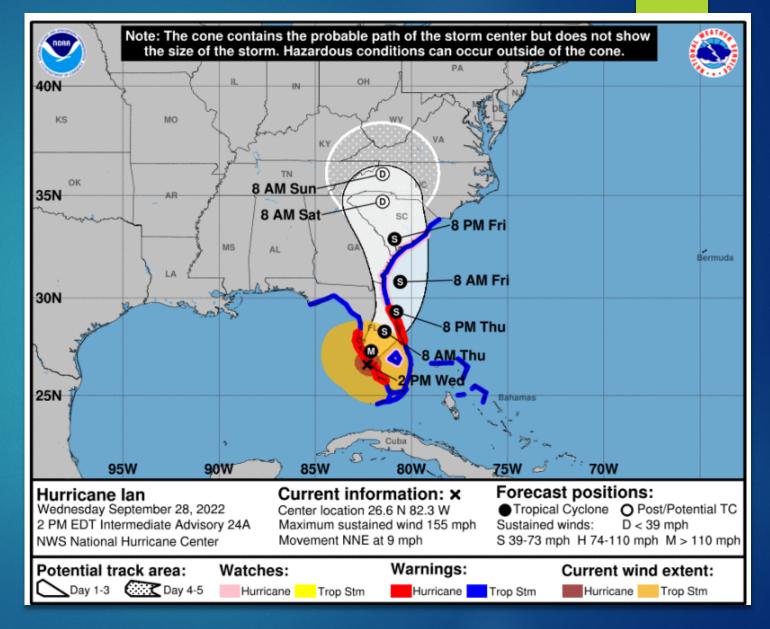


# Sanibel Causeway EMERGENCY RESTORATION

CHARITIBLE FOUNDATION OF THE ISLANDS LEADERSHIP CLASS
JANUARY 25, 2024

### Hurricane Ian Category 4

- Wednesday, September 28, 2022
- Landfall: Cayo Costa

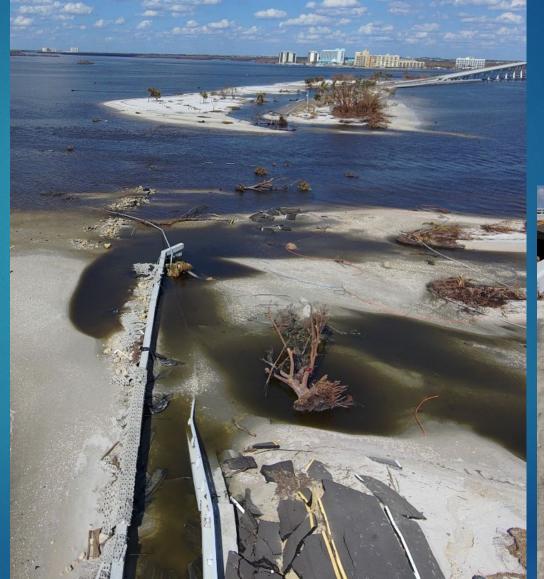


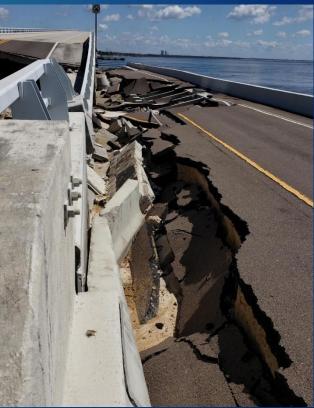


# THE BEGINNING

October 2022







#### Causeway Washouts A-B





# Causeway A-B









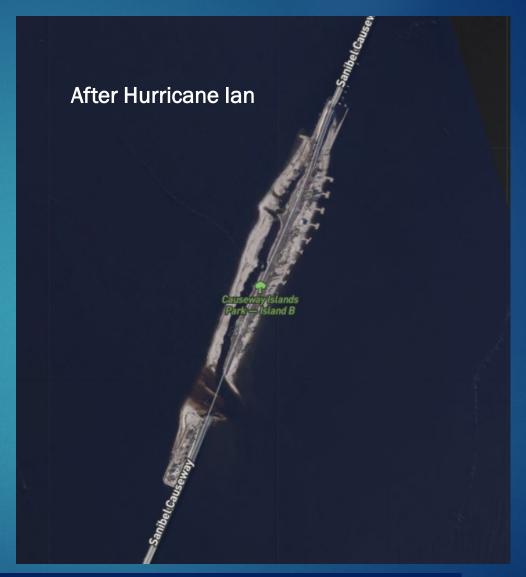
# Causeway A-B





# Causeway B-C





# Causeway B-C







# Access to Sanibel Island – **Temporary** Repairs

Anticipated Scope of Work:

- Clearing of debris as needed to install temporary repairs
- Rebuild stable roadbed for acceptable driving surface
- Stabilize (rebuild) approach slabs to bridges
- Provide two-lane access from Fort Myers (mainland) to Sanibel Island.

**Initial Estimated Cost:** \$20-40 Million

Estimated Time: 25 Days (October 29th)

