

Atlantic Isle Lagoon Bridge (Bridge No. 874218) Project Development and Environment (PD&E) Study

From Atlantic Isles West of SR A1A to Atlantic Avenue

Miami-Dade County, Florida



Alternatives
Workshop

JUNE 23, 2022



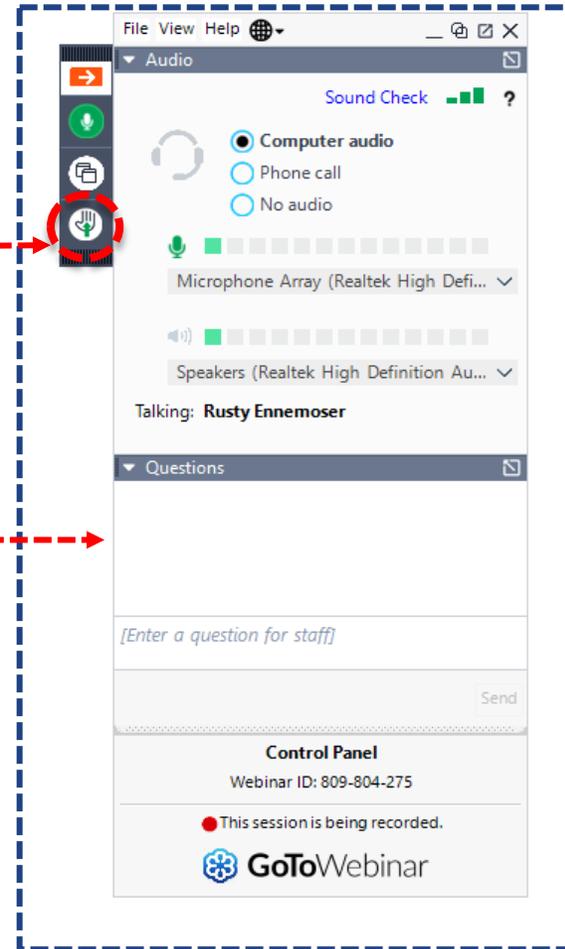
Start-up & Welcome

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.



Technical Information

- Virtual Attendees are Automatically Muted to Start the Meeting
- Providing Comments During Open Discussion Period:
 - **Virtual attendees: Raise hand during comment period, you will be unmuted in order**
 - In-person attendees: Form a line behind the microphone
 - Submit Comments via the “Questions” Box
- Technical Assistance: Call 1-800-418-0524
 - Or dial-in to this meeting 1-877-901-6455 and use Access Code: 638-293-599



Public Notice



Property owner/tenant letters



Emails to project contacts list



FDOT website



Florida Administrative Register



Newspaper



Social media





Title VI Compliance

Public participation at this meeting is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting:

Nicholas Danu, P.E.
FDOT District 6 Project Manager
1000 NW 111 Avenue
Miami, Florida 33172
(305) 470 5342
Nicholas.Danu@dot.state.fl.us

Jacqueline E. Paramore
State Title VI Coordinator
605 Suwannee Street
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

All inquiries or concerns will be handled according to FDOT procedure and in a prompt and courteous manner.



Elected Officials

**We would like to recognize any federal, state, county,
or city officials who may be present.**

**Please stand or select the raise hand feature
on the control panel.**

Meeting Purpose and Study Team



Nick Danu
FDOT



Barbara Culhane
FDOT



Ken Hardin
JANUS
RESEARCH



Joy Castro
Stantec



John Flora
Jacobs



Colleen Ross
Jacobs



Bhushan Godbole
Jacobs



Alex Meitin
Jacobs



AGENDA

- ✓ **Introduction**
 - Project Location and Description
 - Project Background
- ✓ **Study Process**
- ✓ **Purpose and Need**
- ✓ **Existing Conditions**
- ✓ **Proposed Alternatives**
- ✓ **Key Environmental Resources**
- ✓ **Project Schedule**
- ✓ **Public Outreach**
- ✓ **Contact Information**
- ✓ **Questions & Comments**



Polling – Poll Participation Instructions

Smart Phone – Scan QR Code



Computer – Visit www.Slido.com /Enter Code: ATL POLL



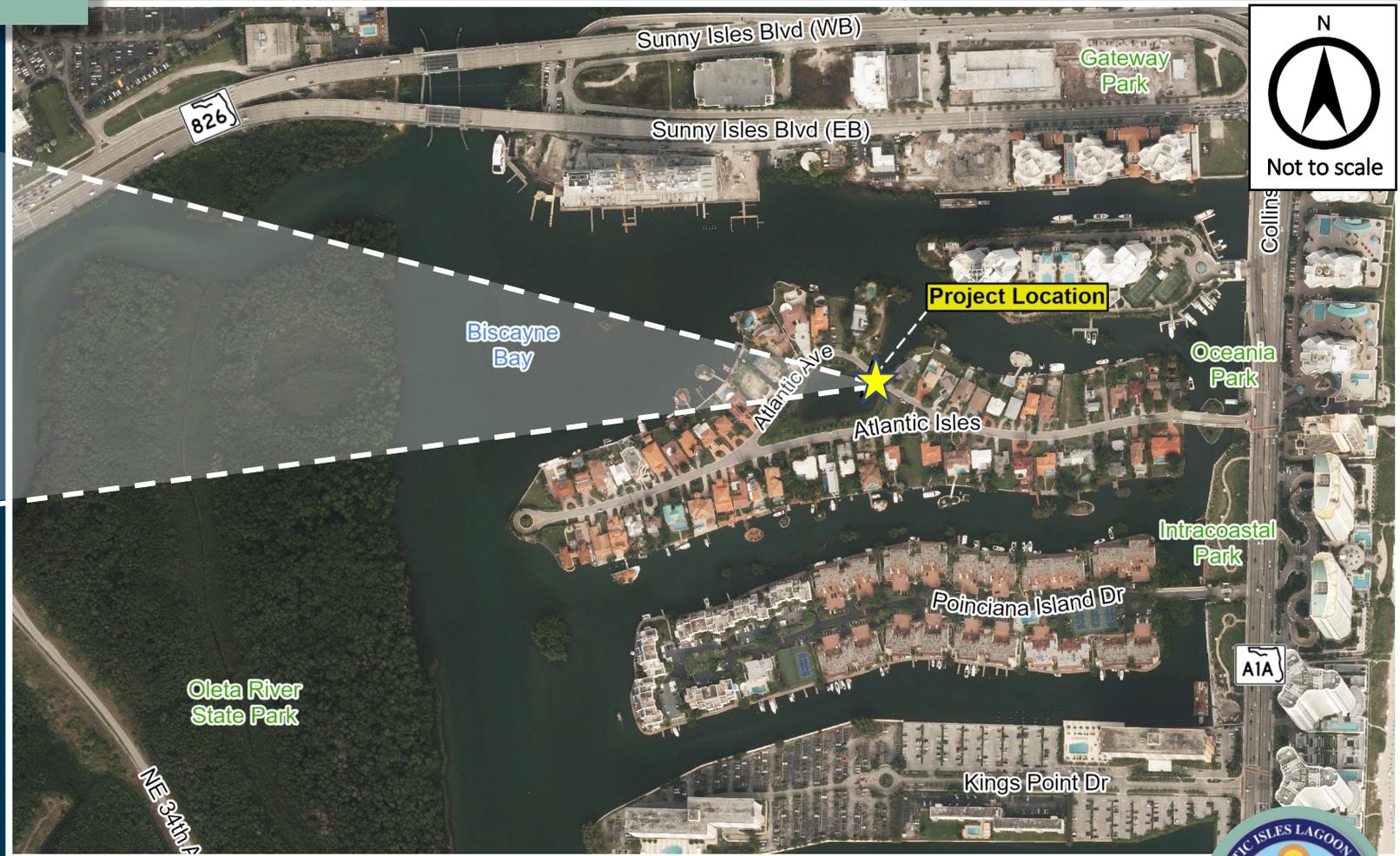
Note: Today’s polling results will help provide preliminary input to the team but are not the only factor used in evaluating potential alternatives. Engineering, environment, cost, and other factors will also help the study team evaluate potential alternatives that may or may not advance to the next phase of the project.



