
- All lights on balconies shall be shielded from the beach.
- The use of lighting for decorative and accent purposes, within line of sight of the beach, such as that emanating from spotlights or floodlights, is prohibited.
- The use of lights for safety and security purposes shall be limited to the minimum number required to achieve their functional roles.
- Lighting used in parking lots within line of sight of the beach shall be:
 - Set in a base which raises the source of light no higher than 48 inches off the ground.
 - Positioned or shielded such that the source of light is not visible from the beach.

Use of window treatments. To prevent interior lights from illuminating the beach, one or a combination of the following window treatments are required on all windows of single- and multi-story structures:

- Blackout draperies or shade screens.
- Window tint/film with a shading coefficient (the percent of incident radiation passing through a window) of 0.37 to 0.45.

Design of vehicular circulation and parking areas.

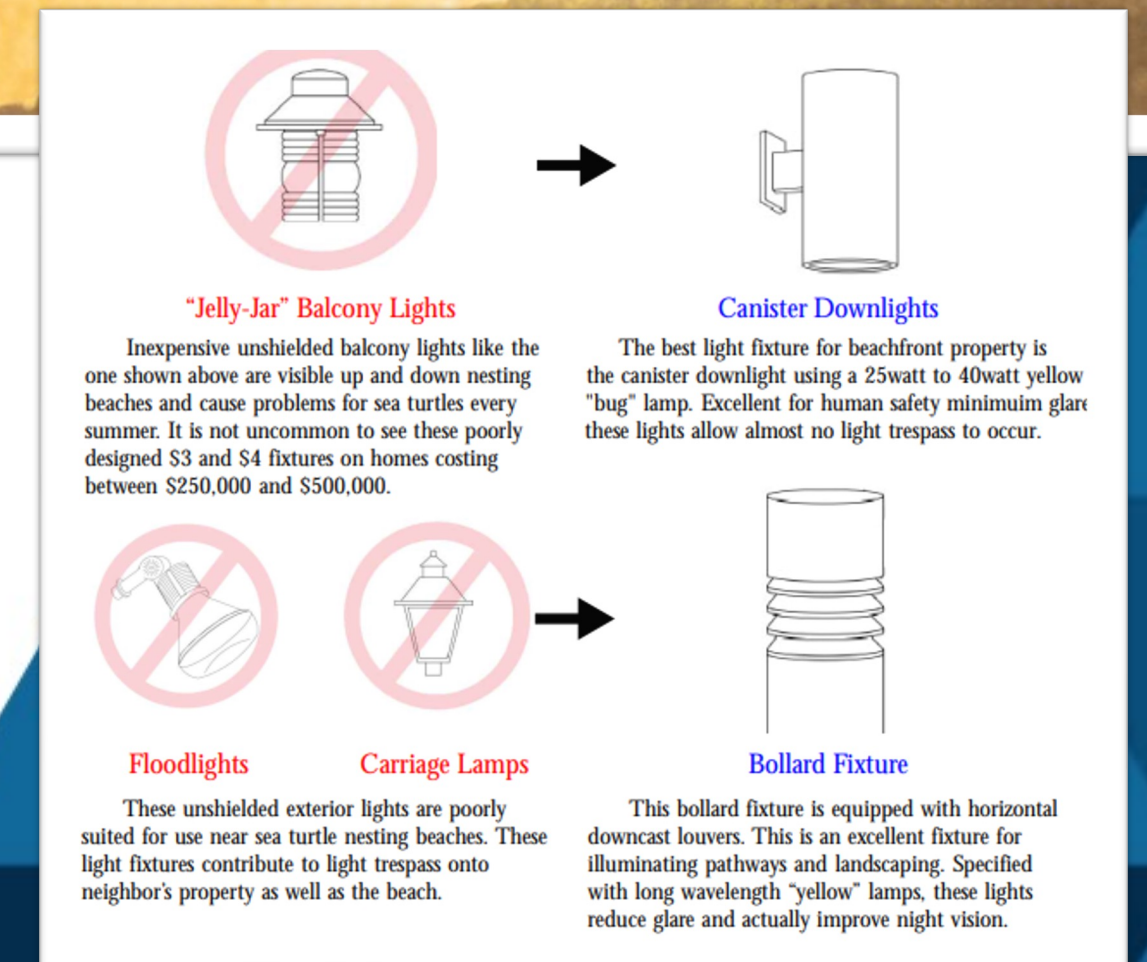
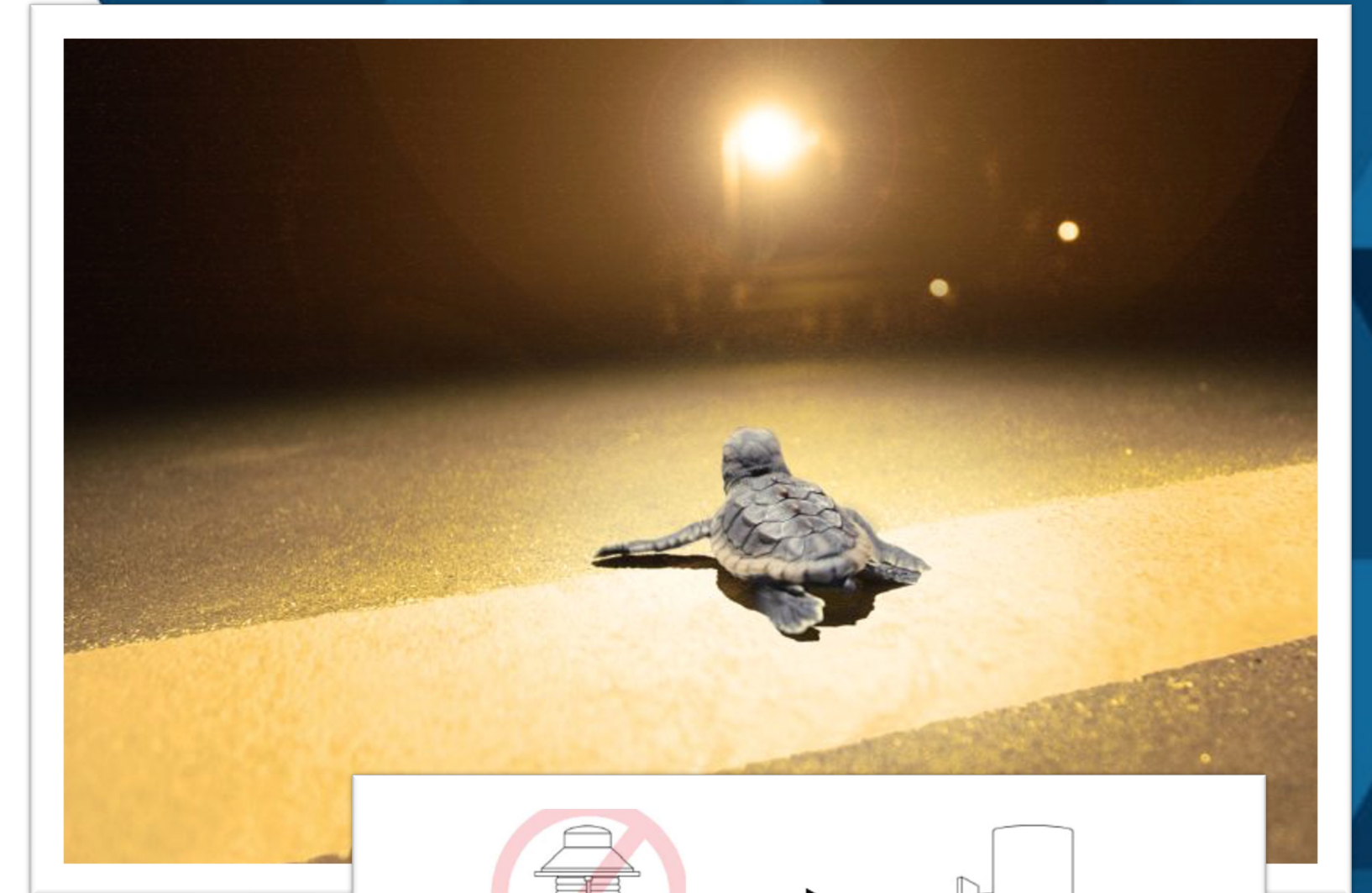
- Parking lots and roadways, including any paved or unpaved area upon which motorized vehicles will operate, shall be designed and/or positioned such that vehicular headlights do not cast light on the beach.
- Vehicular lighting shall be shielded from the beach through the use of hedges, dune vegetation and/or other ground level barriers.

Lighting for pedestrian traffic.

- Beach access points, dune crossovers, beach walkways, piers or any other structure on or seaward of the primary dune designed for pedestrian traffic shall use the minimum amount of light necessary to ensure safety.
- Lighting for pedestrian traffic shall be of low intensity and be recessed or shielded so that the source light is not directly visible from the beach.

Beachfront lighting approval. Prior to the issuance of a certificate of occupancy by the County, each STPP shall be inspected for compliance as follows:

- Upon completion of construction activities, a registered Florida architect or professional engineer shall conduct a site inspection, which includes a night survey with all beachfront lighting turned on.





THANK YOU!
► QUESTIONS?



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