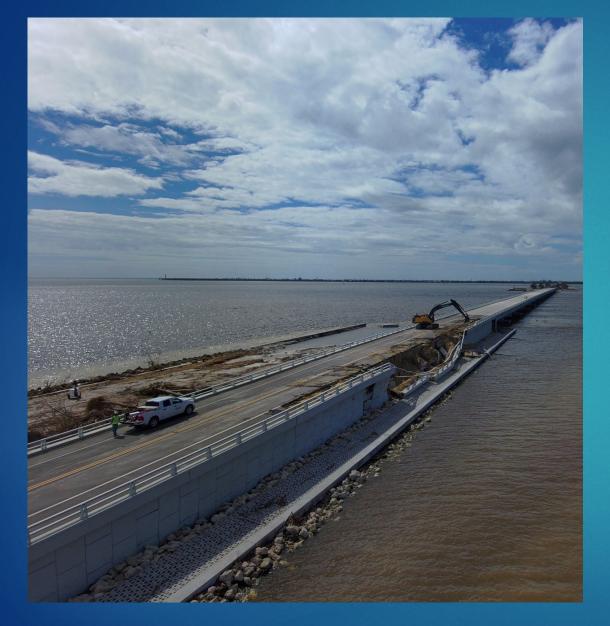


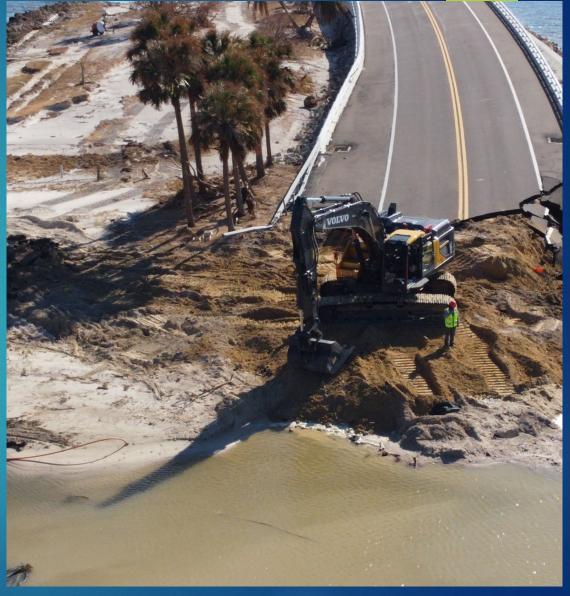
#### DAY 1

Wednesday, October 5, 2022 Mobilization

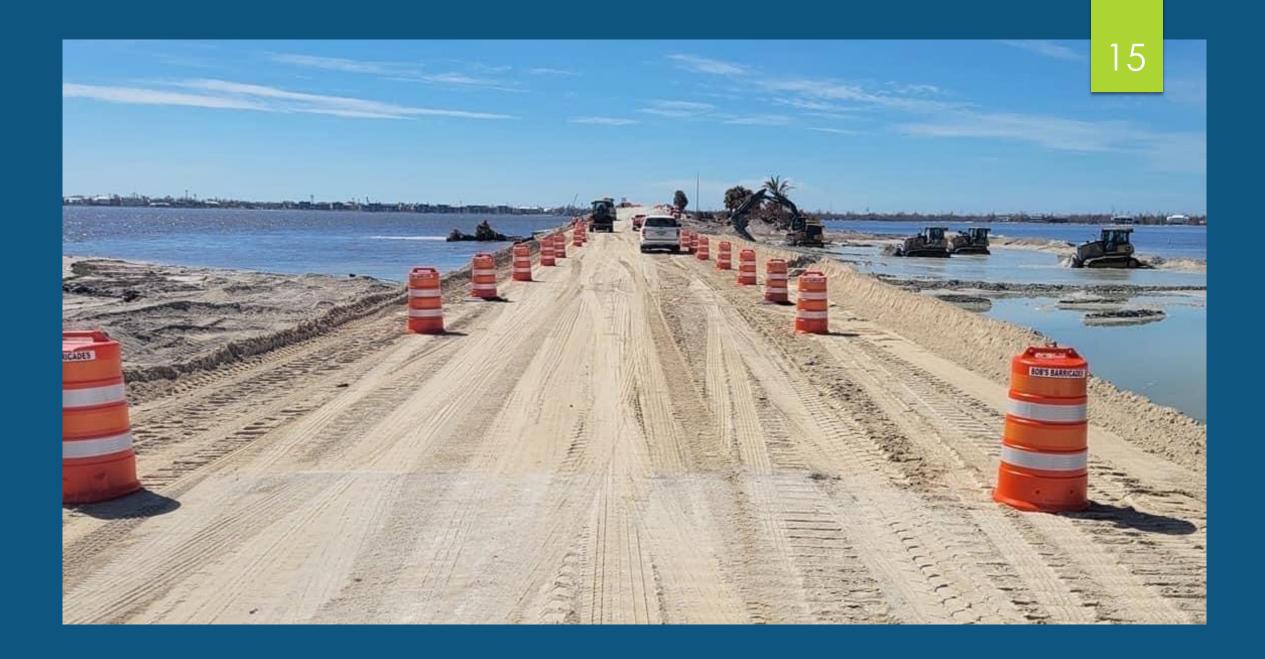






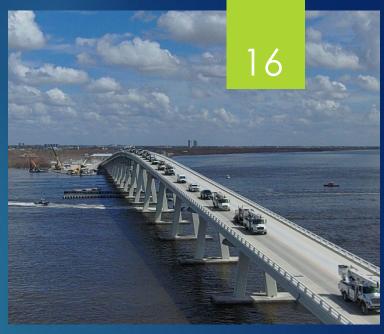












DAY 7

Tuesday, October 11, 2022 Convoy Crossing





#### DAY 15

Wednesday, October 19, 2022