Project Location Map



- Located on Atlantic Island
- City of Sunny Isles Beach
- Atlantic Isle residential community
- Island surrounded by Biscayne Bay
- Bridge spans Atlantic Isle Lagoon



Project Study Area

- Two local streets within Study Area:
 - Atlantic Avenue – one-way eastbound facility
 - Atlantic Isles – two-way facility
- Atlantic Isle Bridge (FDOT Bridge No. 874218)
 - Located on Atlantic Avenue (one-way)
 - Determined National Register of Historic Places (NRHP)-eligible in 2016
- Atlantic Island Park and Lagoon- Determined NRHP-eligible in 2022

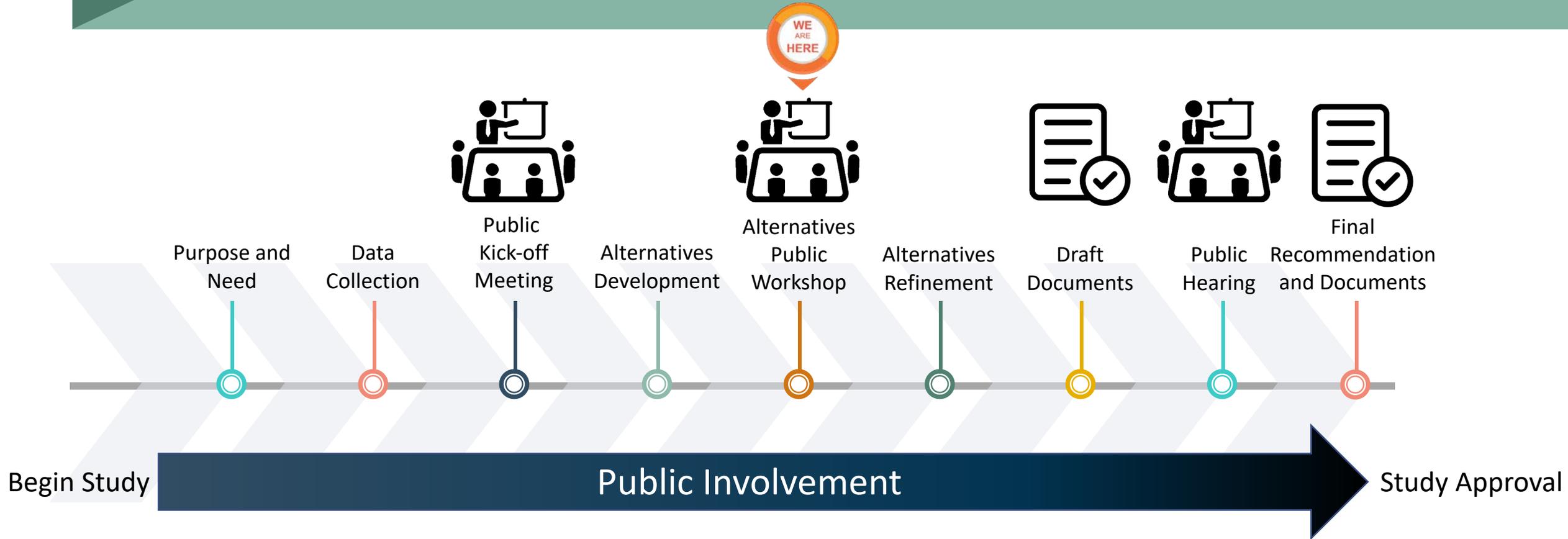


Project Background

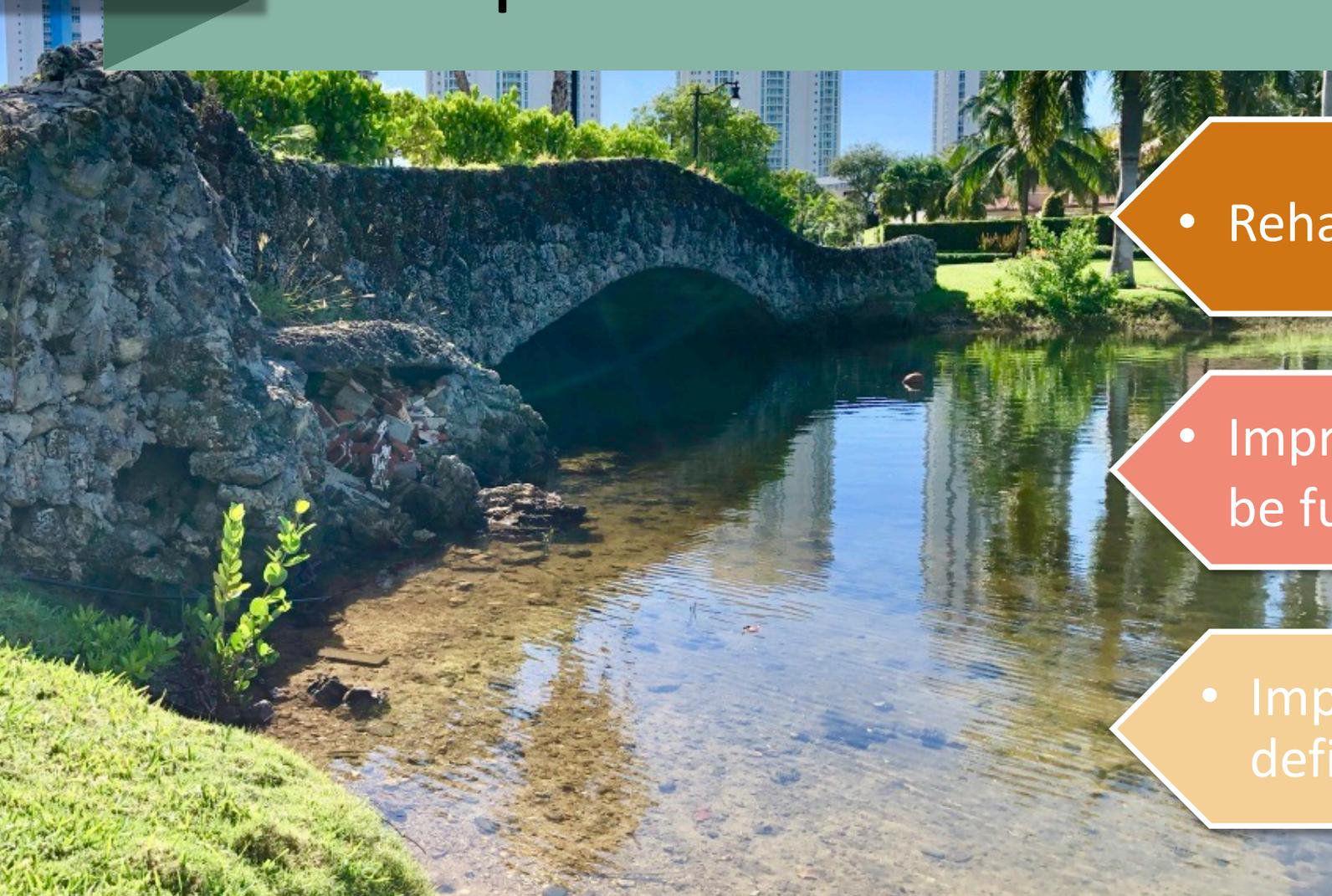
- Bridge constructed in 1925
- Low-level bridge with cast-in-place reinforced concrete arch
- 1999 – load rating analysis performed
- Bridge inspected annually
- Summer 2020 – PD&E Study Initiated



What is a PD&E Study?



