

DEPARTMENT OF TRANSPORTATION

Tiered Projects & Little Pine Island Bridge



Lee County
Southwest Florida

Lee Board of County Commissioners
Workshop | April 18, 2023



AGENDA

Recommended Priorities

•01•

Funding Opportunities

•02•

QUESTIONS

Do you concur with the proposed transportation priorities?

Do you have any other questions or input?



COST INCREASES

Tier 1 Projects

- 13 Tier 1 Projects
- 7 Considered Funded Through Construction Phase
- \$308 Million Increase to Tier 1

Causes

- Supply Chain / Inflation
- Construction Cost Increases
- Land Prices

May Affect Project Timing



PRIORITIES

Project List Adjustments

- Little Pine Island Bridge to Tier 1
- Full Replacement of Cape Bridge in Tier 1
- Phases of Corkscrew Rd., Joel Blvd. and Sunshine Blvd. to Tier 2 and 3

Programming Focus

- Tier 1 Project Cost Increases

Ranking Criteria



System Preservation & Asset Maintenance

Existing or Forecasted Service Level Deficiencies



System Continuity

Safety



Multi-Modal Benefits

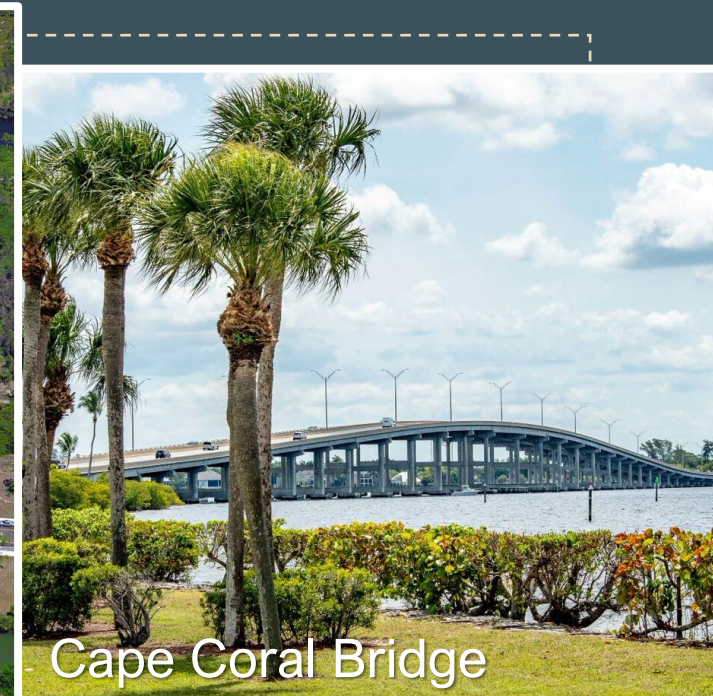
Donation or Matching Fund Offers
(State/Municipal/Private)