Temporary Roadway Open to Hurricane Pass Holders

- ► Over 100 crew per day
- ► Over 36,000 workforce hours
- ► Work Schedule 24/7 for 15 Days
- Over 70 pieces of heavy equipment operating daily

4 Barges

7 Cranes

2 Dredges

5 Boats



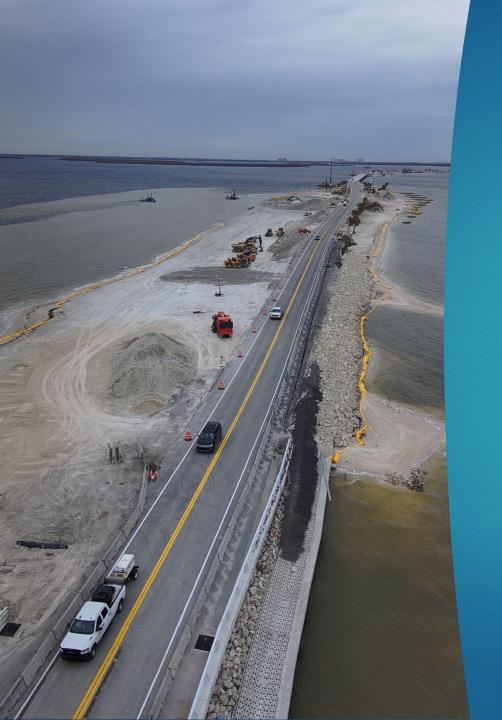
# Access to Sanibel Island – Permanent Repair