Purpose and Need



- Rehabilitation of the bridge

- Improve safety of the bridge to be functional for the public

- Improve existing bridge deficiencies

Project Goals



**Minimize
Environmental Impacts**



**Minimize Effects
To Significant
Cultural Resources**



Enhance Safety



Improve Mobility

Polling Question #3

Smart Phone – Scan QR Code



Computer – Visit www.Slido.com /Enter Code: ATL POLL



Note: Today’s polling results will help provide preliminary input to the team but are not the only factor used in evaluating potential alternatives. Engineering, environment, cost, and other factors will also help the study team evaluate potential alternatives that may or may not advance to the next phase of the project.



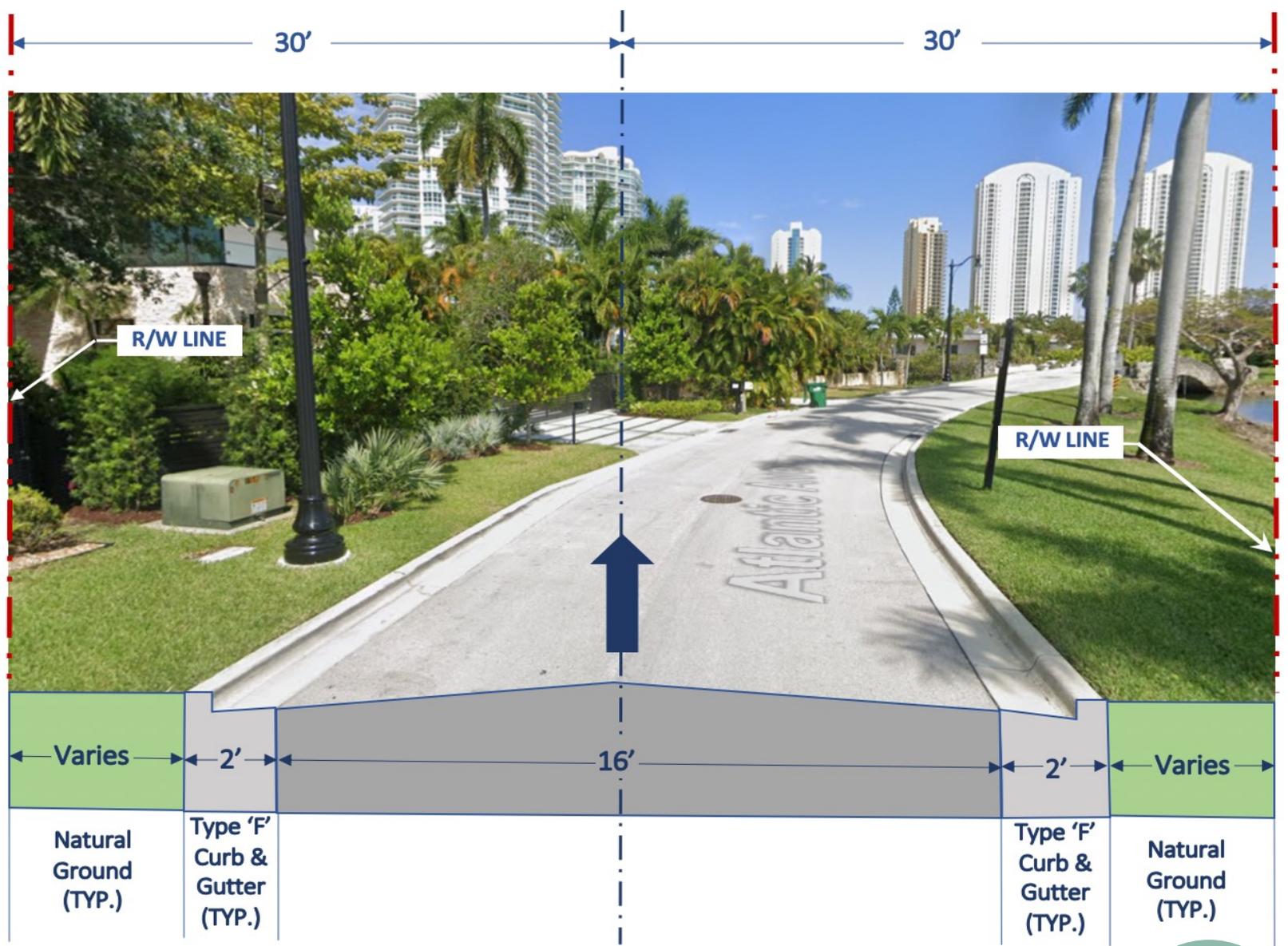
Bridge Deficiencies

- FDOT Bridge Inspection – Performed September 17, 2021
 - Bridge Health Index = 60.39 (out of 100)
 - Sufficiency Rating = 40.9 (out of 100)
 - Functionally Obsolete – substandard traffic barriers and roadway geometry
 - Missing oolitic limestone on north face of arch
 - Exposed steel and areas of corrosion throughout length of arch underside
- Geotechnical Evaluation – Performed in March 2021
 - Inconclusive
 - Bridge classified as having “unknown foundations”

