

# Lee County DOT

## Alico Road Connector & Colonial Boulevard Alternatives



Board of Lee County Commissioners  
Workshop November 17, 2020





# Agenda



## Alico Road Connector

- Alico Road to State Road 82

## Colonial Boulevard

- Alternatives Analysis Study





# Alico Road Connector

● ● ● ● ● Alico Road to SR 82





# Questions



Do you concur  
with our  
recommendation  
of Option 3?



Would you like us  
to explore a  
different Option?



# Alico Road Connector

● ● ● ● ● Proposed Alignment



Alico Road to SR 82  
Total Length: 9.02 miles  
2009 Alignment Study by  
McMahon Associates





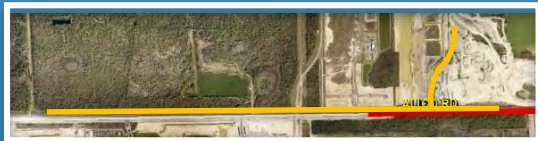
# Alico Road Connector

Proposed Alignment



## Current Alico Road Widening

- 2.44 miles
- Cost: \$18,490,299
- CEI cost: + \$2,790,640



Alico Road to SR 82  
Total Length: 9.02 miles  
2009 Alignment Study by  
McMahon Associates

**ALICO ROAD CONNECTOR**



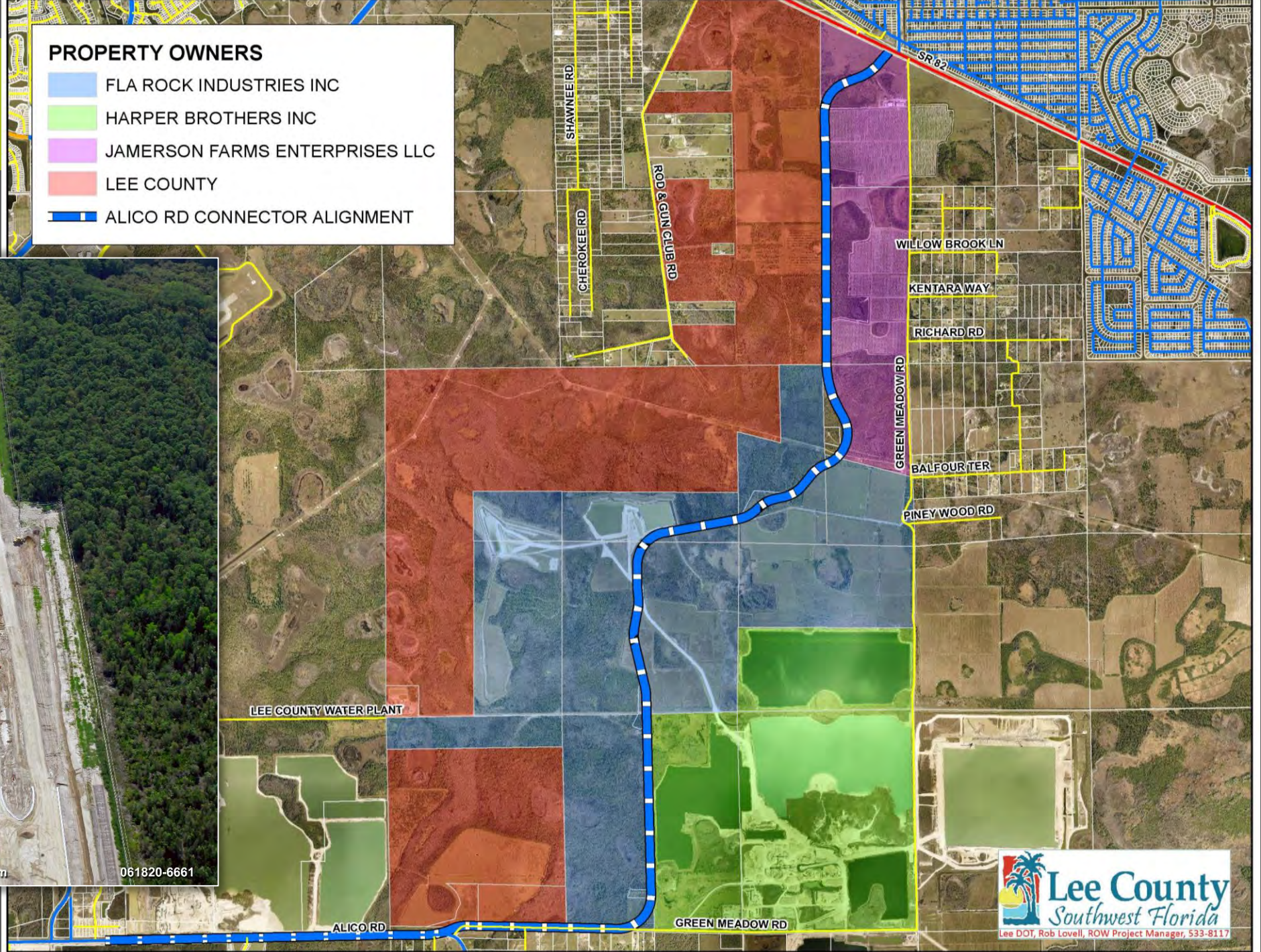


# Alignment

## Alico Road Connector

### PROPERTY OWNERS

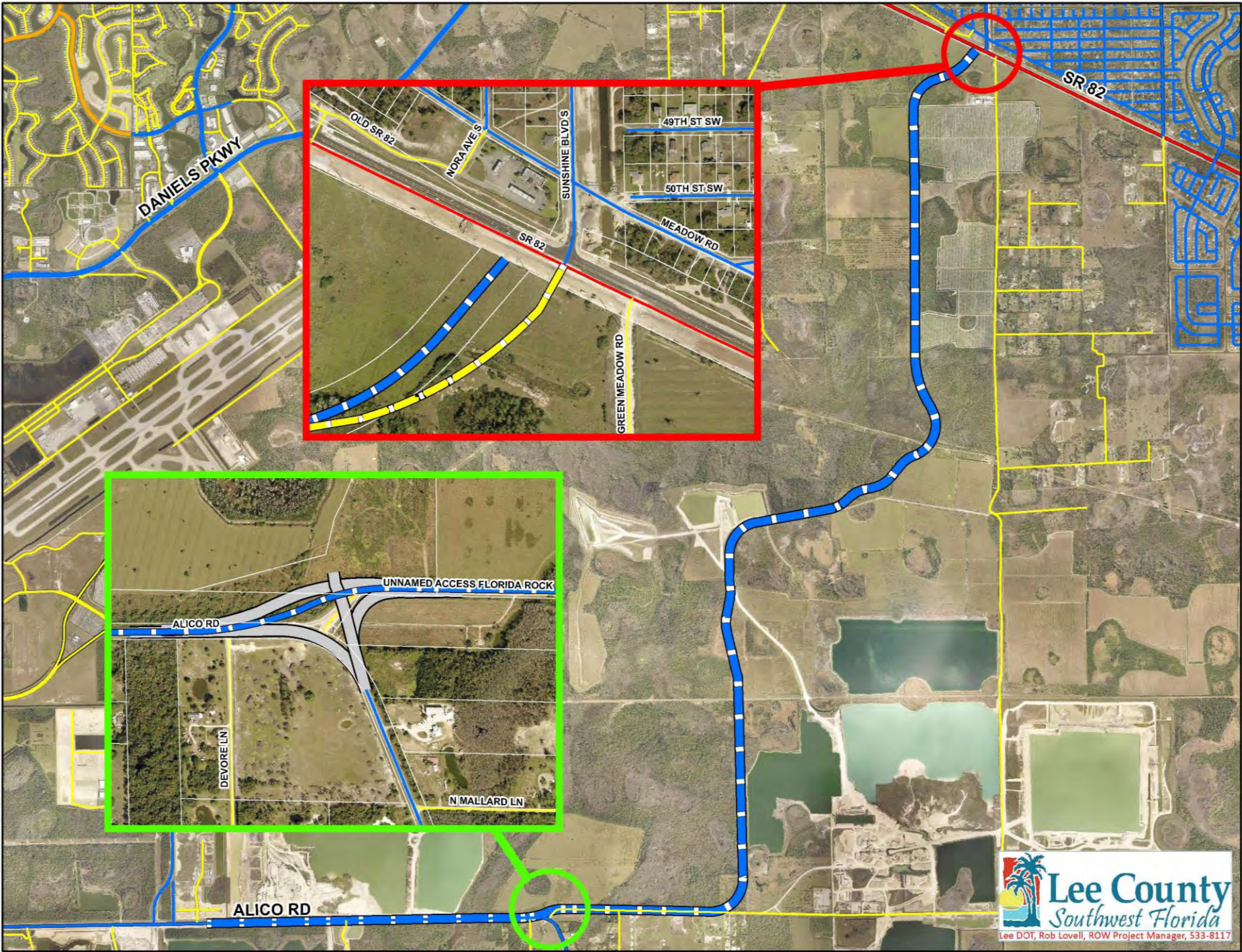
- FLA ROCK INDUSTRIES INC
- HARPER BROTHERS INC
- JAMERSON FARMS ENTERPRISES LLC
- LEE COUNTY
- ALICO RD CONNECTOR ALIGNMENT





