

Atlantic Isles 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



Affected Parties
Consultation Meeting

June 8, 2022



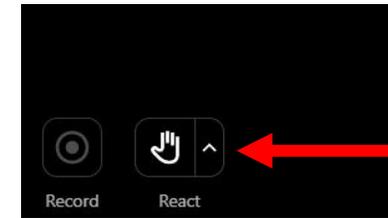
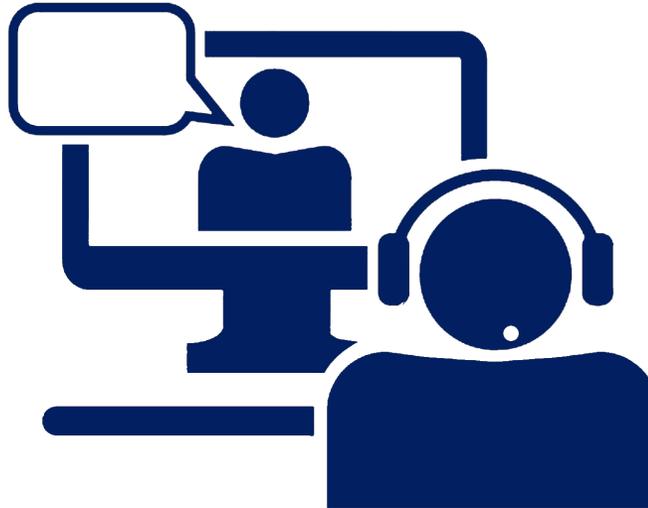
Start-up & Welcome

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.



About the Virtual Meeting Format

- GoToMeeting online meeting platform
- Raise hand to speak on control panel or comment in the chat
- Questions will be responded to after the presentation



Raise Hand button located at bottom left-hand corner of your screen

Technical Information (Technical Issues)



This meeting is being recorded.



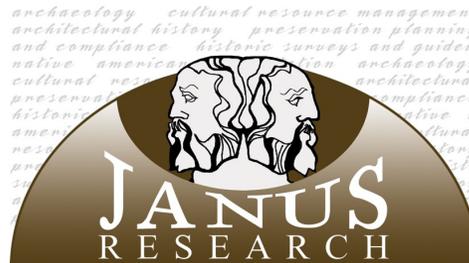
Type your issue in **Questions pane** on the control panel.



PRESENTATION TEAM



Jacobs



Project Manager: Nicholas Danu

Consultant Project Manager: John
Flora

Cultural Resources Lead: Amy
Streelman and Ken Hardin



Meeting Purpose and Speakers



Nick Danu
FDOT



Amy Strelman
Janus Research



John Flora
Jacobs



Barbara Culhane
FDOT

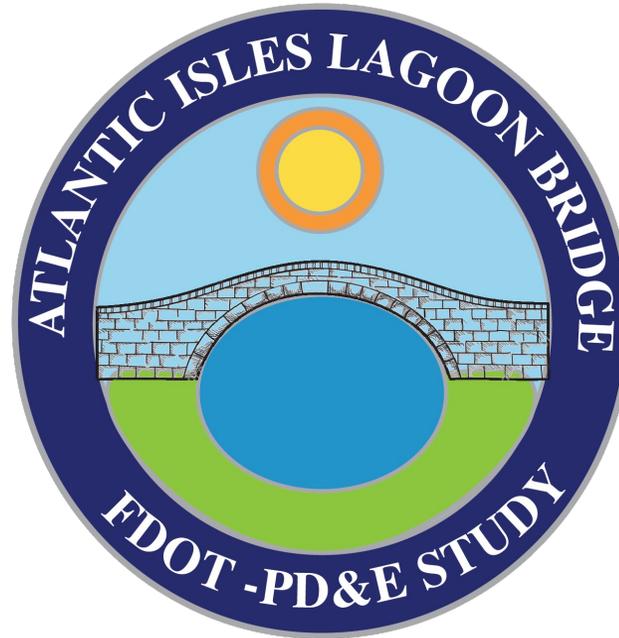


Ken Hardin
Janus Research



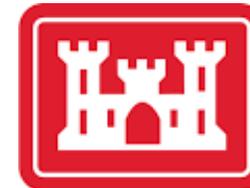


APC Member Introductions



◦ DADE HERITAGE TRUST ◦

Preservation. Education. Advocacy.
Founded 1972





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.

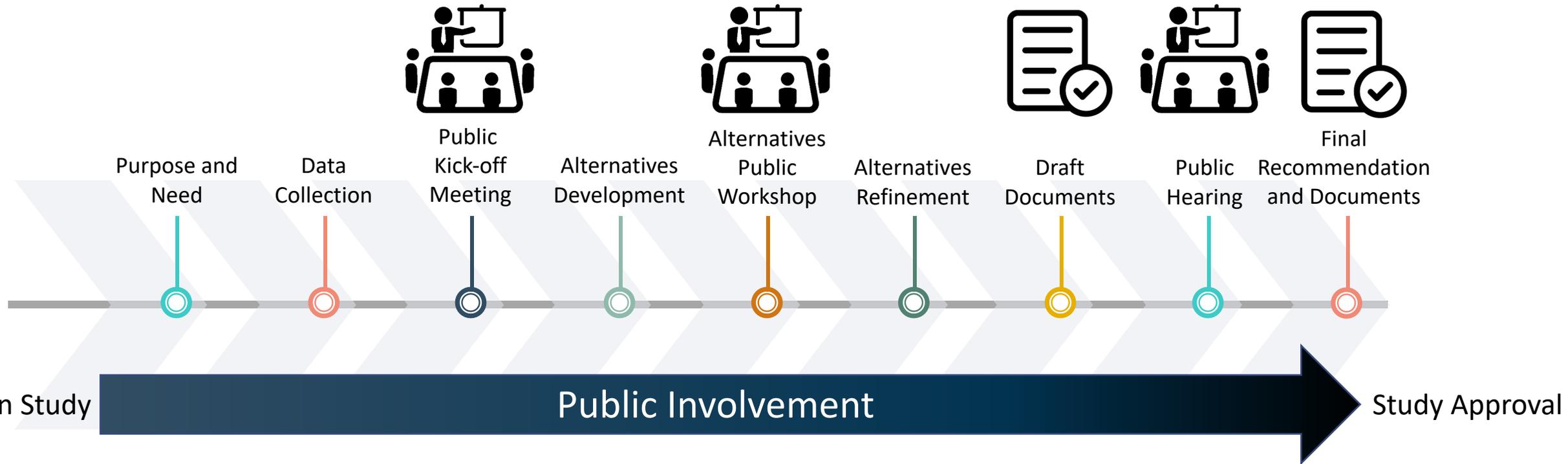


AGENDA

- ✓ **Project Introduction & Background**
- ✓ **Purpose and Need**
- ✓ **Existing Conditions**
- ✓ **Cultural Resources**
 - ✓ **Historic Significance**
 - ✓ **Section 106 Process**
- ✓ **Proposed Alternatives**
- ✓ **Next Steps**