Anticipated Scope of Work:

- Build the roadway to standards and specifications
- Building permanent bridge approaches
- Restore drainage, lighting, pavement markings and provide access for utility service along the causeways

Initial Estimated Cost: \$250 - \$300 Million

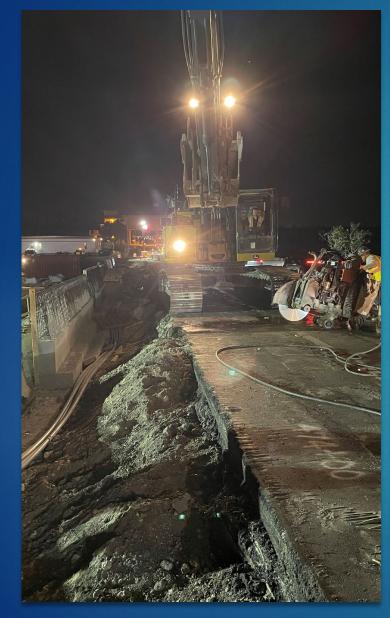
**Estimated Time:** 1 year

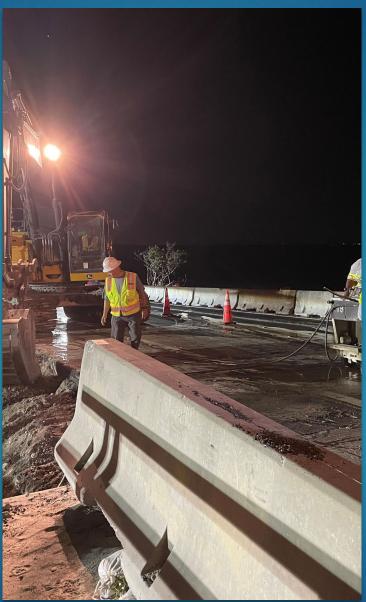


# PROGRESS MILESTONES



▶ Temporary Roadway





BridgeApproachesRebuilt

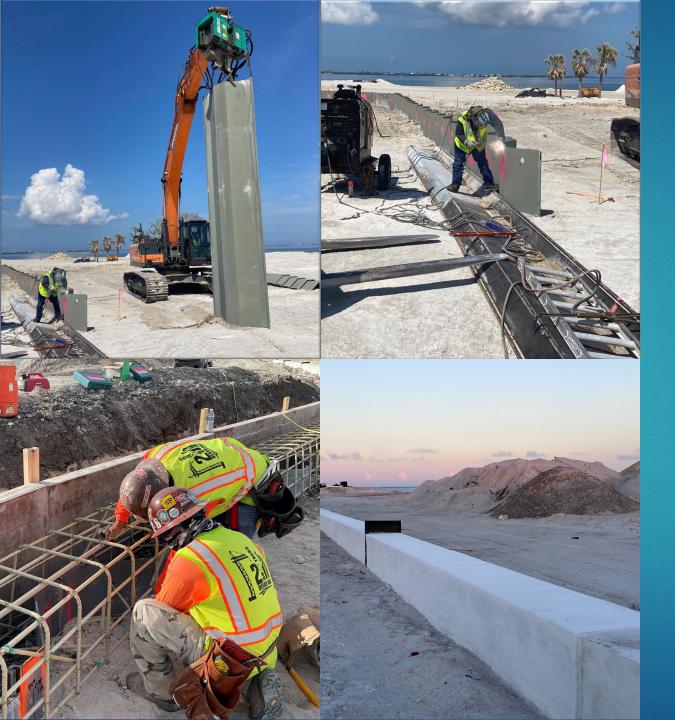


#### Several New Resiliency Features

- Several layers of protective sheet pile walls
  - each with a protective concrete cap
    - Island walls protect the causeway islands roadway completed
    - Sea walls protect the bridge approaches ongoing
    - Retaining walls protect the sides of the bridges ongoing
    - King pile protect the area near the approach slabs completed
- Marine mattresses absorb wave energy
- Armor stone protects bridge abutments
- ▶ Road surface 2' higher
- Drainage system adjacent to road
- ▶ Green infrastructure