Return on Investment



Candidates for Federal Funding



TIER 1 PROJECTS

Recommended Priority	Project	Spent / Budgeted	Unfunded Balance	2023 Estimated Project Cost	2022 Estimated Project Cost	% Change	Recommended Funding Source
1	Three Oaks Pkwy. Extension N. to Daniels Pkwy./Daniels Pkwy. 8L, Apaloosa Ln.-I-75	\$153,807,205	\$0	\$153,807,205	\$156,470,282	-2%	Impact Fees, Gas Tax, GIF, Debt
2	Big Carlos Pass Bridge Replacement	\$102,635,477	\$0	\$102,635,477	\$80,157,241	+28%	Surplus Tolls, ARP, FDOT, Debt
3	Lehigh Acres Paving Program	\$55,398,555	\$44,601,445	\$100,000,000	\$100,000,000	-	GIF
4	Ortiz Ave. 4L, Colonial Blvd.-MLK Blvd	\$23,785,345	\$10,780,834	\$34,566,179	\$23,785,345	+45%	Impact Fees, GIF, FDOT
5	Little Pine Island Bridge		\$14,303,946	\$14,303,946		-	FDOT, GT
6	Littleton Rd. 3L, Corbett Rd.-US 41	\$16,723,642	\$5,572,090	\$22,295,732	\$15,347,569	+45%	Impact Fees, Gas Tax, FDOT
7	Corkscrew Rd. 4L, Ben Hill-Alico Rd. (2 seg.)	\$60,062,579	\$0	\$60,062,579	\$54,531,493	+10%	Impact Fees, Gas Tax, FDOT, Debt
8	Alico 4L Connector, Airport Haul Rd.-SR 82	\$191,220,795	\$39,272,804	\$230,493,599	\$171,256,253	+35%	Impact Fees, Gas Tax,
9	Ortiz Ave. 4L, MLK Blvd.-Luckett Rd. & Luckett Rd. 4L, Ortiz Ave.-I-75	\$14,047,954	\$43,635,913	\$57,683,867	\$46,572,046	+24%	Impact Fees, Gas Tax
10	Colonial Safety/Int. Improvements, US 41-McGregor	\$1,191,255	\$0	\$1,191,255	\$857,031	+39%	Surplus Tolls, Gas Tax
11	Cape Coral Bridge Full Replacement/6L	\$243,948,217	\$0	\$243,948,217	\$184,134,723	+32%	Surplus Tolls, Debt, Federal
12	Midpoint-Summerlin Flyover Bridge 6L	\$15,473,314	\$279,931,305	\$295,404,619	\$193,416,426	+53%	Surplus Tolls, Debt, Federal
13	Hickory Bridge Replacements	\$8,188,912	\$104,121,753	\$112,310,665	\$79,665,777	+41%	Surplus Tolls, Gas Tax, Federal
SUBTOTAL		\$886,483,250	\$542,220,090	\$1,428,703,340	\$1,106,194,186	+29%	

TIER 2 PROJECTS

Recommended Priority	Current Priority	Project	Updated Score	Spent / Budgeted	Unfunded Balance	Estimated Project Cost
14	17	Orange River Blvd. Bridge Replacement	6.7		\$6,371,081	\$6,371,081
15	15	Burnt Store Rd. 4L, Van Buren-Charlotte Co.	6.35	\$23,000,000	\$193,882,067	\$216,882,067
16	NEW	Buckingham Rd. 4L, Orange River Blvd.-Palm Beach	5.9		\$64,298,343	\$64,298,343
17	16	Ortiz Ave. 4L, Lockett Rd.- Palm Beach Blvd.	5.4	\$11,558,339	\$37,188,059	\$48,746,398
18	13	Veterans Pkwy. 6L, Chiquita Blvd.-Skyline Blvd.	5.4		\$26,093,058	\$26,093,058
19	19	Corkscrew Rd. 6L, Three Oaks Pkwy.-I-75	5.6		\$13,595,512	\$13,595,512
20	NEW	Joel Blvd. 17 th St W to SR 80	5.55		\$67,669,116	\$67,669,116
21	22	Sunshine Blvd. 4L, 23 rd St. SW-Lee Blvd.	4.55		\$48,031,919	\$48,031,919
22	20	Stringfellow Bridge Replacement (Monroe Canal)	5.4		\$3,185,170	\$3,185,170
23	14	Corkscrew Rd. 4L, Alico Rd.-Verdana Ent. PH3	5.35		\$90,594,501	\$90,594,501
24	NEW	Sunshine Blvd. 4L, Lee Blvd. to 75 th St W	5.3		\$177,872,213	\$177,872,213
25	21	Broadway St. (Alva) Bridge Replacement	5.15		\$26,553,390	\$26,553,390
26	18	Homestead Rd. 4L, Milwaukee Blvd.-Sunrise Blvd.	4.9		\$19,148,138	\$19,148,138
SUBTOTAL				\$34,558,339	\$774,482,567	\$809,040,906

TIER 3 PROJECTS

Recommended Priority	Current Priority	Project	Updated Score	Spent / Budgeted	Unfunded Balance	Estimated Project Cost
27	NEW	Corkscrew Rd 6L, Firehouse Ln. - Bella Terra	4.95		\$33,783,961	\$33,783,961
28	NEW	Corkscrew Rd 6L, Bella Terra - Alico Rd.	4.95		\$40,872,758	\$40,872,758
29	NEW	Sunshine Blvd 4L Extension (75 th St W to SR 80)	4.9		\$66,621,461	\$66,621,461
30	NEW	Corkscrew Rd 4L, Verdana-County Line	4.35		\$147,912,842	\$147,912,842
31	22	Crystal Dr. 2L Ext., Plantation Rd.-Six Mile Pkwy.	3.9		\$17,471,956	\$17,471,956
32	23	Hancock Bridge Pkwy. Bridge Replacement	4.6		\$9,777,089	\$9,777,089
33	25	Veterans/Santa Barbara Overpass	3.4		\$45,500,000	\$45,500,000
34	26	Harbor Drive (Boca Grande) Bridge Replacement	3.2		\$2,805,133	\$2,805,133
35	27	Bonita Beach Rd. 6L, US 41-Old 41	2.95	\$1,994,332	\$42,601,841	\$44,596,173
36	28	Crystal Dr. 3L, US 41-Metro Pkwy.	2.35		\$30,829,456	\$30,829,456
SUBTOTAL TIER 3				\$1,994,332	\$438,176,497	\$440,170,829
TOTAL ALL TIERS				\$923,035,921	\$1,754,879,154	\$2,677,915,075