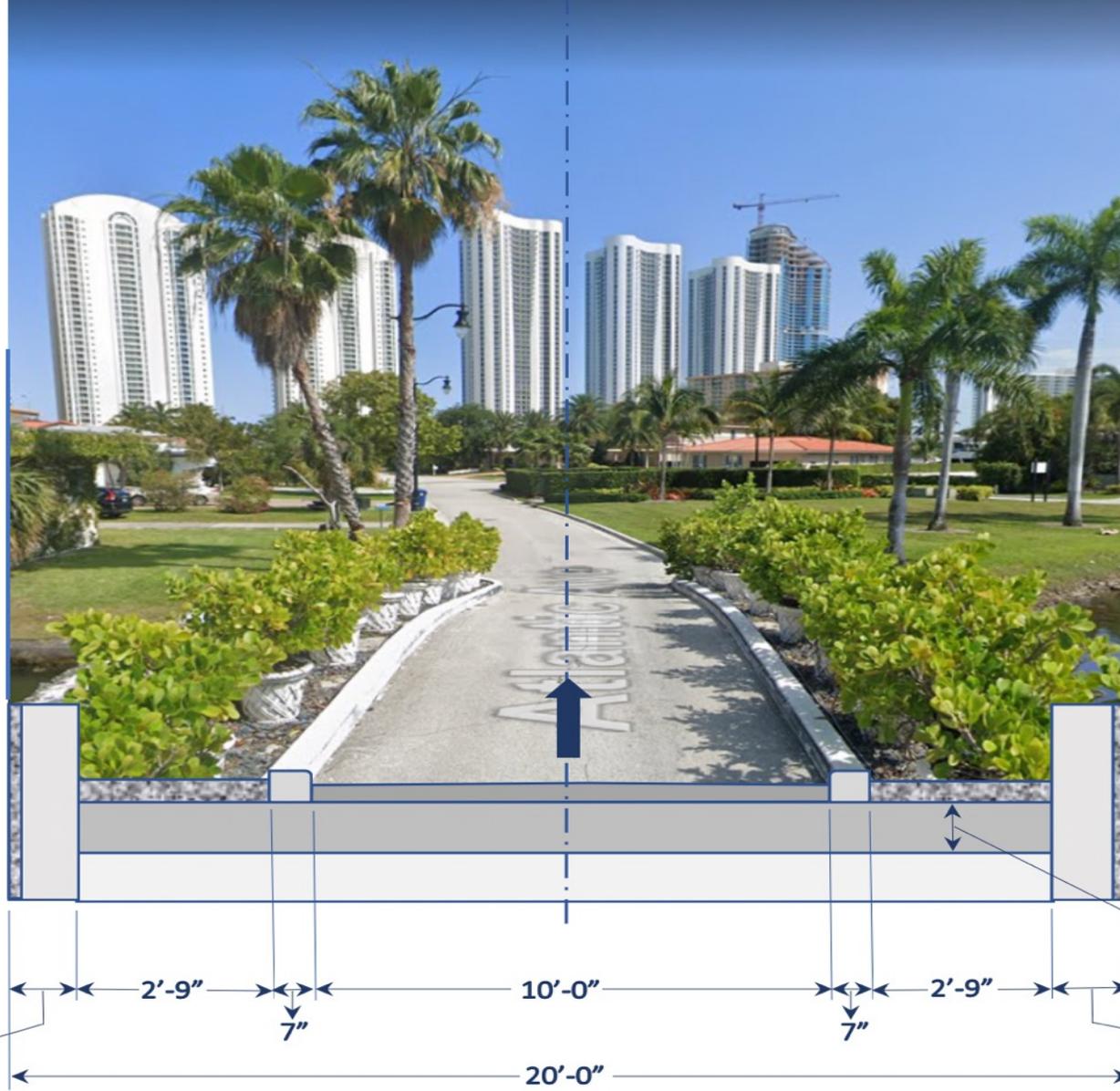
		BRIDGE INSPECTION REPORT		Inspected by: LARS Engineering, Inc.	
		PREPARED FOR: FDOT District 6 BRIDGE OWNER: City of Sunny Isles Beach INSPECTION TYPE: Routine		CONTRACT No. CA611	
Bridge No. 874218		REPORT CONTAINS			Inspection Date: 09-17-21
<input checked="" type="checkbox"/> BrM Inspection Report <input checked="" type="checkbox"/> CIDR Information		<input checked="" type="checkbox"/> Bridge Profile <input type="checkbox"/> UW Inspection Report		<input type="checkbox"/> Fracture Critical Data <input checked="" type="checkbox"/> Load Rating Summary sheet	
				<input type="checkbox"/> Addendum <input type="checkbox"/> Mechanical and Electrical Data	
Atlantic Isle Avenue over Ocean Canal		Facility Carried & Location		0.25 Miles West of A1A	
Location Map				Detour Length = 0.13 mi.	



Existing Typical Section of Atlantic Avenue



Existing Typical Section for Bridge No. 874218



1'-8" Barrier Wall with Oolitic Limestone Surfacing

Limerock Fill Varies From 8.5"-1'-1"

1'-8" Barrier Wall with Oolitic Limestone Surfacing





Initial Alternatives Considered

- ✓ No-Action
- ✗ Transportation Systems Management and Operations Alternative
- ✗ Multimodal Alternative
- ✗ Tunnel Alternative
- ✓ Bridge Rehabilitation
- ✓ Bridge Replacement





Viable Alternatives

- Build Alternative 1 - Bridge Rehabilitation
- Build Alternative 2 - Bridge Replacement
- No-Action Alternative



No Action Alternative

Advantages:

- No construction effects
- No construction costs
- No disruption to community or travel patterns

Disadvantages:

- Frequent maintenance
- Does not preserve historic integrity
- Does not provide new bridge riding surface or structural arch
- Does not involve new foundations
- Load restrictions remain



Build Alternative 1 - Rehabilitation

Advantages:

- Provides new bridge riding surface and structural arch
- Provides new bridge foundations
- Maintains existing bridge façade (oolitic limestone)
- Maintains existing arch
- Load restrictions removed
- New bridge components life = 75 years

Disadvantages:

- Does not rehabilitate façade
- Significant construction risks
 - Bridge façade could crumble
 - Potential for bridge settlement
- Remaining historic bridge elements life ~ 15 to 25 years
- Frequent future maintenance of bridge façade
- High construction costs compared to replacement