Framework for the Island Wall caps



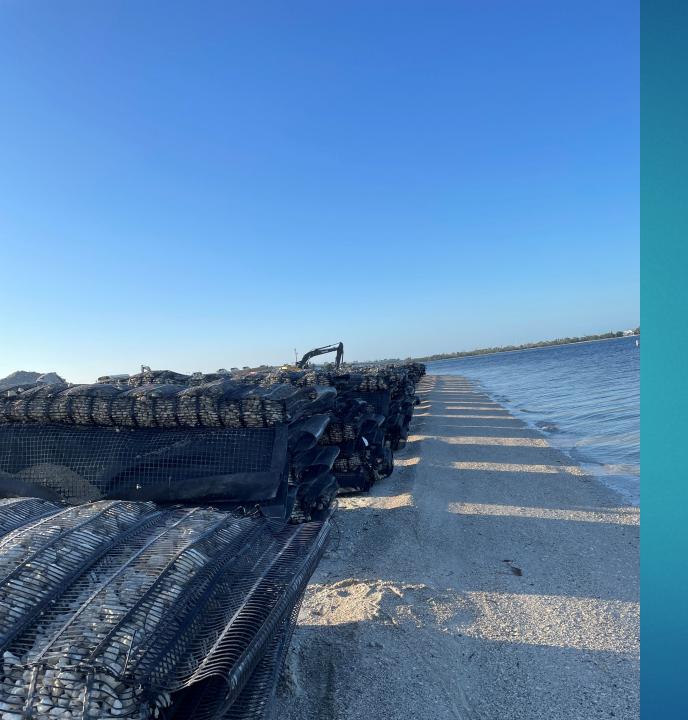


► Island Walls —
On Island Sheet Pile Installation
Protection you can't see



Cranes Placing King Pile –Provide wall structure



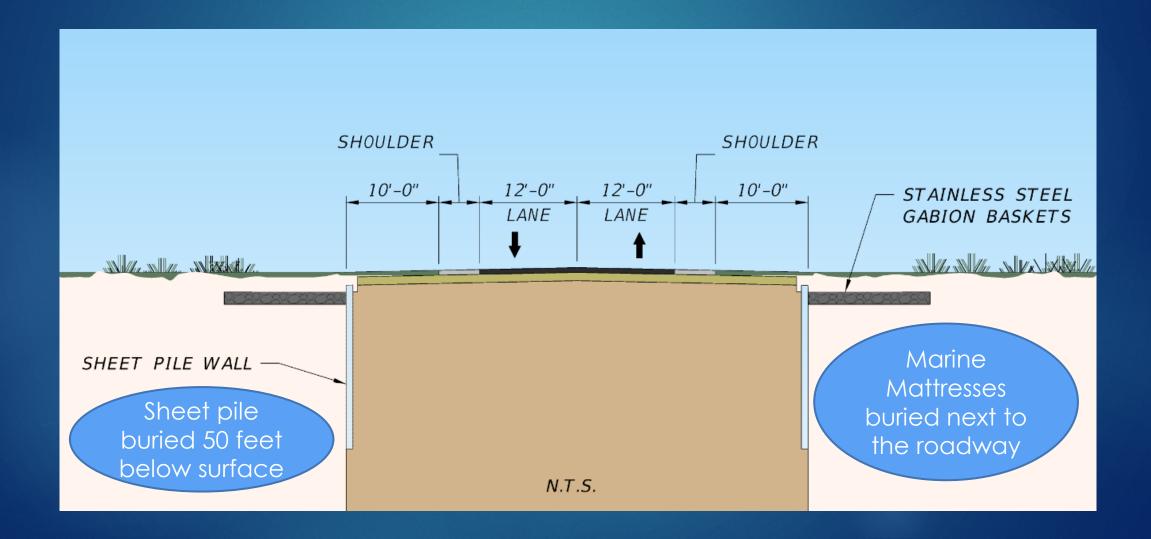


# Installation of Marine Mattresses

- Fully buried
- Fastened to retaining walls
- Absorb wave energy

### Permanent Repairs – Roadway

Typical location of sheet pile and marine mattresses



#### Green Infrastructure includes:

Native plantings



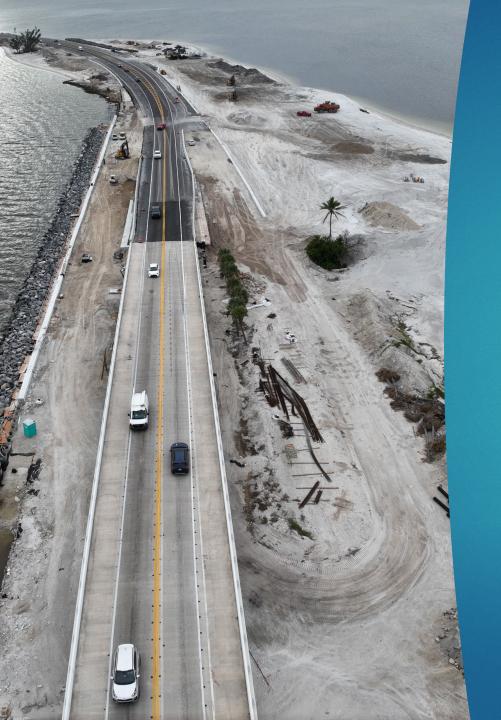