# North/South Intersections

## Alico Road Connector





# North/South Intersections

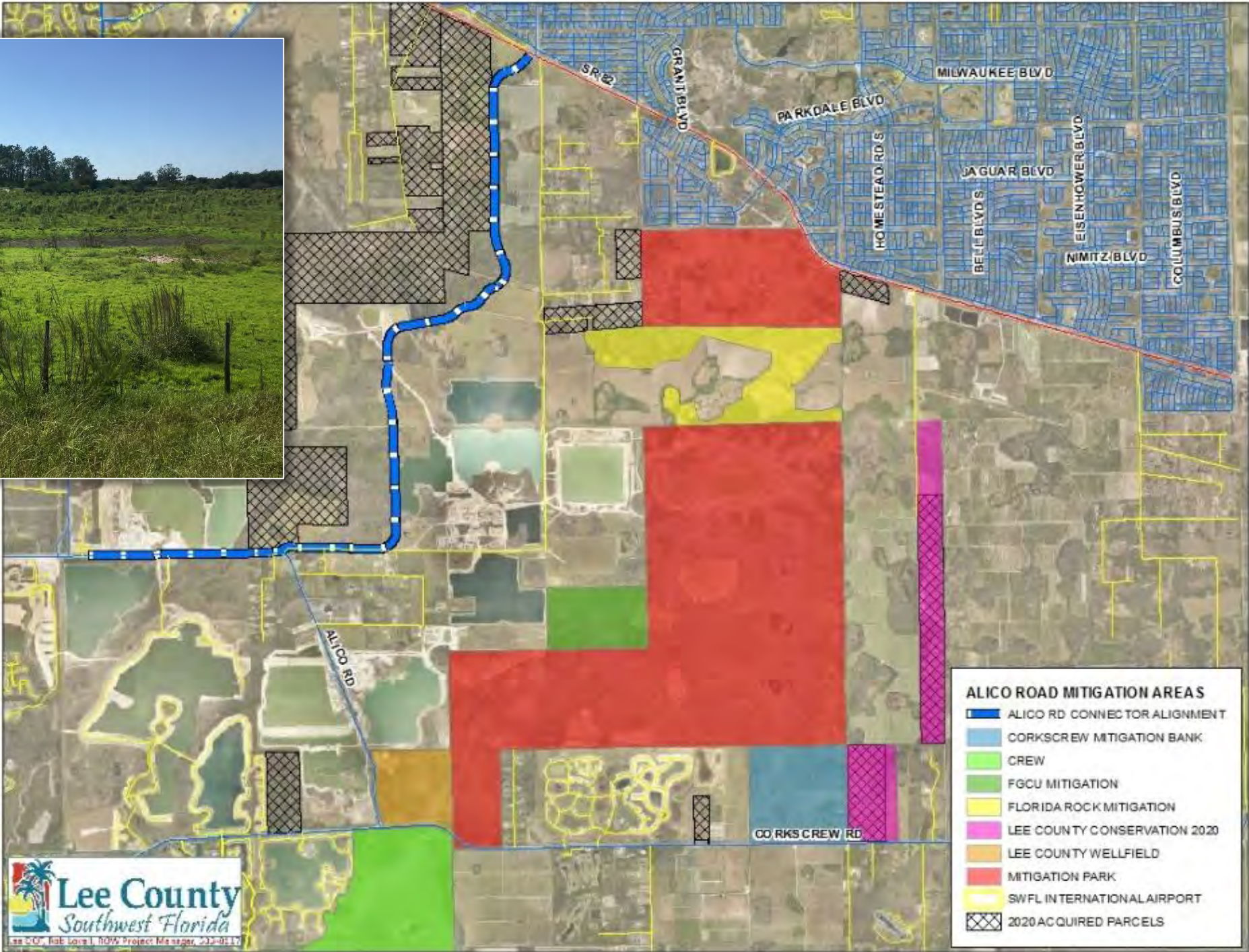
Alico Road Connector







# Mitigation Areas





# Large Tract Right-of-Way Acquisition