Build Alternative 1 – Rehabilitation

Typical Section

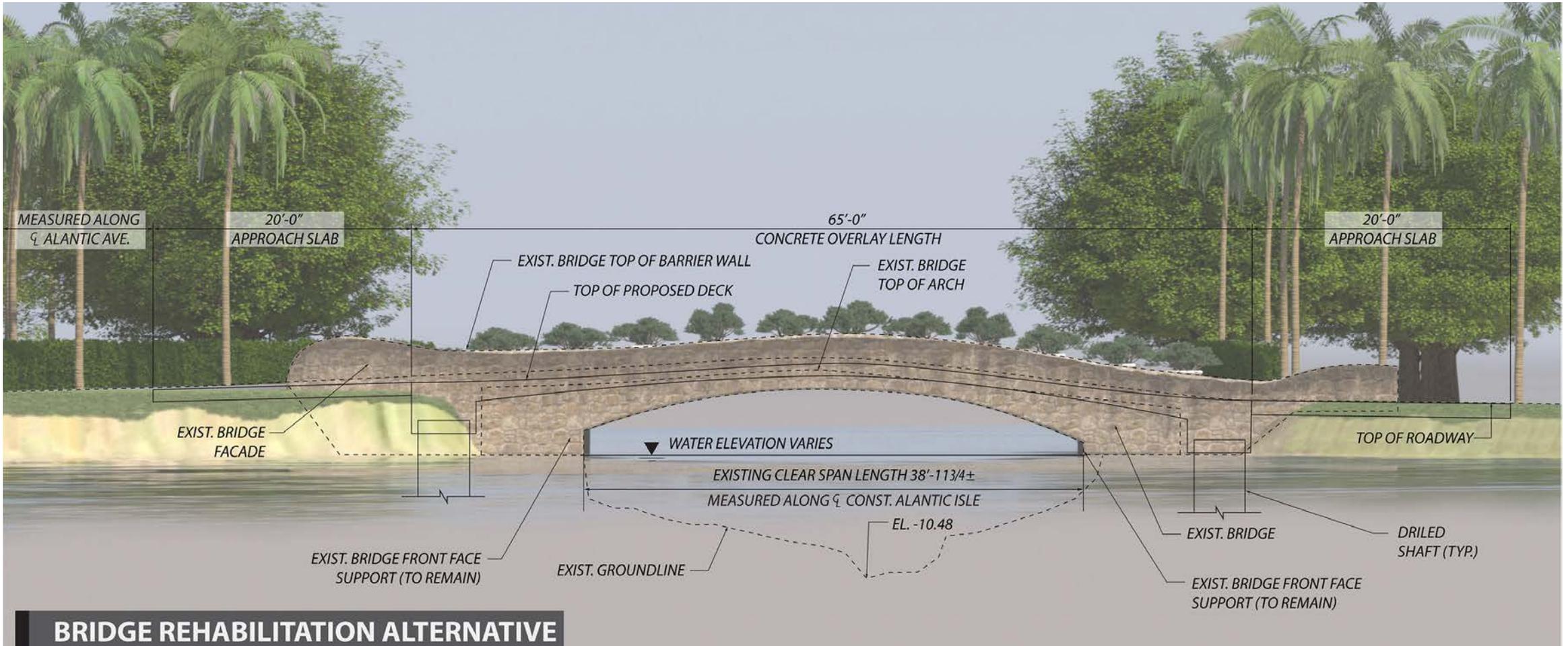


BRIDGE REHABILITATION ALTERNATIVE



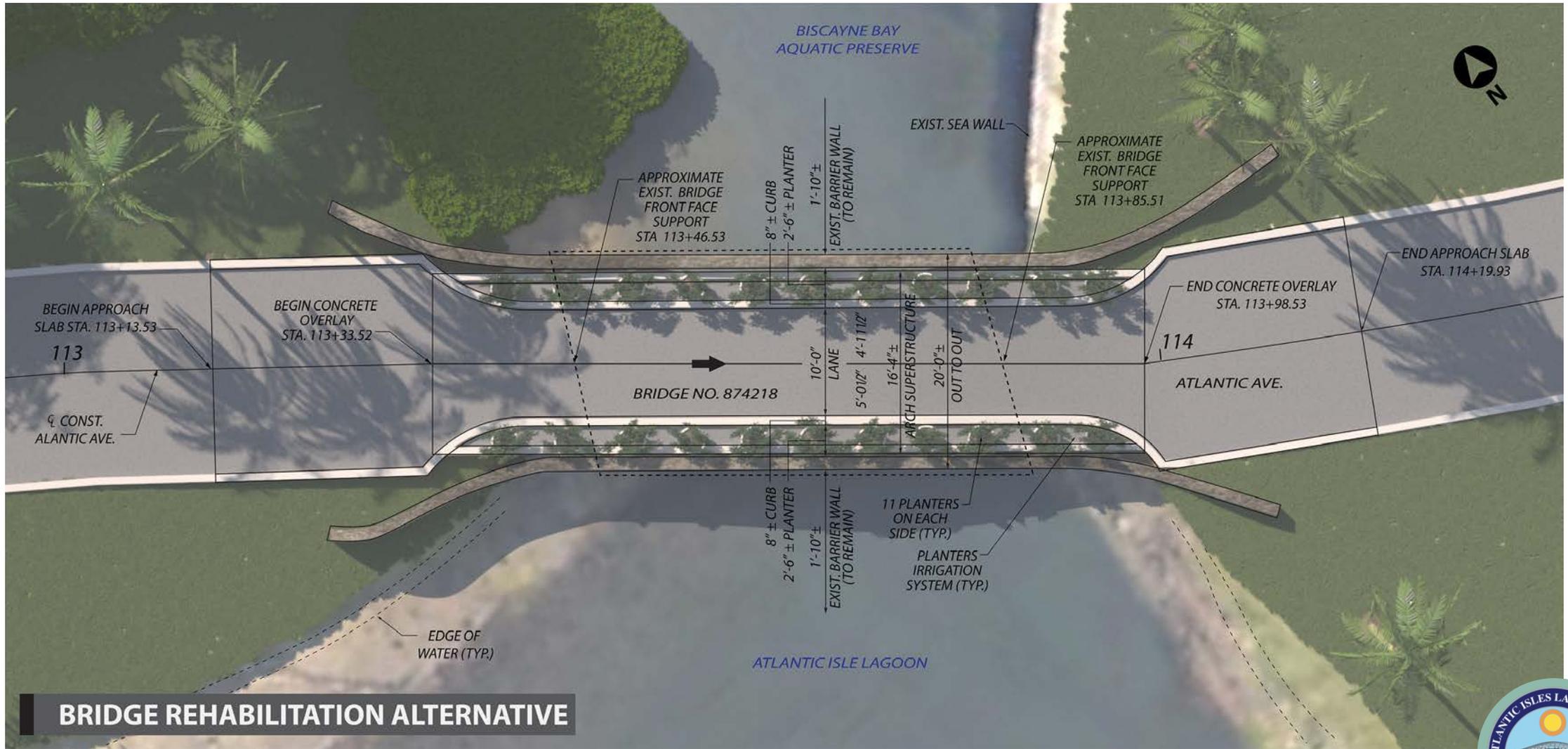
Build Alternative 1 – Rehabilitation

Elevation View



Build Alternative 1 – Rehabilitation

Plan View



Build Alternative 2 - Replacement

Advantages:

- Meets current Florida Greenbook criteria
- Improves bridge operations and safety
- Adds 8-ft-wide shared use path
- Design could mimic historical character of existing bridge if desired
- Lower construction & maintenance costs (compared to Rehabilitation Alternative)
- Oolitic limestone could be reused (or locally sourced)
- Bridge life = 75 years
- Load restrictions removed

Disadvantages:

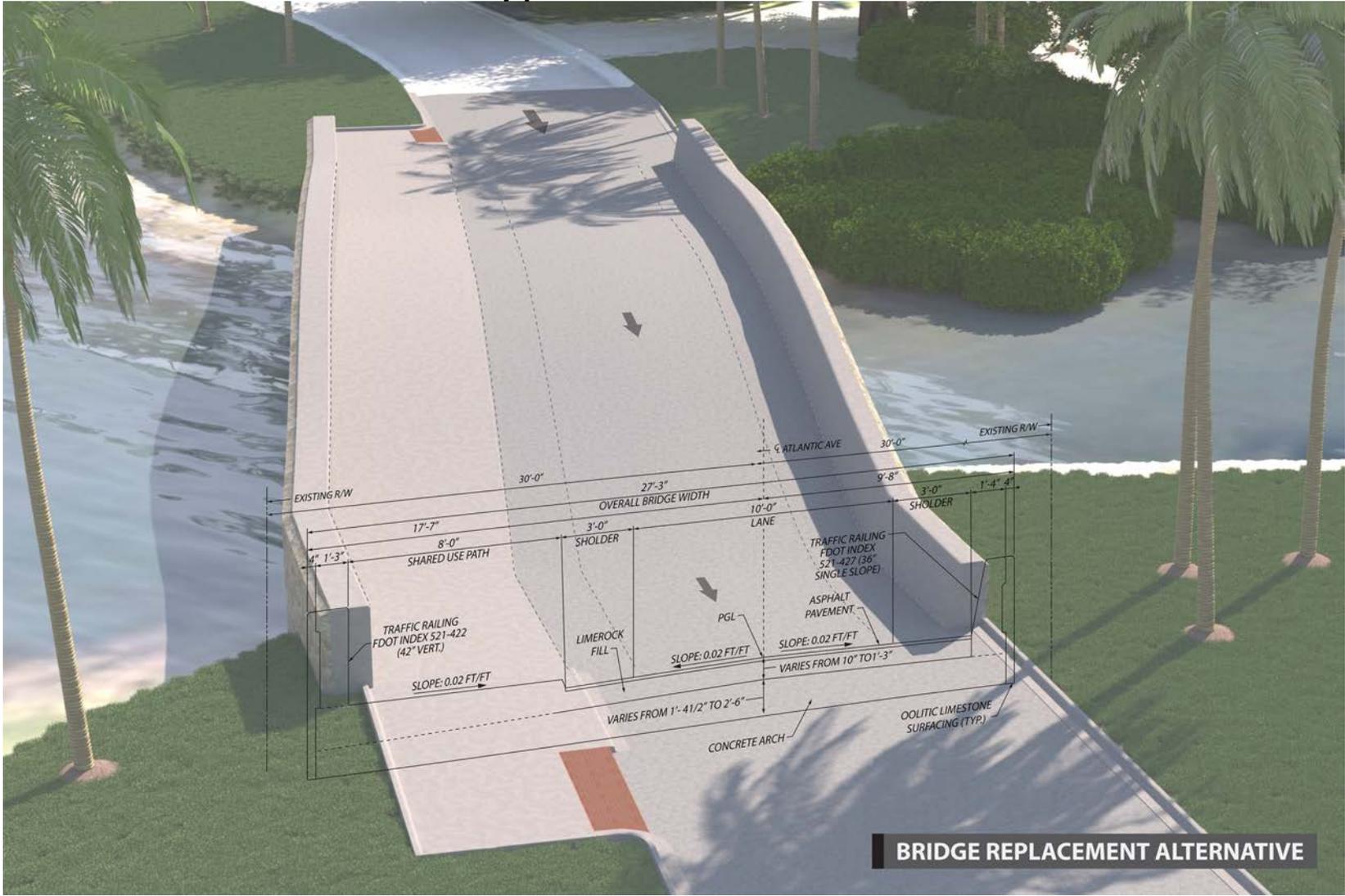
- Historic bridge is gone
- May have slightly different profile than existing bridge