Mangroves



#### Substantial Permanent Roadway Completion – Dec. 22, 2023

- Two, 12-foot lanes through majority of Causeway
- ▶ Shoulders
- ▶ Smoother driving surface
- Fewer traffic shifts
- Minimal impacts to traffic





# WHAT'S LEFT TO DO?



### Armor Stone

- Protects the bridge abutments
- ▶ Will continue into 2025

# Earthwork/ Grading

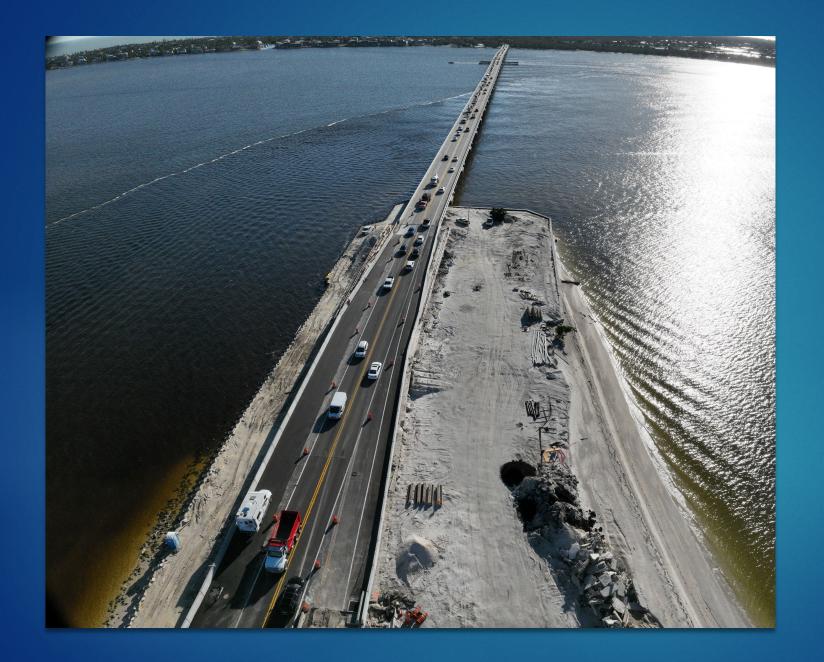
- Shape embankments
- Fine grade to set causeway islands back to pre-storm configuration
- Prepare for placement of marine mattresses