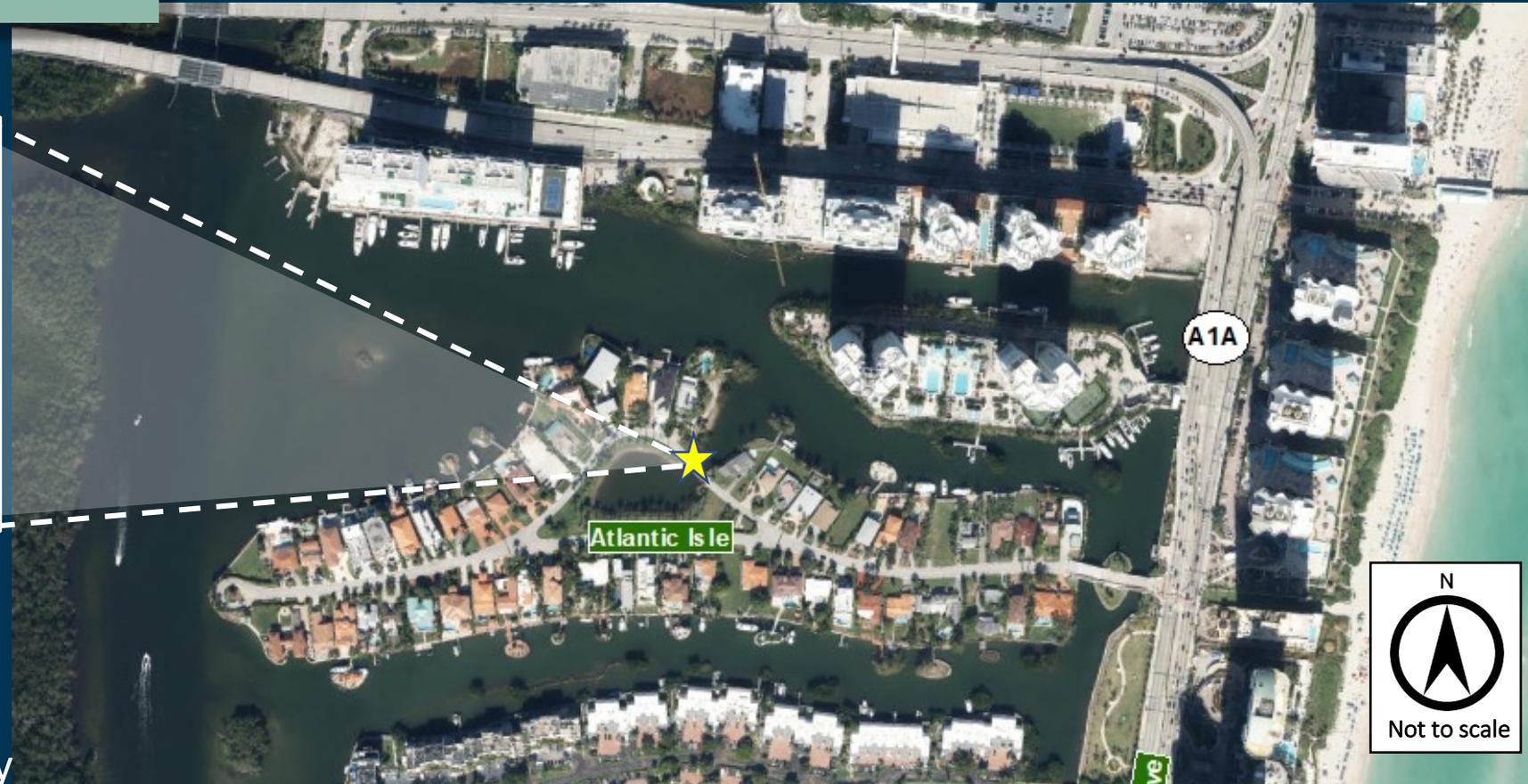
What is a PD&E Study?



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



Project Timeline

- ✓ December 2016 – Proof of Concept Report
- ✓ May 2018 – Bridge Rehabilitation Technical Memorandum
- ✓ August 2019 – PD&E Study Scoping Report
- ✓ February 2020 – ETDM Programming Screen
- ✓ Summer 2020 – PD&E Study Initiated
- ✓ October 27, 2020 – Public Kick-Off Meeting
- ✓ February 4, 2022 – SHPO Concurrence of CRAS



PROJECT DEVELOPMENT AND ENVIRONMENT (PD&E) STUDY
Scoping Report

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Timothy A. Parsons, Ph.D.
January 27, 2022
Page 4

The Florida State Historic Preservation Officer finds the attached Cultural Resource Assessment Survey Report complete and sufficient and concurs / does not concur with the recommendations and findings provided in this cover letter for SHPO/FDHR
Project File Number 2022-518. Or, the SHPO finds the attached document contains _____ insufficient information.
In accordance with the Programmatic Agreement among the ACHP, SHPO and FDOT regarding Implementation of the Federal-Aid Highway Program in Florida, if providing concurrence with a finding of No Historic Properties Affected for a project as a whole, or to No Adverse Effect on a specific historic property, SHPO shall presume that FDOT may approve the project as de minimis use under Section 4(f) under 23 CFR 774.

SHPO Comments:

Kelly L. Chase 2/4/2022
Timothy A. Parsons, Director, and State Historic Preservation Officer
Florida Division of Historical Resources [DATE]

Bridge (Bridge No. 874218)
Miami-Dade County, Florida
FPN No. 430029-2-22-02
Prepared for:
Transportation, District 6
August 2019



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.	