Replacement Bridge Rendering

Build Alternative 2 – Replacement

Typical Section

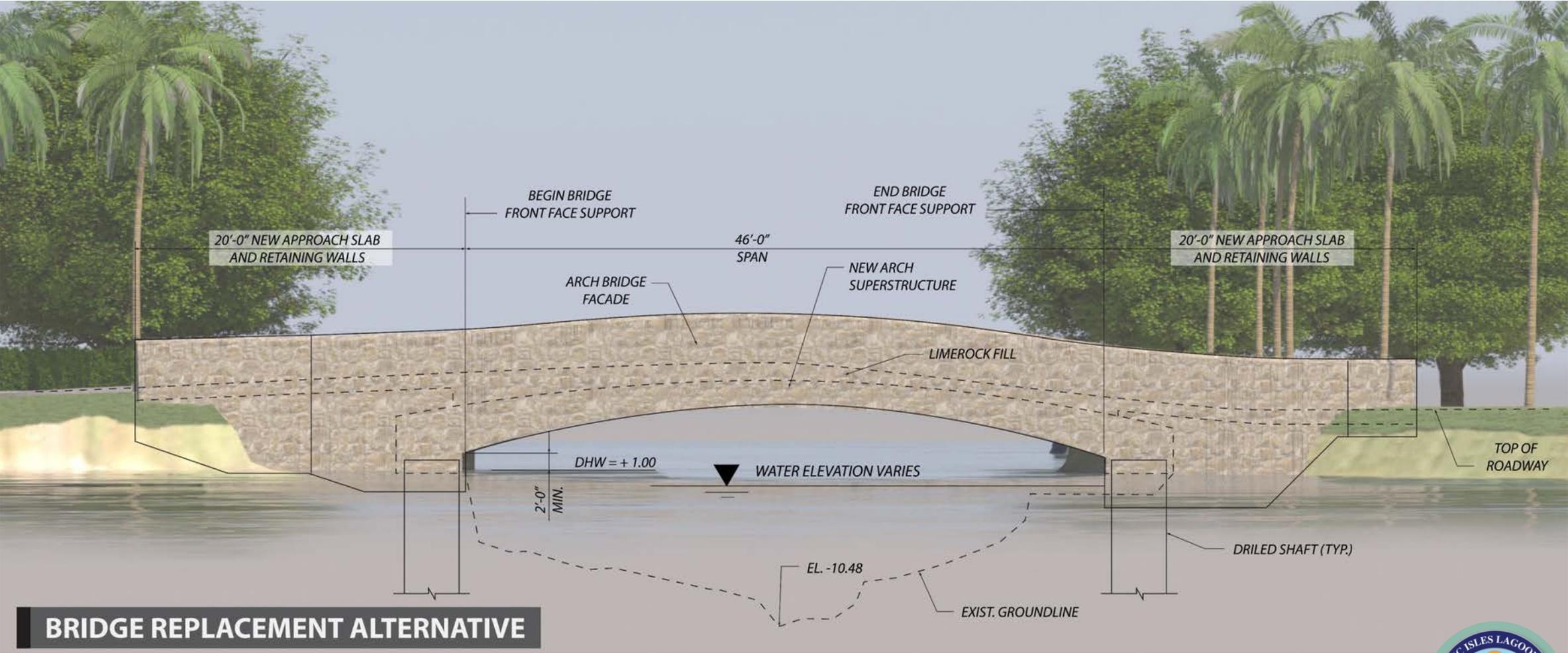


BRIDGE REPLACEMENT ALTERNATIVE

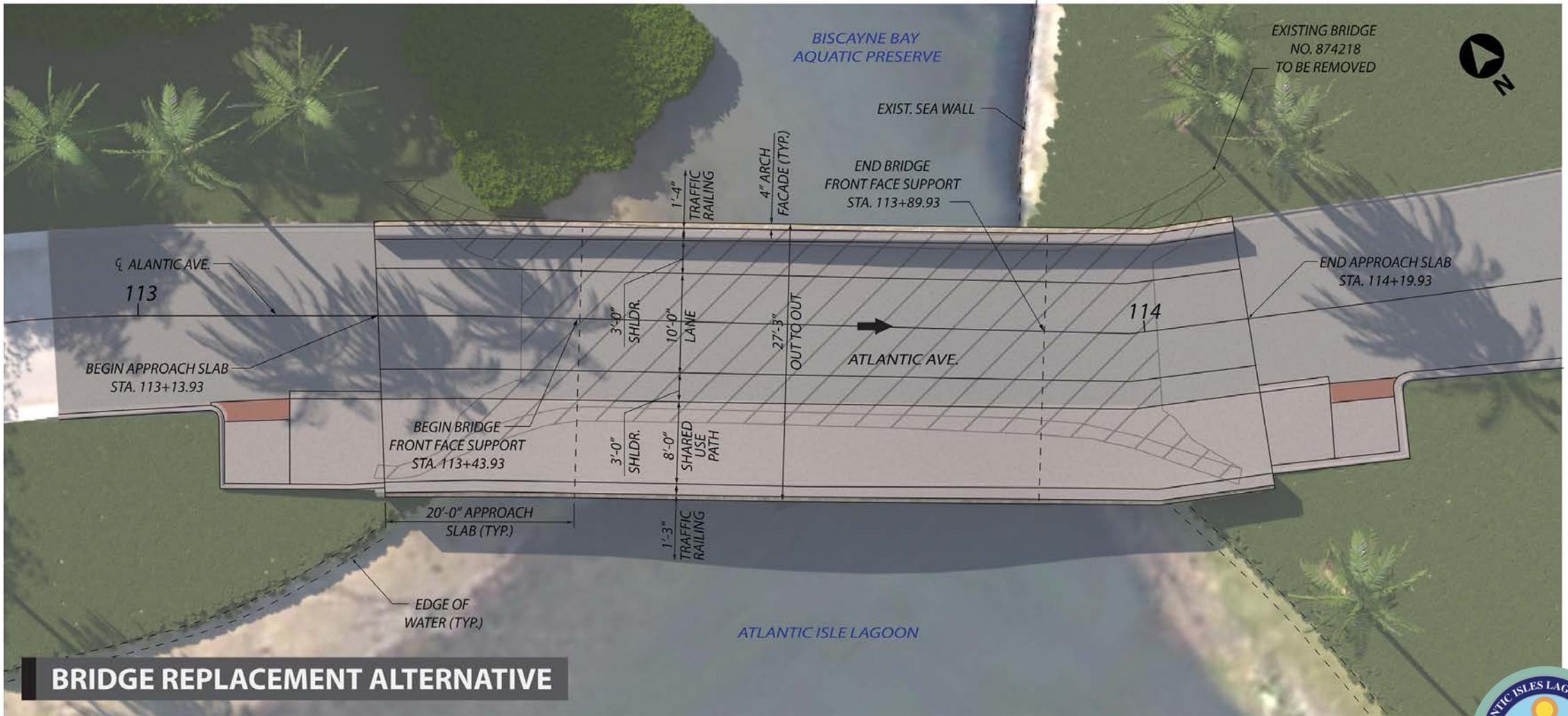


Build Alternative 2 – Replacement

Elevation View



Build Alternative 2 – Replacement Plan View



BRIDGE REPLACEMENT ALTERNATIVE



Temporary Maintenance of Traffic (MOT) Impacts



- Maintenance of Traffic (MOT) impacts are the same for both Build Alternatives
- Temporary impacts include:
 - Right-of-Way impacts
 - Atlantic Island Park impacts