# Placement of Sod

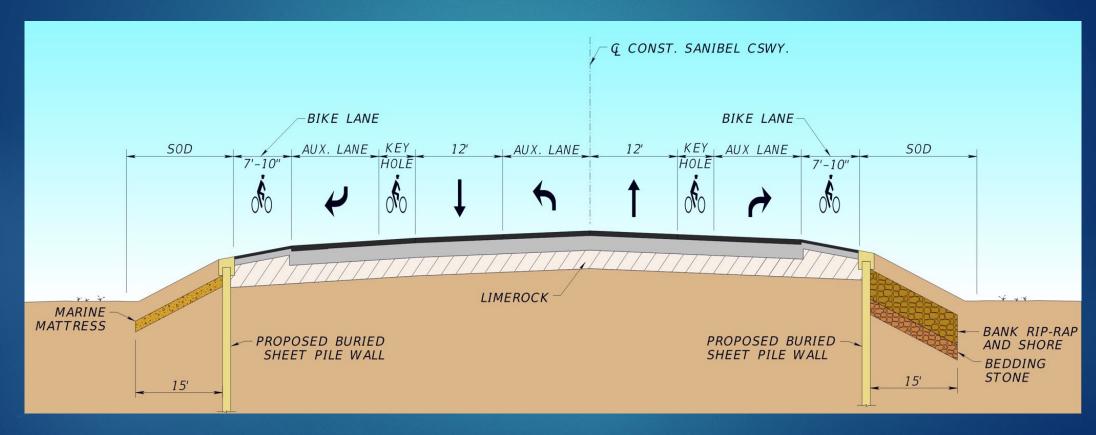




# In the Work Zone

- Construction vehicles throughout life of project
- No extended stops are permitted
- No anticipated flagging during peak hours
- Crews will be utilizing area behind barrels as much as possible

# Permanent Repairs – Island Roadway Design





#### On McGregor Boulevard

- Installation of marine mattresses for erosion control
- One lane continues from toll plaza until Port Comfort Road
- ▶ No access to shoulder

# Restoration of Punta Rassa Boat Ramp

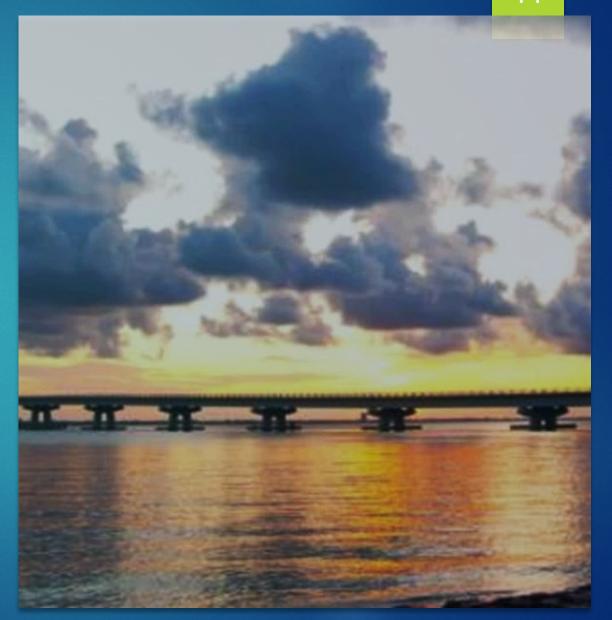




Restoration of Causeway Islands Park (Lee County)

#### Timeline

- Armoring (bridge protection)
   estimated completion –
   early 2025
- Causeway islands recreation areas restoration – estimated completion – mid 2027



#### **QUESTIONS?**

Jennifer Dorning Sanibel Causeway Community Liaison

Jennifer.Dorning@dot.state.fl.us 239-338-7723



#### **Hurricane Ian Sanibel Island Access**

from Sextant Drive to Port Comfort Road www.swflroads.com/SanibelCauseway

\*PUBLIC ACCESS TO THE CAUSEWAY ISLANDS IS
PROHIBITED DURING CONSTRUCTION\*

www.swflroads.com/SanibelCauseway