Purpose and Need



Address structural deficiencies

Provide a safe and usable route for the public

Improve functional operations



Project Goals



**Minimize
Environmental Impacts**



**Minimize Effects
To Significant
Cultural Resources**

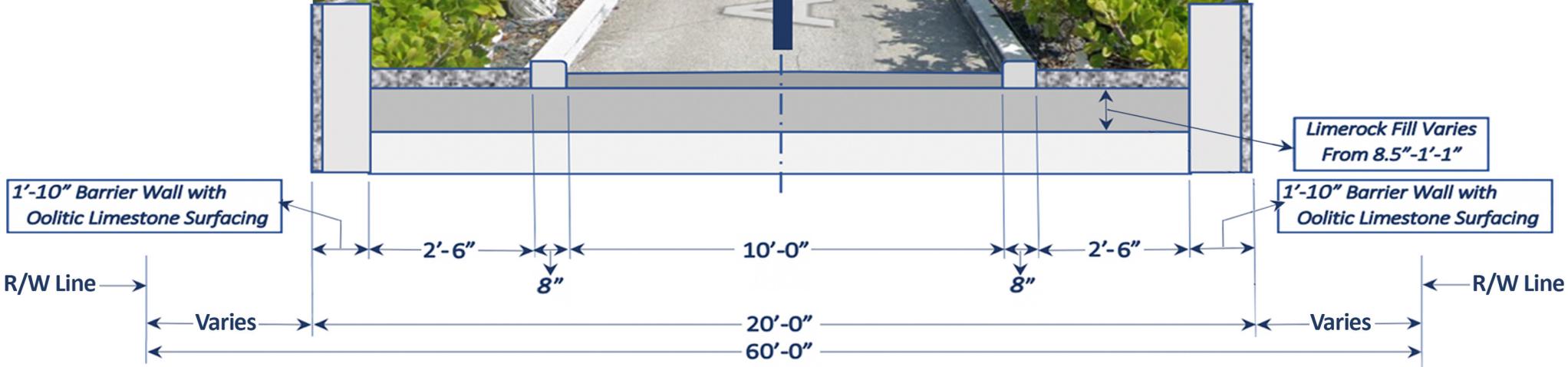


Enhance Safety

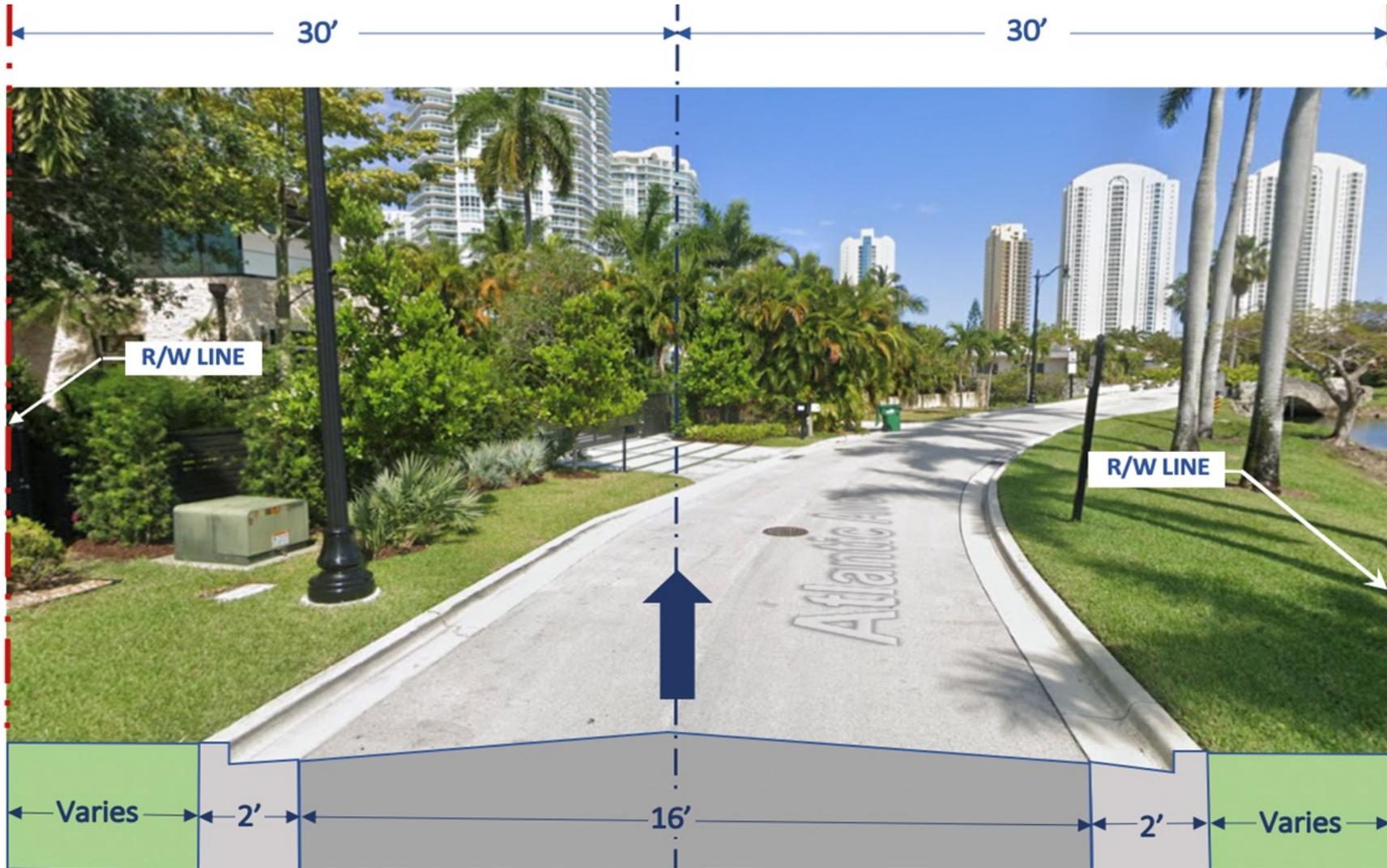


Improve Mobility

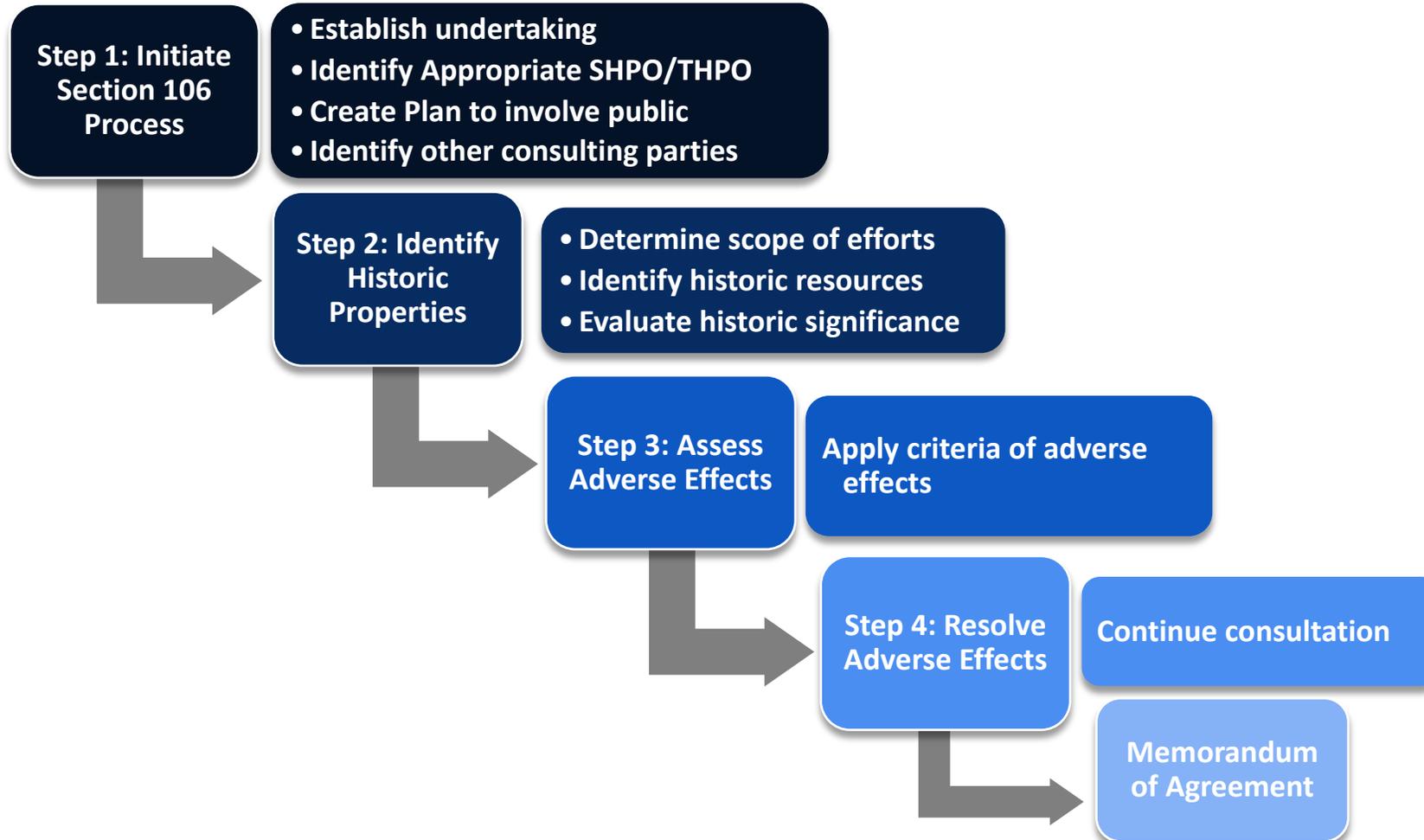
Existing Bridge Typical Section



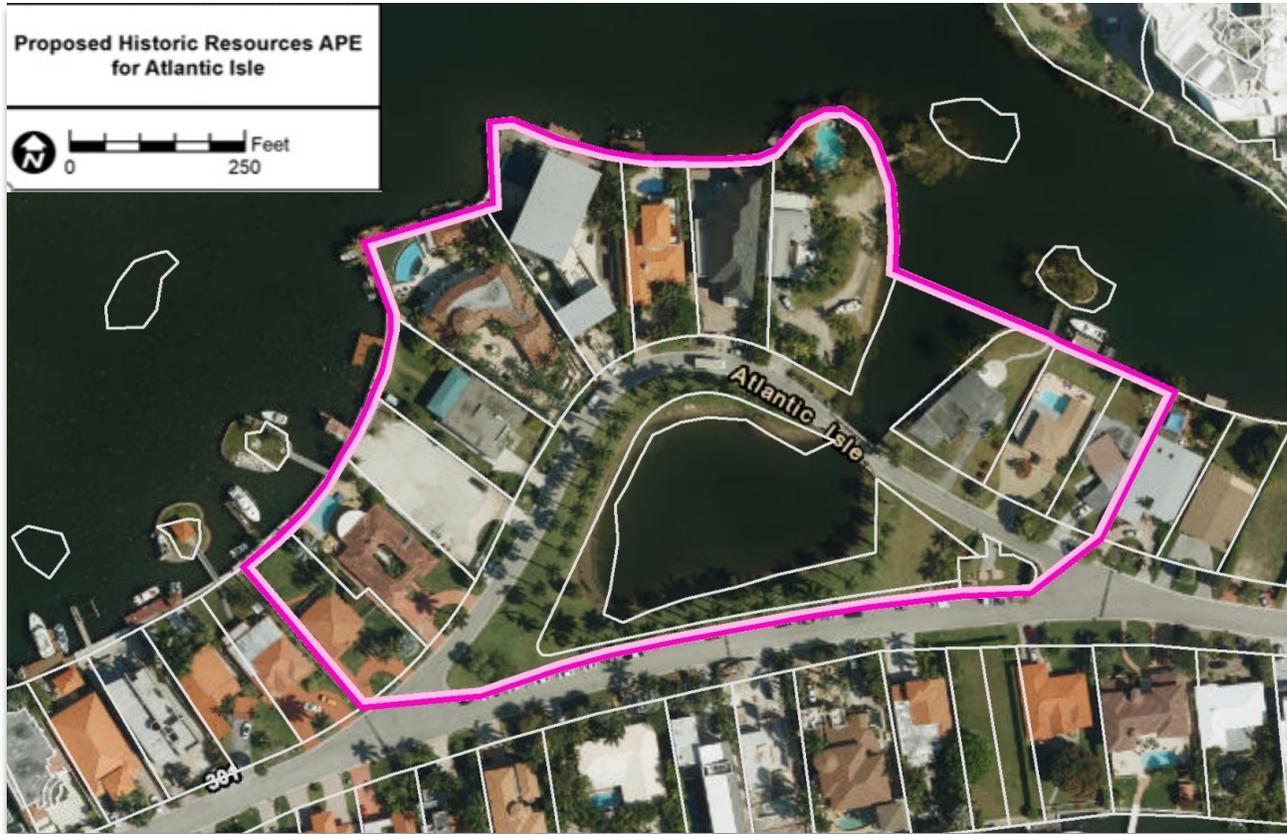
Atlantic Avenue Existing Typical Section