Alternative Characteristics Evaluation Matrix

Evaluation Criteria	No-Action Alternative	Build Alternative 1 Rehabilitation	Build Alternative 2 Replacement
Replaces Existing Foundation	No	Yes	Yes
Replaces Existing Bridge Riding Surface & Arch	No	Yes	Yes
Removes Weight Limit Restrictions	No	Yes	Yes
Bridge Life	15 to 25 years	75 years (remaining historic bridge elements 15 – 25 years)	75 years
Bridge Width / Length (feet)	20 / 43	20 / ~65	27 / ~46
Rehabilitates Oolitic Limestone Facade	No	No	Potential Reuse
Bridge Under Clearance	5.5 feet (field measure 6/9/2020)	Maintains Existing	Meets Current Criteria
Maintains Bridge Historic Integrity	Uncertain Duration	No - Adversely Affects Bridge's Historic Integrity	No - Adversely Affects Bridge's Historic Integrity
Construction Damage Risk	None	High	Not Applicable
Provides Enhanced Operations and Safety	No	No	Yes
Meets Project Purpose & Need	No	Yes	Yes



Natural Resources

- Federally listed species
 - West Indian Manatee
 - Wood Stork
 - Smalltooth Sawfish
 - Florida Bonneted Bat
 - American Crocodile
 - Sea Turtles
 - Corals
- Biscayne Bay Aquatic Preserve
- Outstanding Florida Water
- Essential Fish Habitat



Right-of-Way Considerations



- Property Owners:
 - Residential (private)
 - Atlantic Island Civic Association
 - Miami-Dade County
 - City of Sunny Isles Beach
- Right-of-Way impacts expected to be minimal
- No relocations or impacts to residential buildings anticipated



Physical Environment

- No known contaminated sites
- No asbestos-containing materials or heavy metal-based coatings found
- Minimal potential for contamination involvement
- No noise or air quality impacts anticipated



Agency Coordination

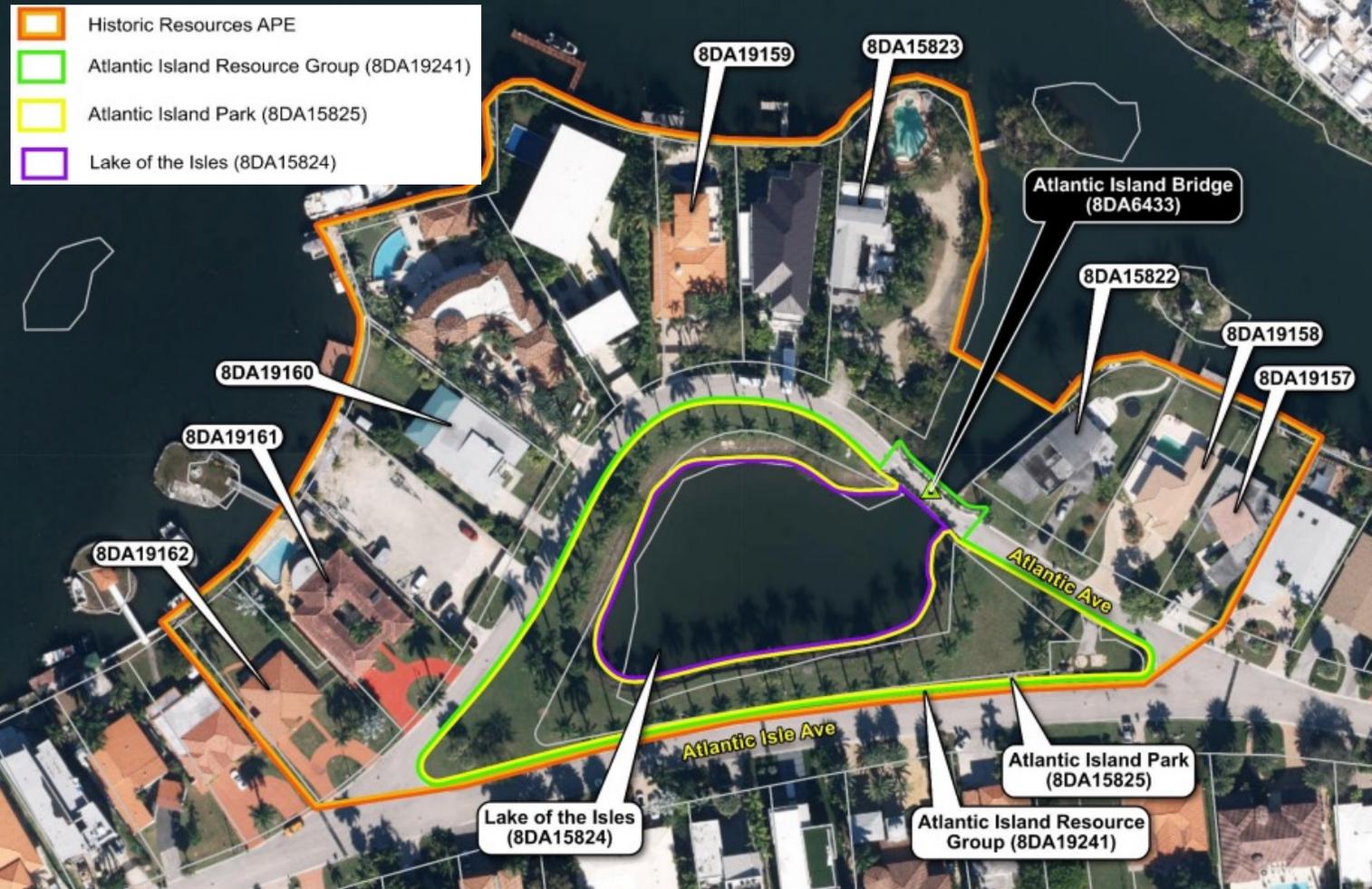
- Early and consistent coordination throughout PD&E and Design Phases
- Interagency meetings
- Consulting Agencies
 - U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWC), National Marine Fisheries Service (NMFS), South Florida Water Management District (SFWMD), and United States Army Corps of Engineers (USACE)



US Army Corps
of Engineers®



Cultural Resources



➤ August 23, 2016 - SHPO determined Atlantic Island Bridge NRHP-eligible

➤ February 24, 2022 - SHPO determined **Atlantic Island Resource Group** and associated resources NRHP-eligible

Atlantic Island Resource Group (8DA19241) includes:

- Atlantic Island Bridge (8DA6433)
- Lake of the Isles (Lagoon) (8DA15824)
- Atlantic Island Park (8DA15825)