**Lee County**  
*Southwest Florida*





# Alico Road Connector

Right-of-Way Requirements  
Southern End






# Alico Road Connector

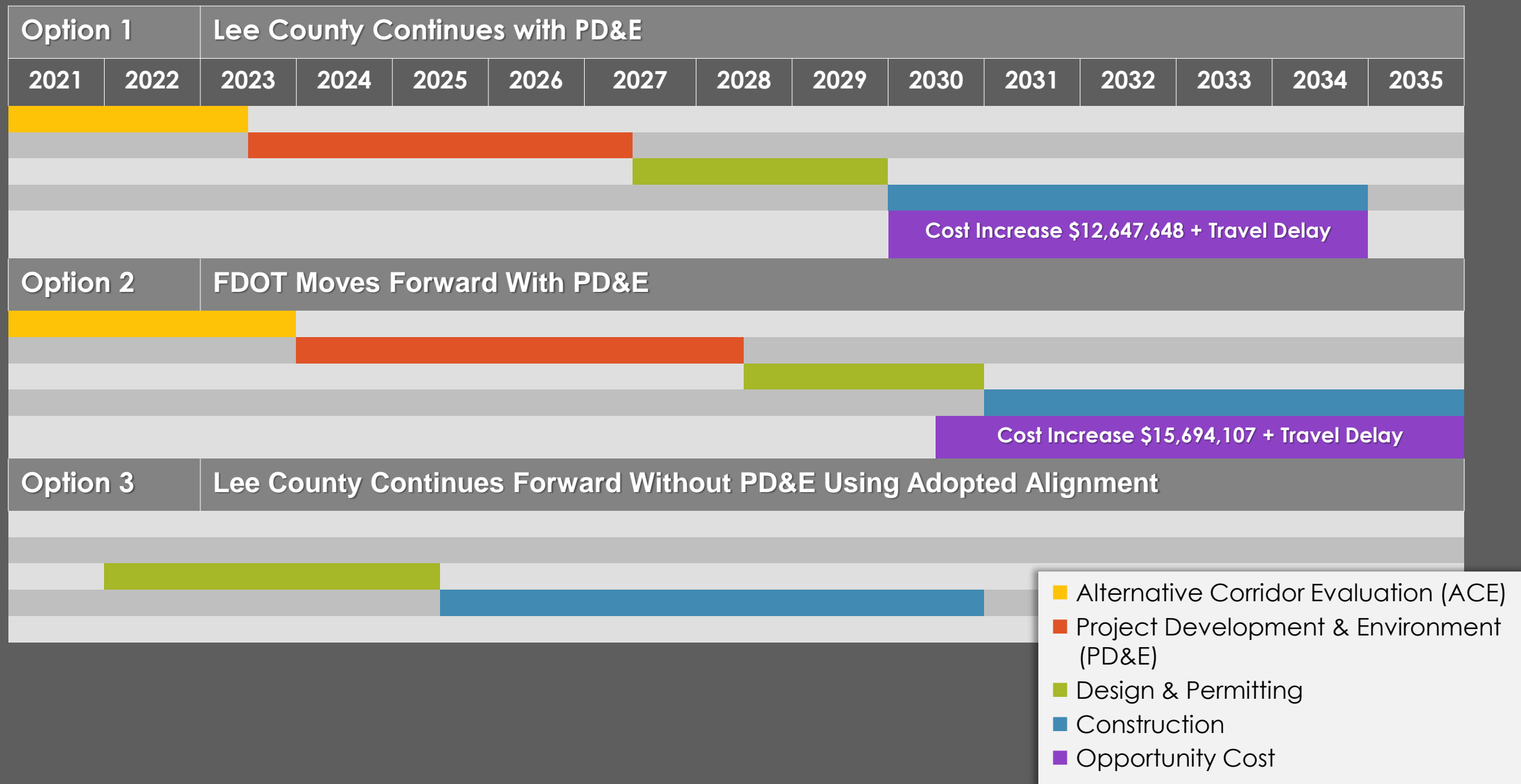
Right-of-Way Requirements  
Southern End