QUESTIONS

Do you concur with the proposed transportation priorities?

Do you have any other questions or input?





Little Pine Island Bridge Repair Options



Before Hurricane Ian

History

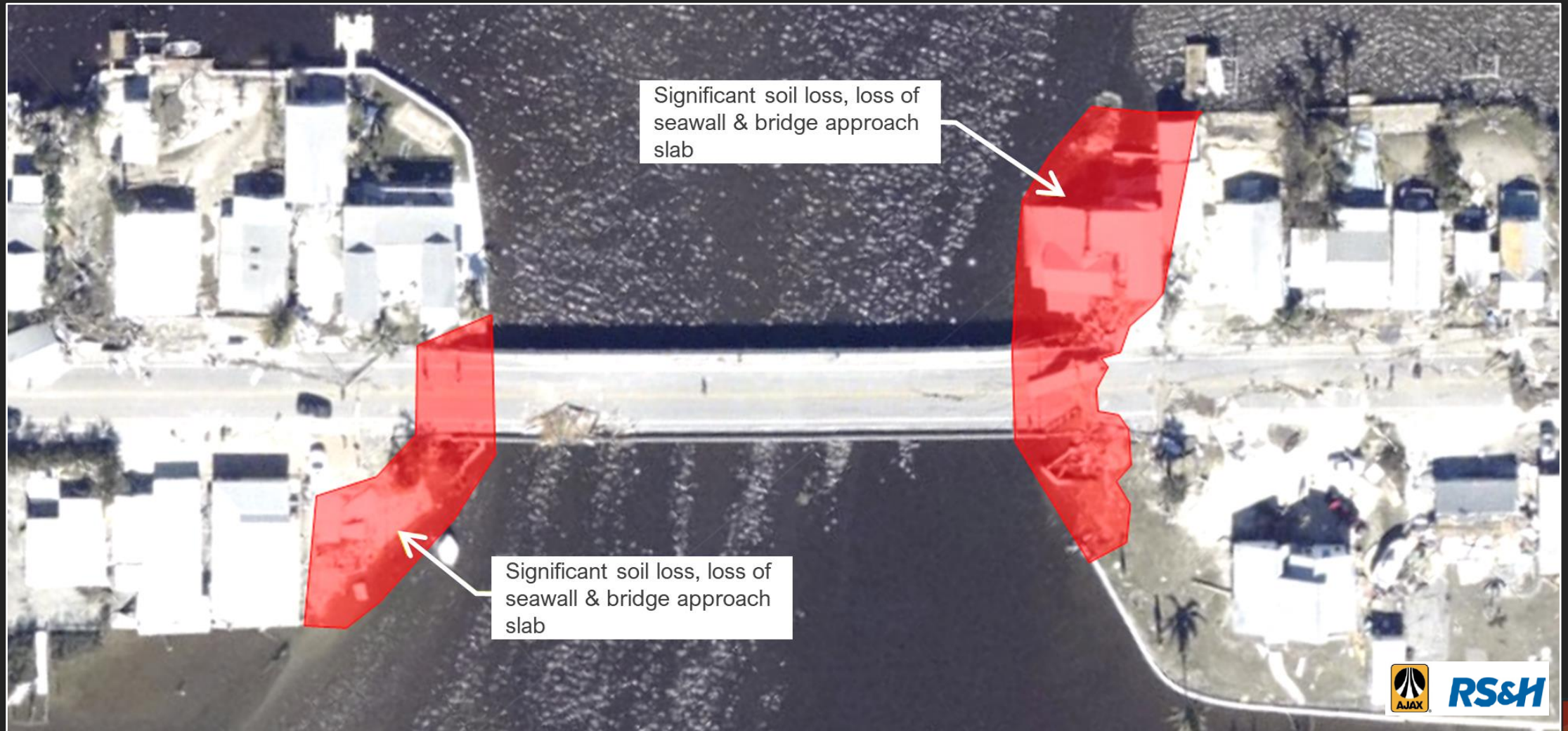
- Designed 1974; Built 1977

Structure

- Sufficiency Rating: 46
- <50 qualifies for replacement per FHWA
- Classified Structurally Deficient
- FDOT Inspection 8/2022