Section 106 of the National Historic Preservation Act Process



Cultural Resources - APE

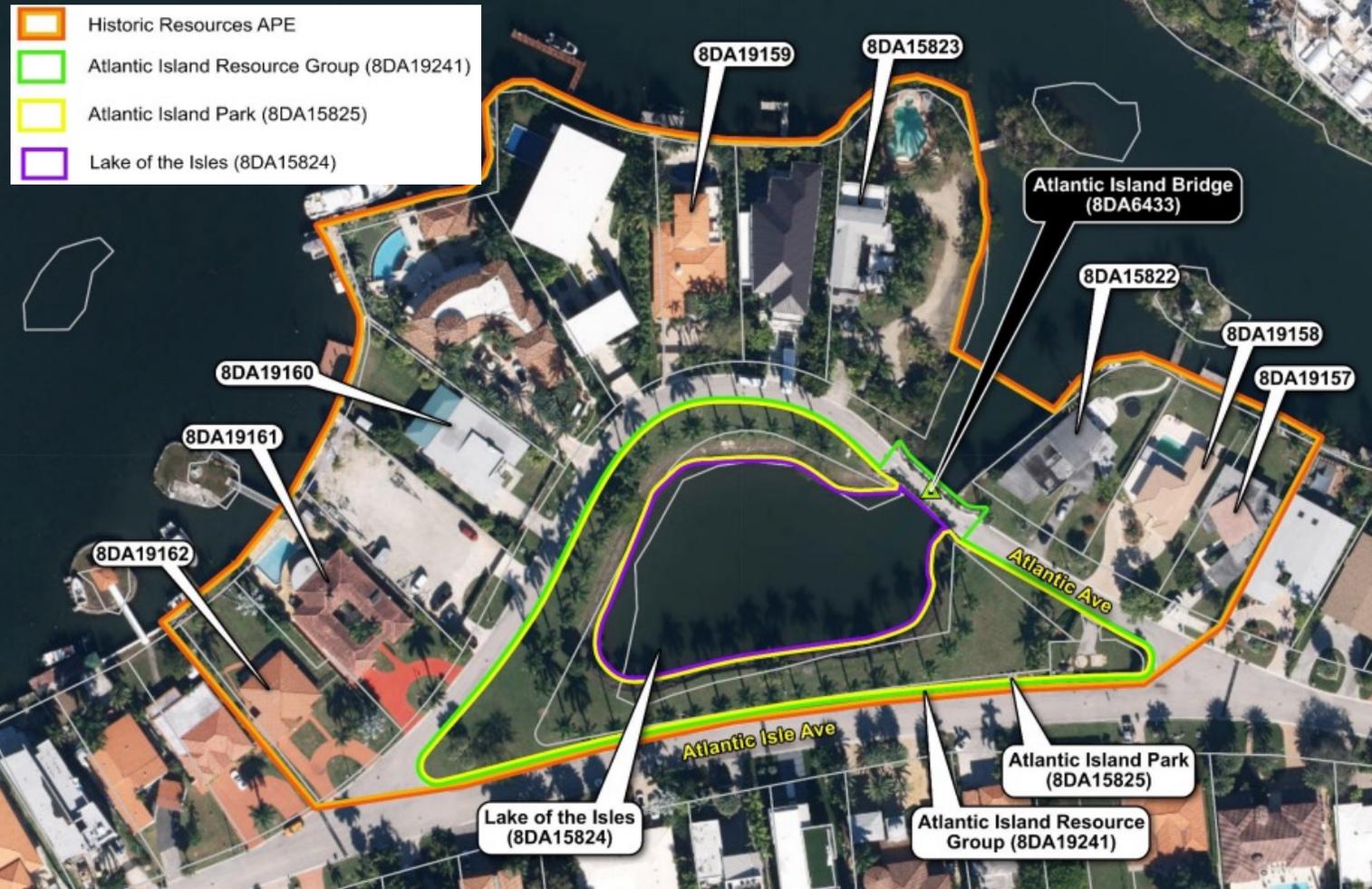


Area of Potential Effect (APE)

- Defined based on the improvements proposed as part of alternatives being considered
- Cultural Resources Assessment Survey (CRAS) - documented resources within APE
- FMSF forms prepared as part of this effort and each resource evaluated according to the National Register of Historic Places Criteria



Cultural Resources



- Atlantic Island Resource Group (8DA19241):
 - Atlantic Island Bridge (8DA6433)
 - Lake of the Isles (Lagoon) (8DA15824)
 - Atlantic Island Park (8DA15825)
- 8/23/2016 - SHPO determined Atlantic Island Bridge NRHP-eligible
- 2/24/2022 – SHPO determined Atlantic Island Resource Group and associated resources NRHP-eligible

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

- CRAS – completed and SHPO concurred with findings in 2016 and 2022
- Evaluate Determination of Effects—in progress
- Consultation with Affected Parties, Agencies, and Local Stakeholders—in progress
- Memorandum of Agreement – will be prepared during consultation if significant resources are adversely affected
- Section 4(f) applies if there is determination of adverse effect to significant resources

Affected Parties Consultation

- ✓ Present Project Purpose and Need and Alternatives Considered
- ✓ Discuss the Section 106 Process
- ✓ Outline how the Section 106 Process is being carried out during course of this project
- ✓ Present findings of cultural resources studies and consultation participants provide input regarding resources and eligibility
- ✓ Define next steps in the Section 106 process: effects and resolution of effects
- ✓ Input on future consultation related to potential effects and minimization and mitigation measures