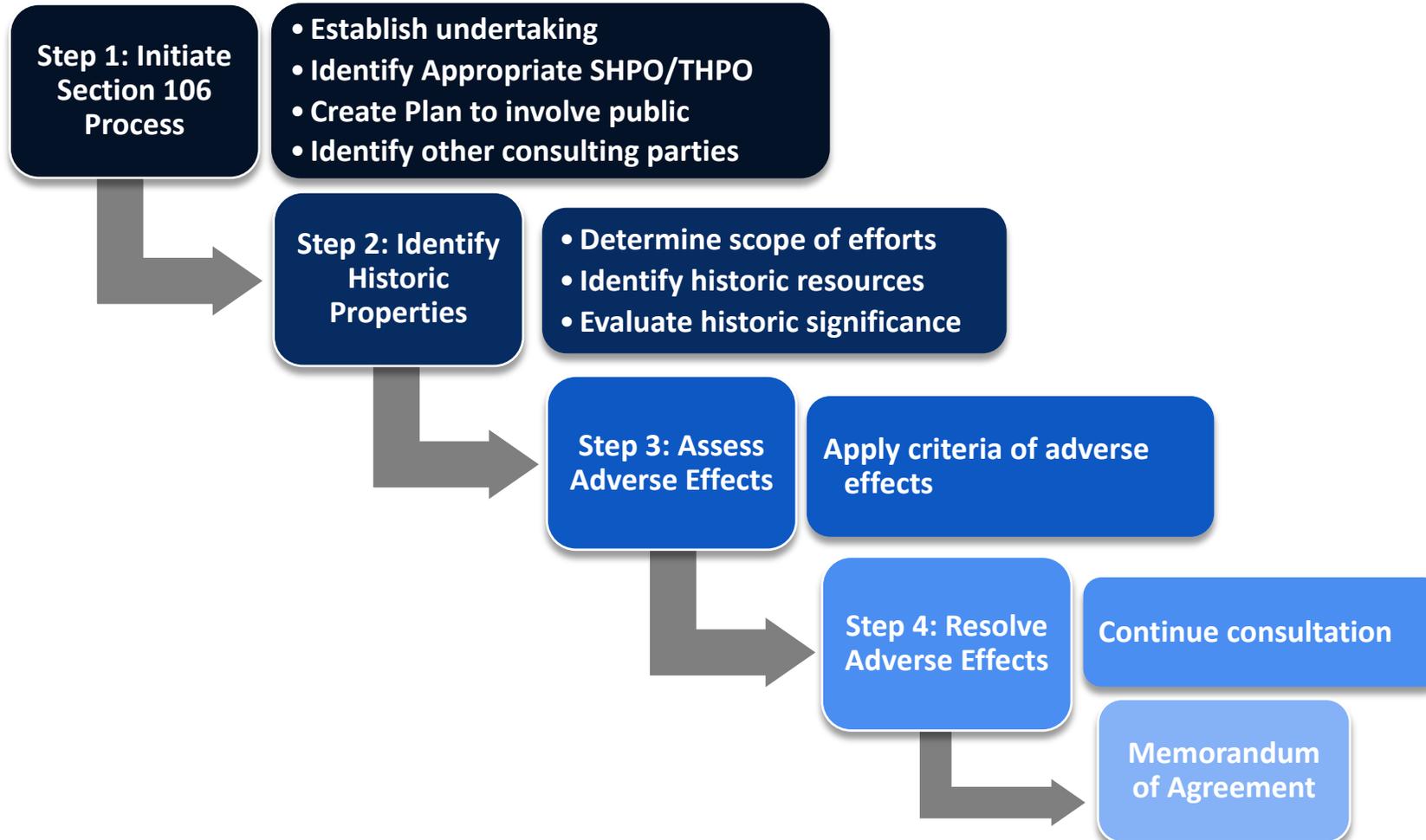


Atlantic Isle Historic Importance

- Atlantic Isle island was constructed during the Florida Boom Period (1917–1929) and the original design included these resources:
 - Atlantic Island Bridge
 - Lake of the Isles (Lagoon)
 - Atlantic Island Park
- Atlantic Island Bridge Historic Elements
 - Only remaining historic bridge of the three originally constructed on the island in 1925
 - Bridge’s oolitic limestone quarried in Miami-Dade County (unique application for a bridge)
 - Irregular whitewashed stucco on the interior of the bridge
 - Early example of an arch deck bridge



Section 106 of the National Historic Preservation Act Process



What is Section 4(f)?

*Section 4(f) refers to the original section within the **U.S. Department of Transportation Act of 1966** which established the requirement for consideration of public park and recreational lands, wildlife and waterfowl refuges, and historic sites in transportation project development.*



Source: FDOT Office of Environmental Management

Alternative Impact Evaluation Matrix

Evaluation Criteria	No-Action Alternative	Build Alternative 1 Rehabilitation	Build Alternative 2 Replacement
Potential ROW Impacts (Temporary)	0	0.02	0.02
Community Use Parcel Impacts (Temporary)	0	1	1
Residential Parcel Impacts	0	0	0
Potential Wetland (NWI) Impacts (acres)	0	0.1	0.1
Potential Surface Water Impacts (acres)	0	0.1	0.1
Increased Shading Impacts	No	No	Yes
Potential Species Habitat Impacts (acres)	0	0.11	0.11
Potential Number of NRHP-eligible Resources Impacts	0	3	3
Preliminary Construction Costs	\$0	\$1.68 Million	\$1.2 Million



Polling Question #4

Smart Phone – Scan QR Code



Computer – Visit www.Slido.com /Enter Code: ATL POLL



Note: Today’s polling results will help provide preliminary input to the team but are not the only factor used in evaluating potential alternatives. Engineering, environment, cost, and other factors will also help the study team evaluate potential alternatives that may or may not advance to the next phase of the project.



Public Involvement

State

- Florida Department of Environmental Protection
- State Historic Preservation Office
- Florida Fish and Wildlife Conservation Commission

Federal

- Army Corps of Engineers
- U.S. Fish and Wildlife Service
- National Marine Fisheries Service

Regional/Local

- City of Sunny Isles Beach
- Miami-Dade County
- South Florida Water Management District



**US Army Corps
of Engineers®**



sfwmd.gov



**NOAA
FISHERIES**



Polling Question #5

Smart Phone – Scan QR Code



Computer – Visit www.Slido.com /Enter Code: ATL POLL



Note: Today’s polling results will help provide preliminary input to the team but are not the only factor used in evaluating potential alternatives. Engineering, environment, cost, and other factors will also help the study team evaluate potential alternatives that may or may not advance to the next phase of the project.

Public Involvement - Stay Engaged



Public Meetings

Kick-Off Meeting
Alternatives
Workshop



Informing the public

Press Releases
Public Notices
Newsletters
Mailings



Public Hearings

Formal Presentation
Comments by the
public



Website

<http://www.fdotmiamidade.com/atlanticislesbridge>





Contact Information

Nicholas Danu, P.E.
FDOT Project Manager
1000 NW 111 Avenue
Miami, Florida 33172
Phone: (305) 470-5342
Email: Nicholas.Danu@dot.state.fl.us

Monica Diaz
Community Outreach Specialist
Infinite Source Communications Group
Phone: (305) 573-0089
Email: monica@iscprgroup.com

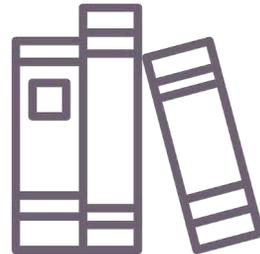


Public Comments

Please submit your comments by July 03, 2022



Responses to comments and questions will be provided later.



All comments and questions are part of the **Public Record**.



All registrants will receive a link to the **meeting recording**.

Public Comments & Questions

- In-person attendees please form a line.
- Online attendees submit your comments in the “Questions” box.
- If you would like to speak, please press the raise hand button.
- Participants will have three minutes to provide comments.
- Please clearly state your name and address.



Conclusion

Thank you! Please complete our **exit survey!**



Comments

Type comments or questions in the **Questions pane** on the control panel or complete a comment card if you are attending in person.

After meeting

monica@iscprgroup.com 

Att. Nicholas Danu, P.E.
1000 NW 111 Avenue
Miami, Florida 33172 

(305) 573-0089 

<http://www.fdotmiamidade.com/atlanticislesbridge>



Thank You for attending!



Alternatives
Workshop

JUNE 23, 2022