After Hurricane Ian





Hurricane Ian Damage

East Approach Collapse

Severed Utilities
Total Seawall Failure
Roadway Cutoff
Major Scour: -21' At East End

West Approach Damage

Roadway Undermined
Soil Loss Behind Seawall
Seawall Damaged Beyond Repair
Major Scour: -11' At West End

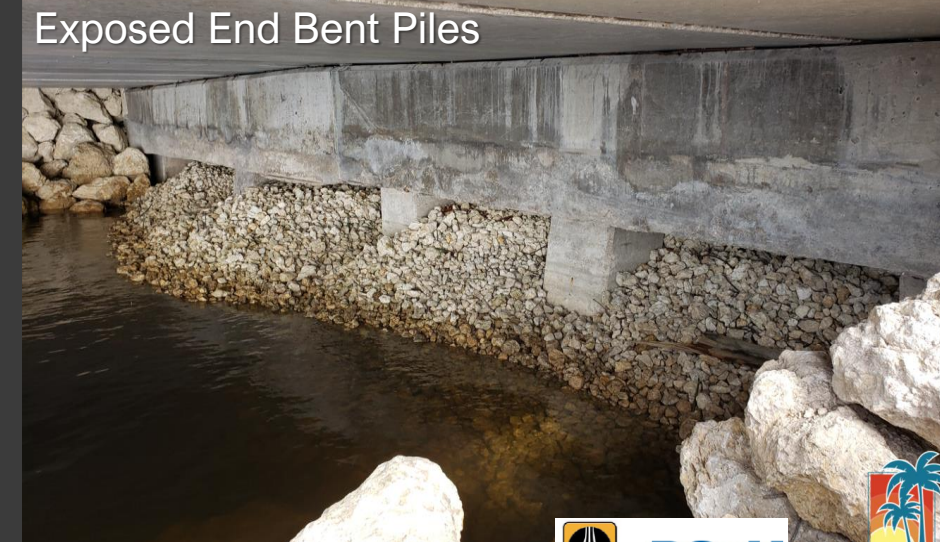
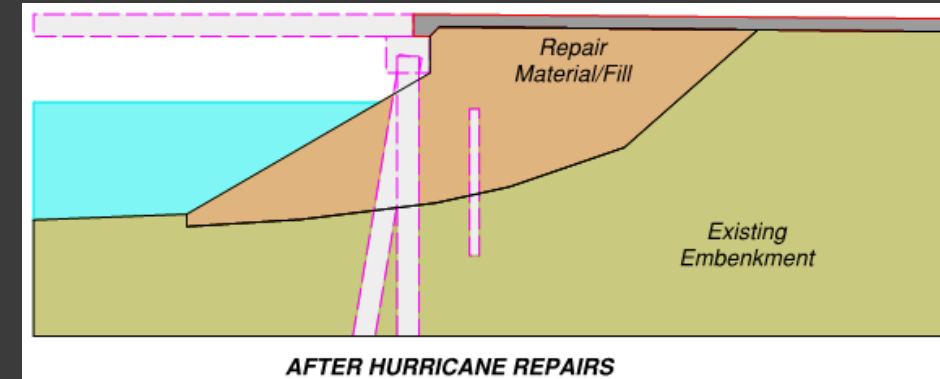
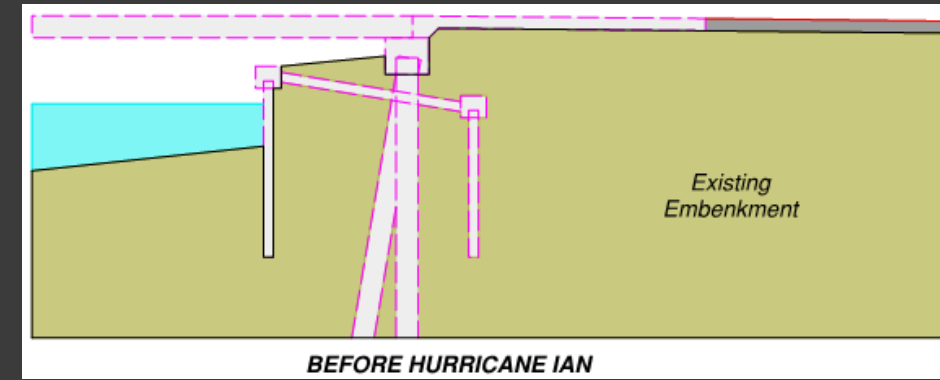
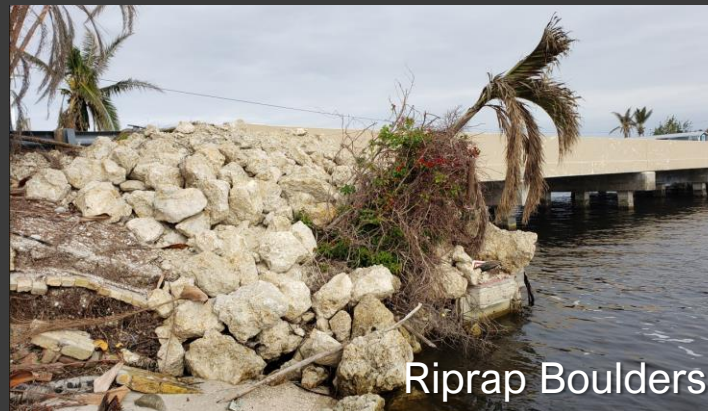
Temporary Repairs