Initial Alternatives Considered

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





Viable Alternatives

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



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

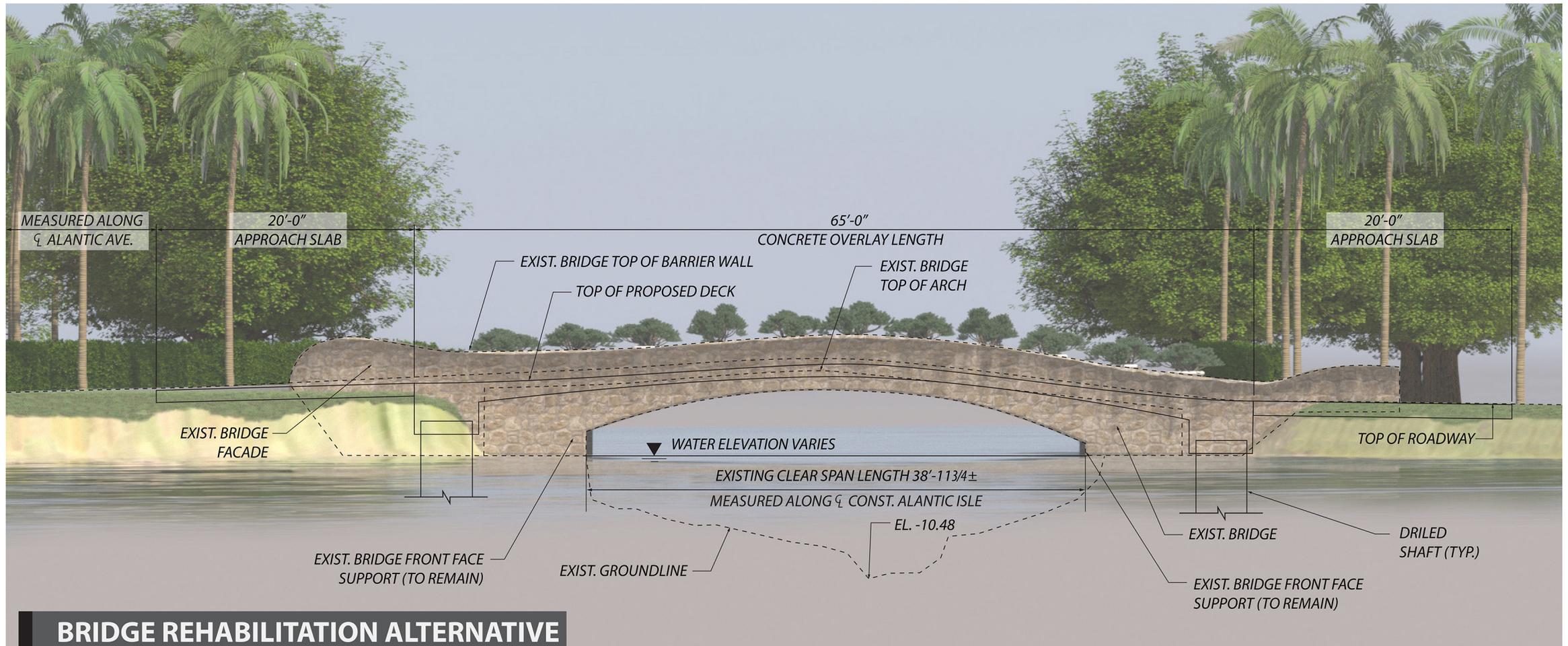


BRIDGE REHABILITATION ALTERNATIVE



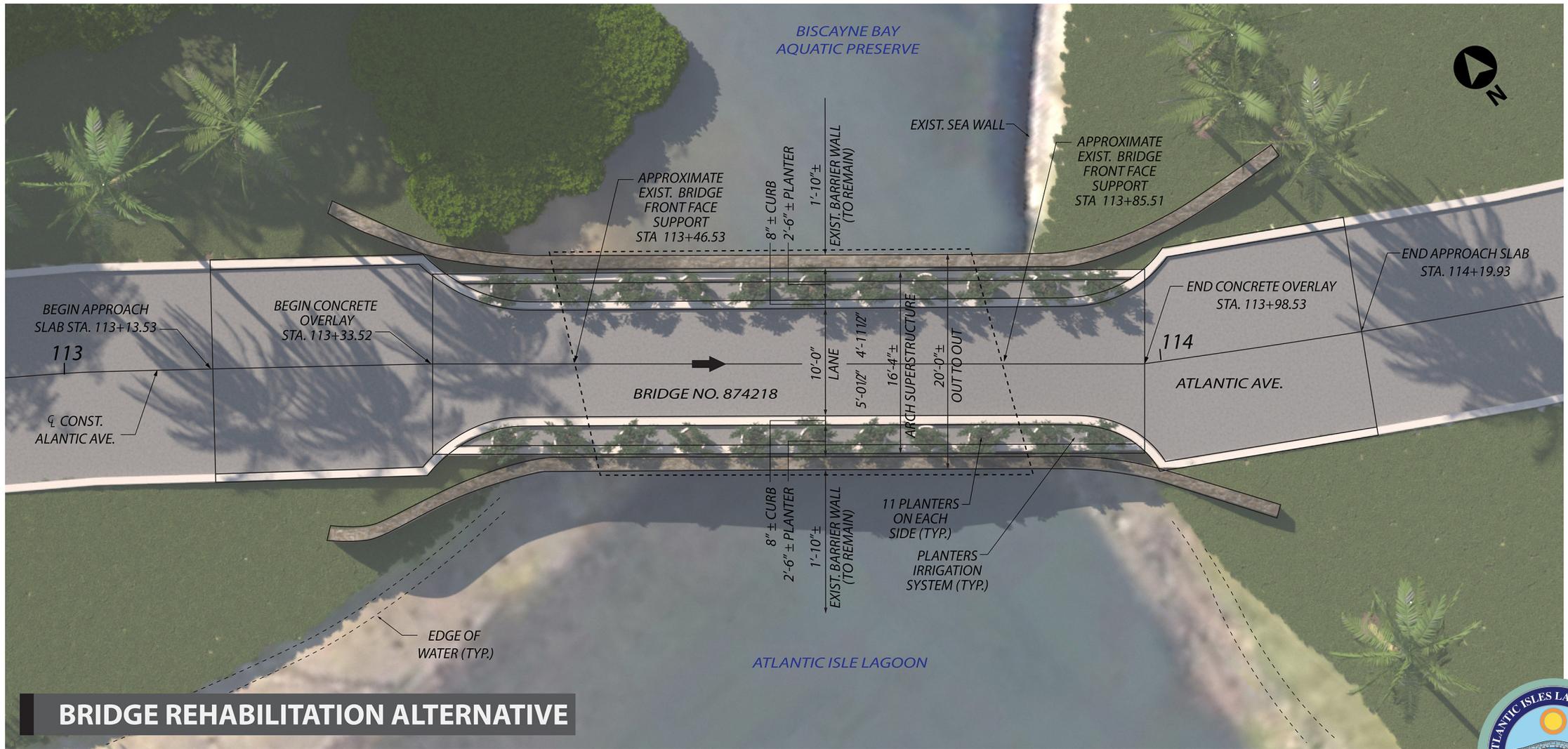
Build Alternative 1 – Rehabilitation

Elevation View

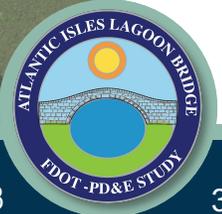


Build Alternative 1 – Rehabilitation

Plan View



BRIDGE REHABILITATION ALTERNATIVE



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:

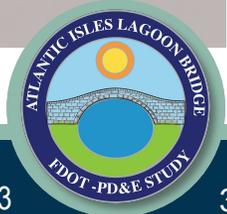
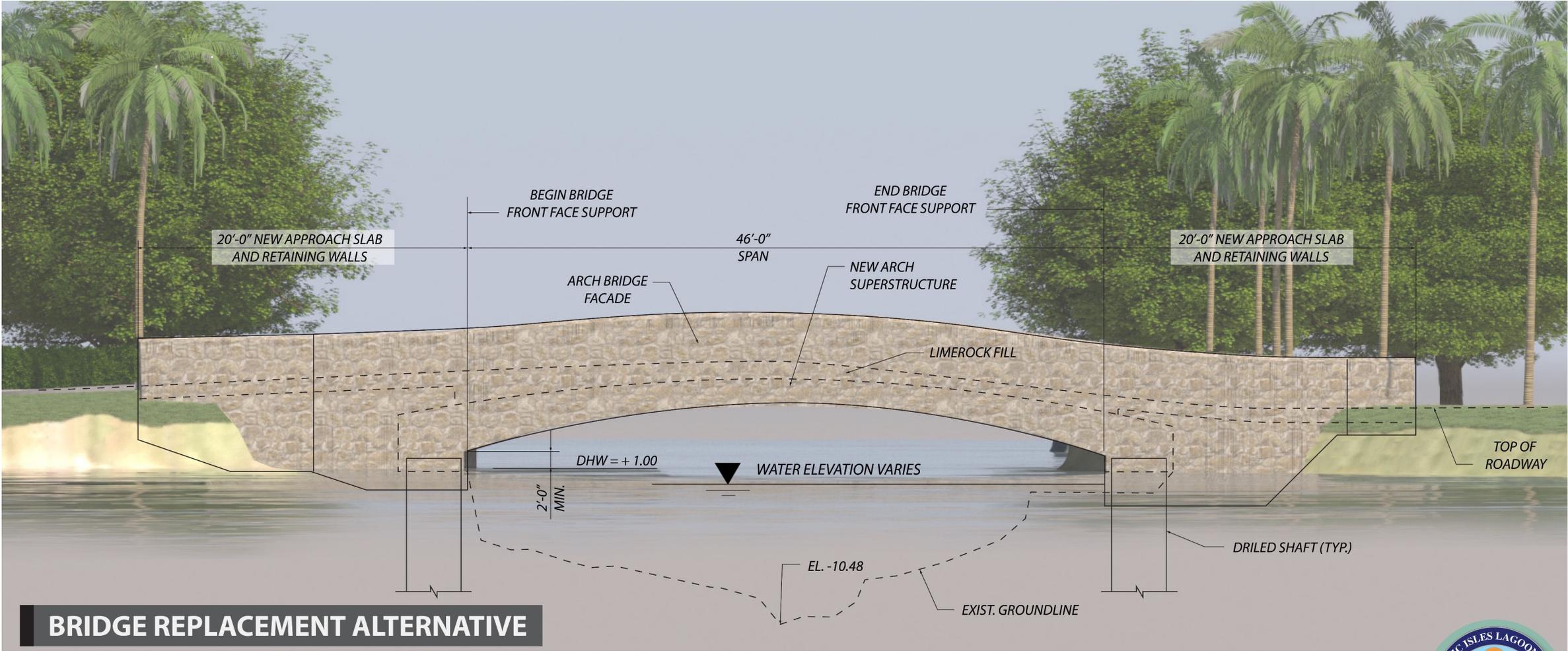
- Historic bridge is gone
- May have slightly different profile than existing bridge