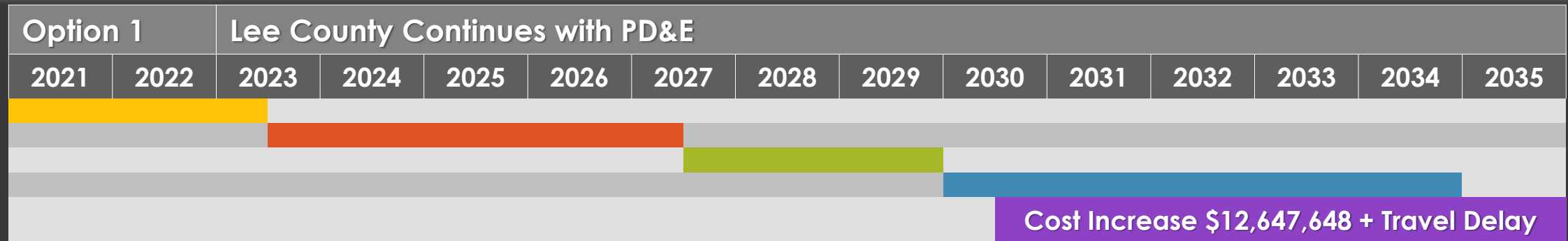
 50' +/- RW Needed to Acquire











### Pros

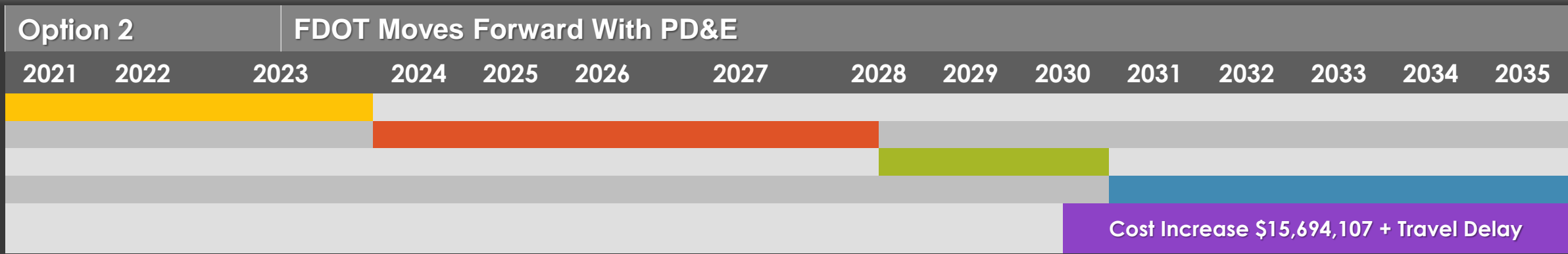
- Possibility of securing federal funding.

### Cons

- Includes 2 year Alternative Corridor Analysis.
- Includes 4 year PD&E study - elevated class of action to Environmental Assessment (EA) versus simpler Type II Categorical Exclusion (CE) due to panther habitat.
- Degrades BoCC control over the process.
- Federal grant funds not guaranteed.

- Alternative Corridor Evaluation (ACE)
- Project Development & Environment (PD&E)
- Design & Permitting
- Construction
- Opportunity Cost





### Pros

- Possibility of securing federal funding.

### Cons

- Includes 2 year Alternative Corridor Analysis.
- Includes 4 year PD&E study - elevated class of action to Environmental Assessment (EA) versus simpler Type II Categorical Exclusion (CE) due to panther habitat.
- Degrades BoCC control over the process further than Option 1.
- Federal funds not guaranteed.

- Alternative Corridor Evaluation (ACE)
- Project Development & Environment (PD&E)
- Design & Permitting
- Construction
- Opportunity Cost



- No 2 year Alternative Corridor Analysis or 4 year PD&E study.
- Start construction earlier.
- Save \$12,647,648.