Washed Out Approaches

- Approach Slabs Removed
- Filled with Rocks
- Temp Asphalt

Deficiencies After Repairs

- End Bent Piles Exposed
- Bridge Approaches Susceptible to Future Storm
- Foundations at Capacity – Scour Critical
- Temporary Pavement Settlement
- Riprap Boulders Extend Beyond ROW



Option A

- ✓ Keep Existing Bridge
- ✓ Add New Seawalls
- ✓ Estimated Cost: \$4,350,000
- ✓ Replace First & Last Spans for Seawall Replacement

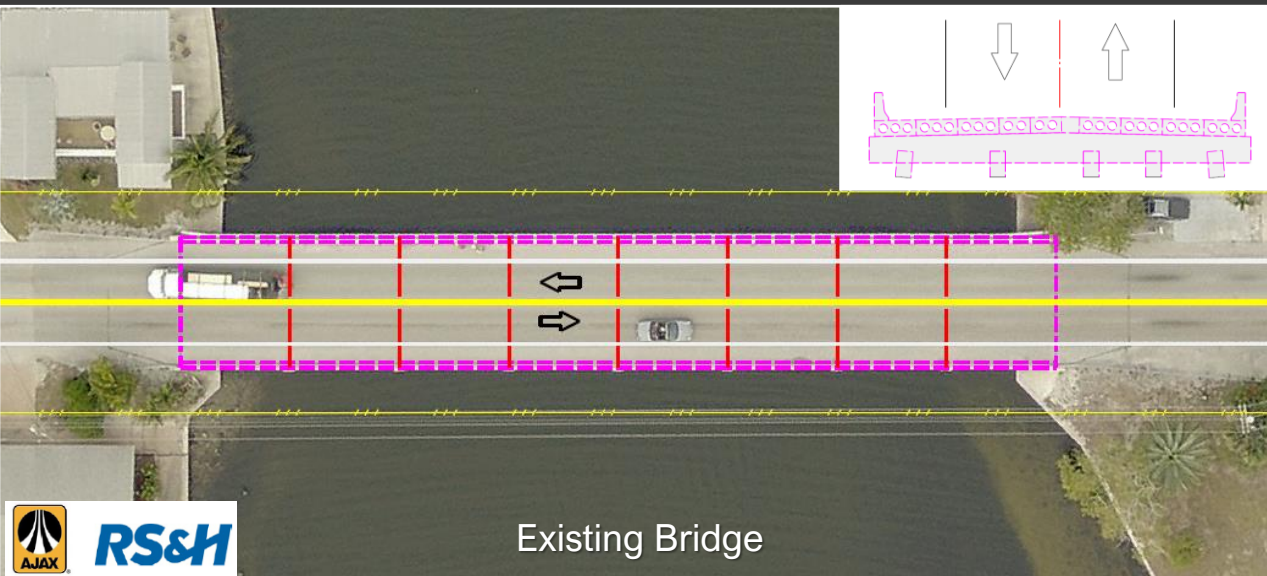
Pros

- Least construction time: 6 months
- No barges to perform work
- Less permitting effort
- Least cost