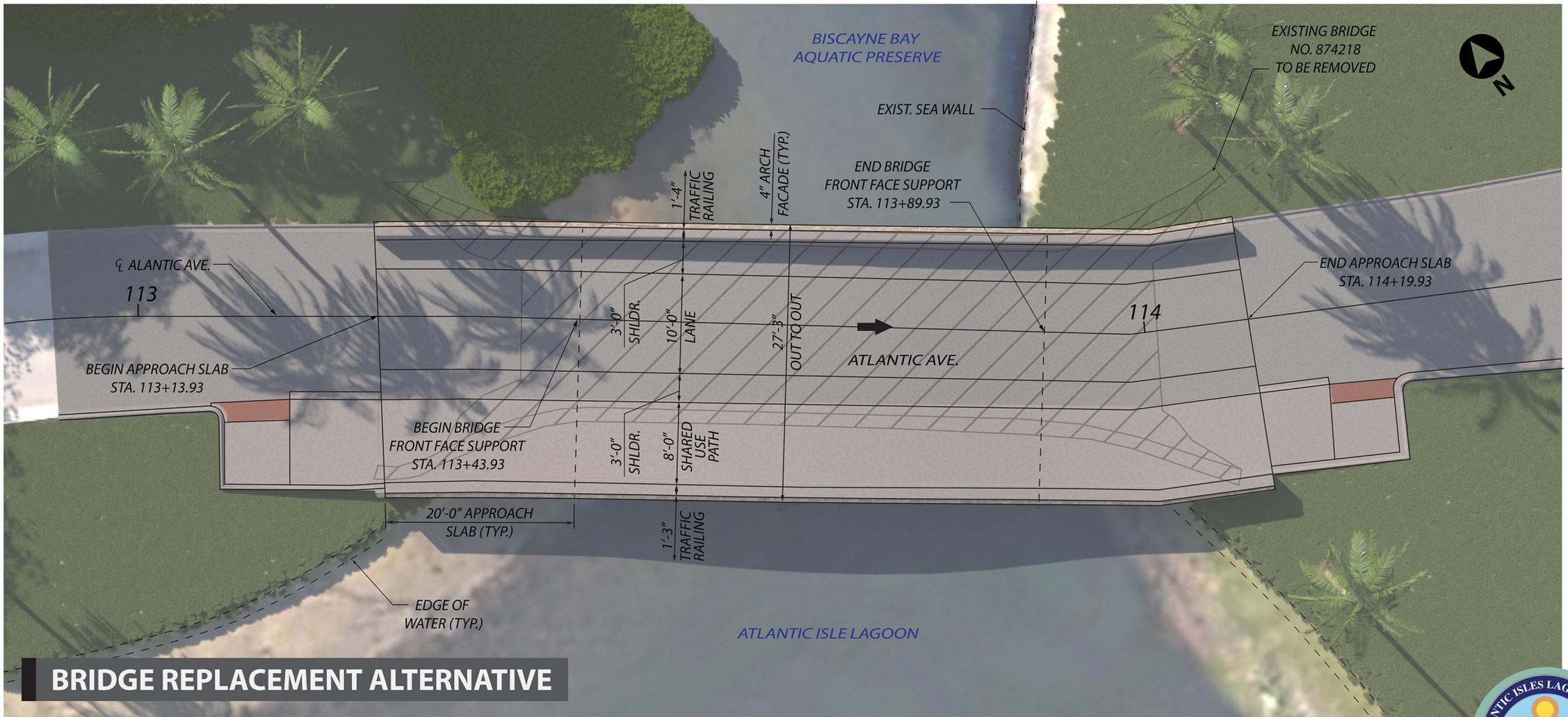
Replacement Bridge Rendering

Build Alternative 2 – Replacement

Elevation View

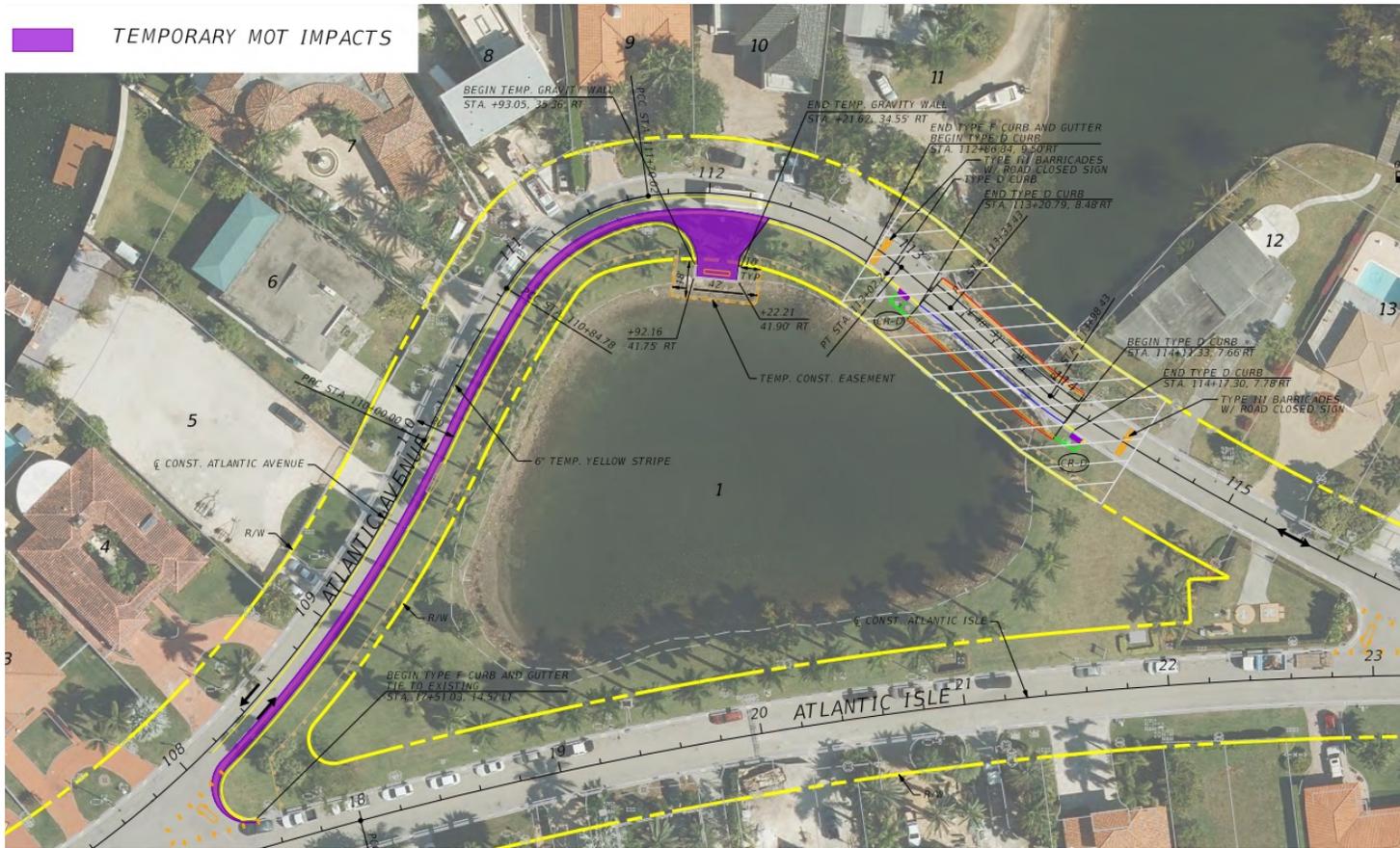


Build Alternative 2 – Replacement Plan View



BRIDGE REPLACEMENT ALTERNATIVE

Temporary Maintenance of Traffic Considerations



- 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	Unsure	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



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

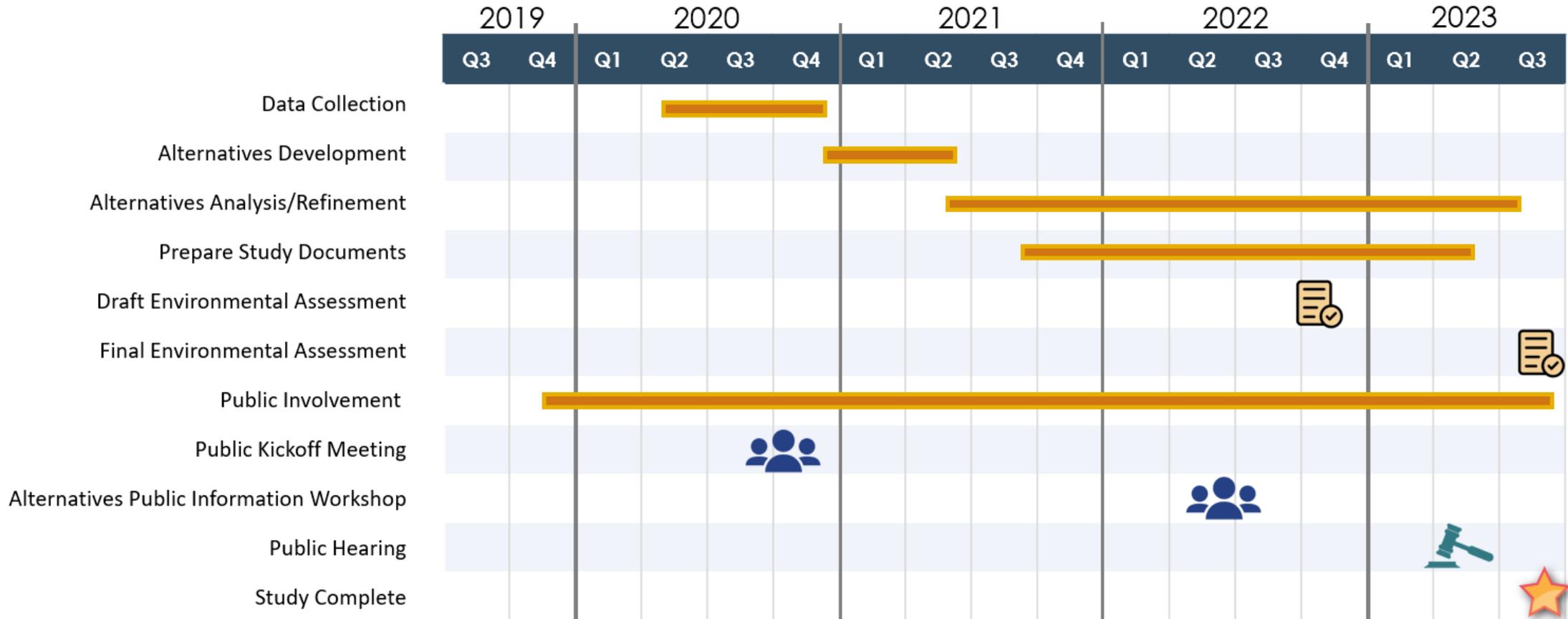


Next Steps

What happens next?

- Once Recommended Alternative selected – begin Section 106 Case Study (Effects to Significant Historic Resources)
- Effects to Significant Historic Resources will be evaluated and documentation will be prepared and submitted to SHPO for concurrence
- Consultation will continue to develop minimization or mitigation strategies
- Potential for future meeting(s) or outreach

Project Schedule



Discussion



- Select the raised hand feature on the control panel to voice your question or comment
- Type your comment in the chat
- Any additional comments should be submitted to Nick Danu following the meeting. Would appreciate all comments by June 18.



Contact Information

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



Thank You for attending!



Affected Parties
Consultation Meeting

June 8, 2022