- No PD&E
  - NEPA analysis (National Environmental Protection Act)
- Forgo federal funding opportunity.

- Alternative Corridor Evaluation (ACE)
- Project Development & Environment (PD&E)
- Design & Permitting
- Construction
- Opportunity Cost



# Sunshine Boulevard Corridor

## Alico Road Connector

Board of Lee  
County  
Commissioners  
Workshop  
November 17, 2020





# Questions



Do you concur  
with our  
recommendation  
of Option 3?



Would you like us  
to explore a  
different Option?





# Colonial Boulevard

● ● ● ● ● Alternatives Analysis Study



# Questions



Do you concur with the recommendations to:

- Install safety and intersection improvements now?
- Consider larger, long-term solutions in subsequent CIP cycles?



Do you want us to explore the option of adding an extra lane to each bridge?





# Alternatives Analysis

Level of Service (LOS) & Delay

Travel Time

Vehicle throughput

Network performance

- Average delay
- Average speed
- Average stops
- Latent demand



# Improvement Bundles

## Bundle 1

Safety  
Improvements

## Bundle 2

Intersection  
Improvements

## Bundle 3

Flyover

## Bundle 4

Grade  
Separation

Widen Midpoint



# Improvement Bundles

## Bundle 1

- Safety Improvements

## Approximate Cost

- \$300,000

## General Improvements

- Sidewalk connection under Colonial at McGregor
- Close Rarco access from westbound Colonial
- Update APS/CPS and pedestrian signing
- Update overhead signing