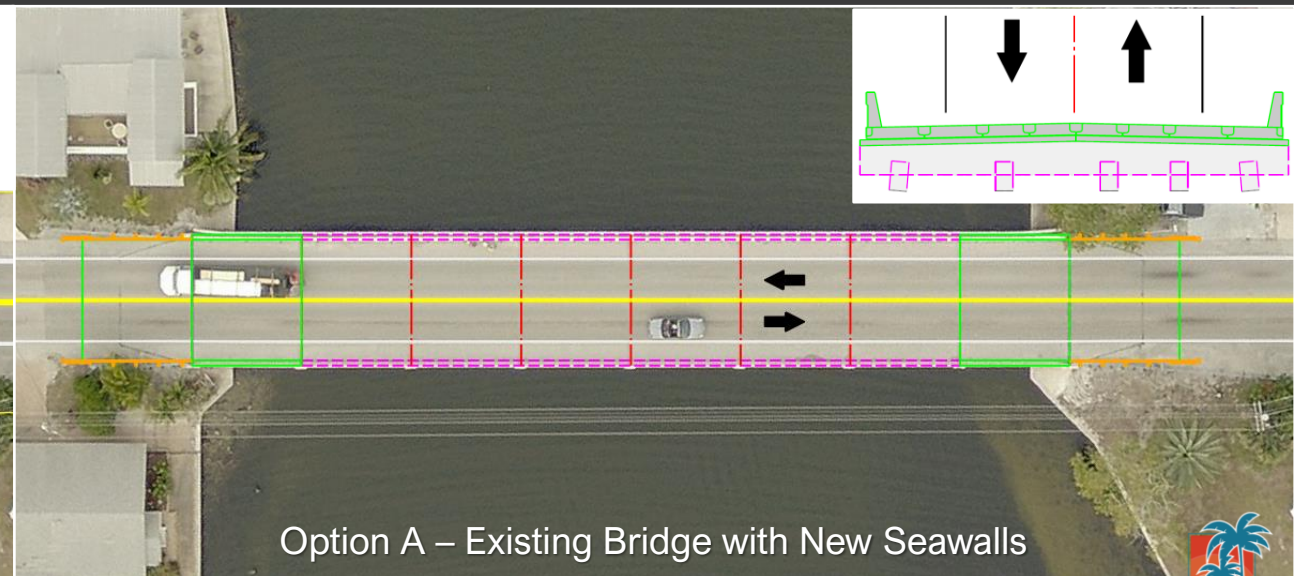


Cons

- Bridge vulnerable to future storm; will remain scour critical
- Throwaway work for repairs that will be demolished when bridge is replaced in 2 years
- Longest duration of 1 lane: 6 months