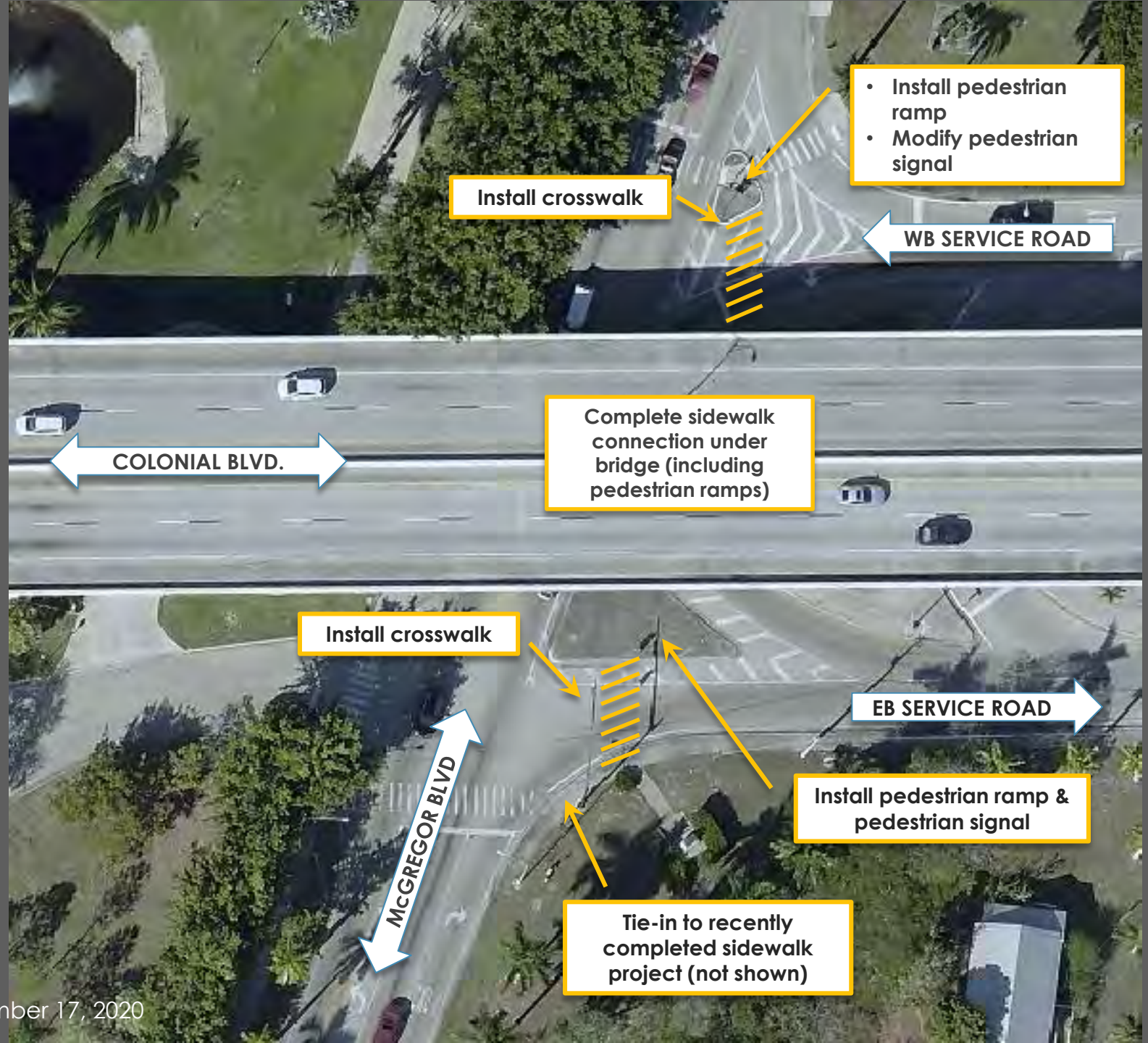
# Improvement Bundles



## Bundle 1

### Sidewalk Connection

Colonial Blvd. at  
McGregor Blvd.





# Improvement Bundles



COLONIAL BLVD.

COLONIAL BLVD.

RARCO BLVD.



# Improvement Bundles



Bundle 1

Close Rarco Access

Westbound Colonial Blvd.



# Improvement Bundles

## Bundle 2

- Intersection Improvements

## Approximate Cost

- \$560,000
- Includes design & construction
- Does not include right-of-way or utilities

## General Improvements

- **Summerlin / Sommerset:** At-grade improvements at intersection
- **NB Summerlin:** L-L-LT-R configuration
- Split phase signal operations
- **Sommerset:** Maintain full access - no modifications SB
- **Deleon:** City planned improvements for NB & SB turn lanes
- Safety improvements from Bundle 4





# Improvement Bundles

## Bundle 2: Intersection Improvements



Colonial Boulevard at  
Summerlin Rd. & Sommerset Dr:  
Modify Northbound Lane Use  
(From L-L-T-R to L-L-LT-R)



# Improvement Bundles

## Bundle 2: Intersection Improvements



Colonial Boulevard at  
Summerlin Rd. & Somerset Dr:  
Modify Northbound Lane Use  
(From L-L-T-R to L-L-LT-R)



# Improvement Bundles

## Bundle 2: Intersection Improvements





# Improvement Bundles

## Bundle 3

- Flyover

## Approximate Cost

- \$12M
- Includes design & construction
- Does not include right-of-way or utilities