Existing Bridge



Option A – Existing Bridge with New Seawalls

Option B

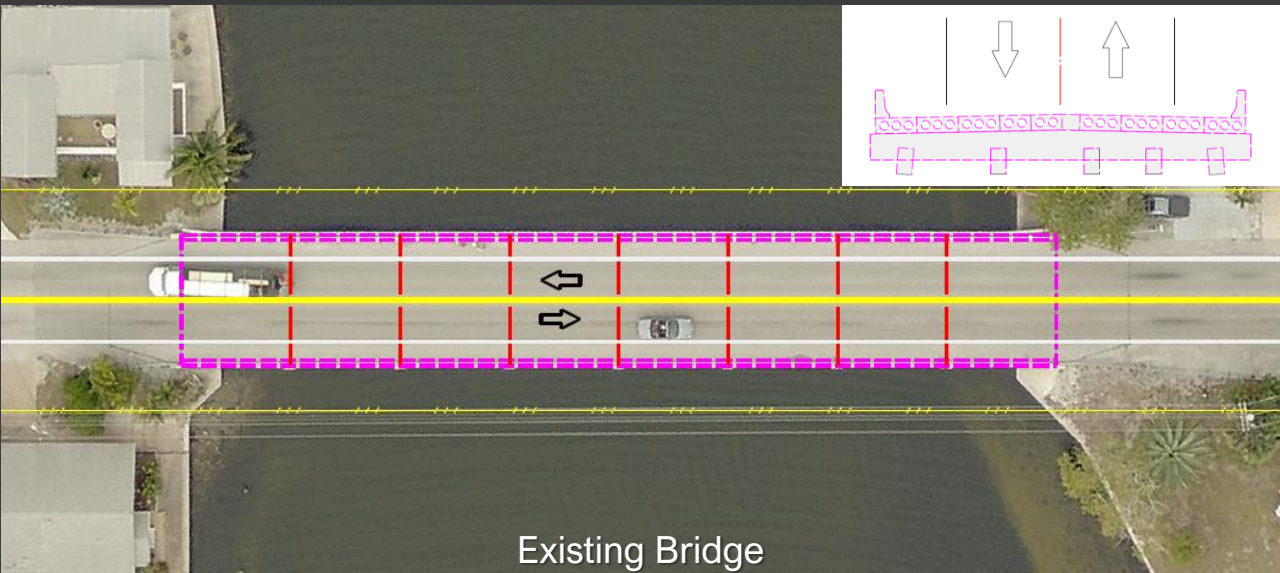
- ✓ Replace Existing Bridge & Seawalls
- ✓ Estimated Cost: \$7,650,000
- ✓ County Share: \$4,170,000

Pros

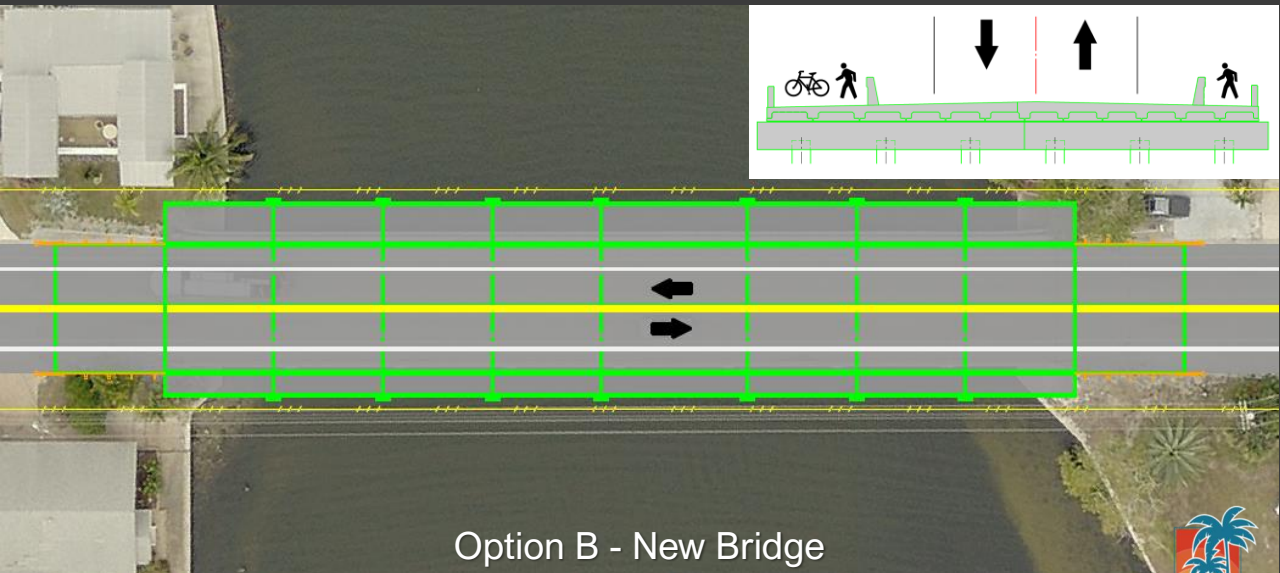
- Most durable option: bridge & seawalls designed to withstand future storm
- Least duration of 1 lane: 4 months
- Bridge replaced - no throwaway work
- Accommodates planned shared use path

Cons

- Longest construction: 8 months
- Work over / in water from barges
- Greater permitting effort



Existing Bridge



Option B - New Bridge





Question

Recommendation: Replace Bridge Now
Does the Board Concur?