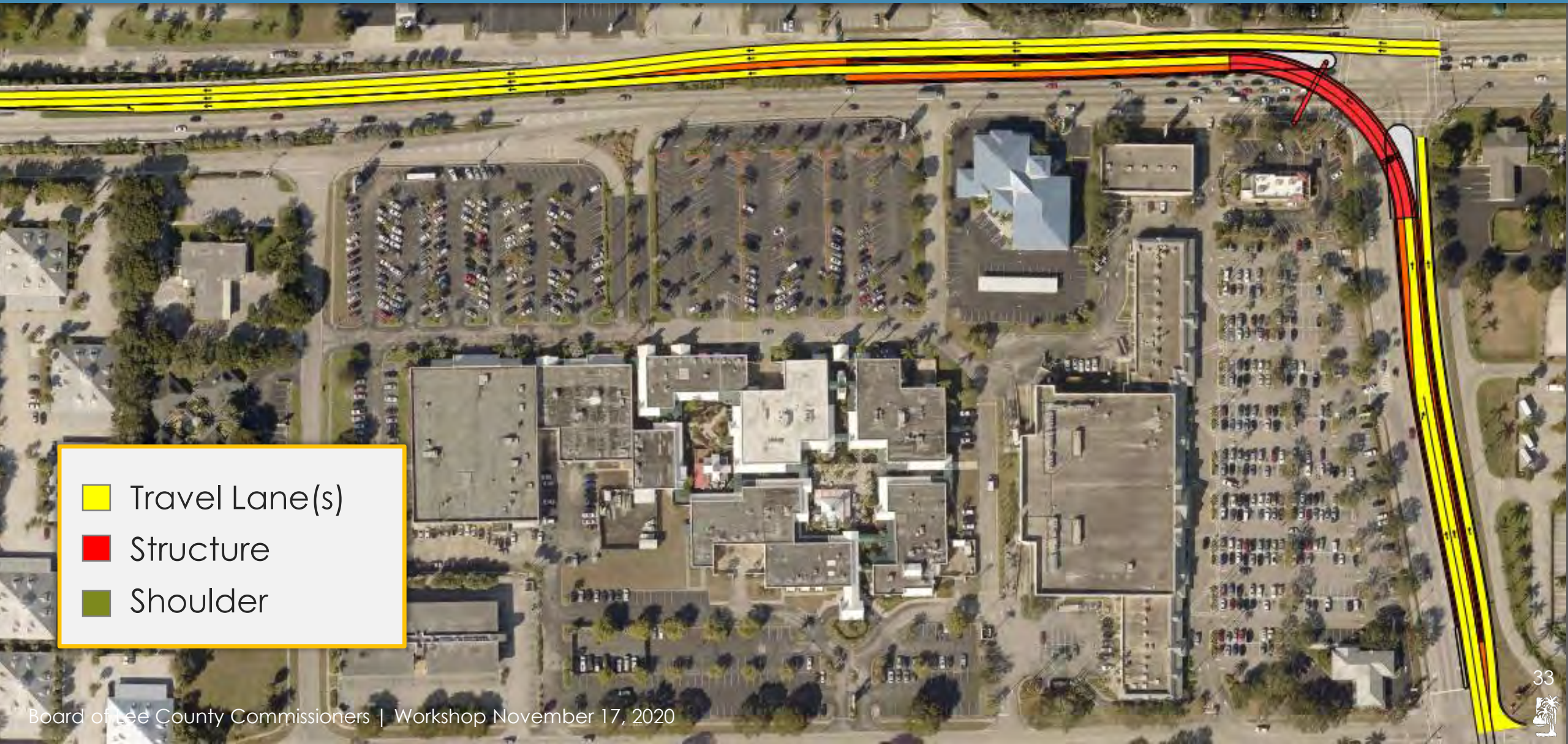
## General Improvements

- Grade separation for the NB Left
- Applicable safety improvement from Bundle 4



# Improvement Bundles

## Bundle 3: Flyover



- Travel Lane(s)
- Structure
- Shoulder





# Improvement Bundles

## Bundle 3: Flyover



- Travel Lane(s)
- Structure
- Shoulder





# Improvement Bundles

## Bundle 4

- Grade Separation

## Approximate Cost

- \$160M
- Includes design & construction
- Does not include right-of-way or utilities

## General Improvements

- Colonial on four-lane structure over Summerlin/Sommerset
- Colonial on four-lane structure over Deleon
- Maintain service road
  - One lane with ramp access between Midpoint & Cleveland
  - Two lanes with access only at Midpoint & Cleveland
- Applicable safety improvements from Bundle 4



# LONG TERM IMPROVEMENT

## Widen Midpoint Bridge

### Approximate Cost

- \$125M
- Structure only

### Operational Impacts

#### Eastbound (eastern shore)

- Minimal impact on queues and delay
- Essentially provides additional storage capacity
- Traffic signal at Summerlin dictates operations

#### Westbound (eastern shore)

- Benefits for grade separation & flyover options
- Additional length for reduction to two westbound lanes
- Widening not needed for entire length of bridge



**\$137M**

Widen Bridge  
+ Flyover

**\$285M**

Widen Bridge  
+ Grade  
Separation



# NETWORK PERFORMANCE IMPACTS

## Grade separation

- Greatest impact on reducing average delay & increasing average speeds
- Highest cost option
- Longest construction time

## Flyover

- Greatest impact on delay & speed during PM peak

## Intersection Improvements

- Modest impact on delay & speeds



# Questions



Do you concur with the recommendations to:

- Install safety and intersection improvements now?
- Consider larger, long-term solutions in subsequent CIP cycles?



Do you want us to explore the option of adding an extra lane to each bridge?

