



January 2020 Stakeholders Group Meeting

Stakeholder Meeting 4 - Summary



Event Information

Date: Thursday, January 30, 2020

Time: 10:00 AM to 11:30 AM

Location: Sea Island Room
Coastal Discovery Museum at Historic Honey Horn
70 Honey Horn Dr, Hilton Head Island, SC 29926

Facility POC: Robin Swift, Vice President of Marketing and Development
rswift@coastaldiscovery.org

Meeting Goals

Present to the stakeholders and gather feedback on:

- An update on where we are in the process
 - Comments Received
 - Alternatives Workshops Conducted
- A deeper understanding of the traffic analysis
- Share next steps

Attendees

Person	Organization
Craig Winn	SCDOT
Megan Groves	SCDOT

Shane Belcher	FHWA
Eric Burgess	KCI
Phil Leazer	KCI
Amy Livingston	CDM Smith
Jenny Humphreys	CDM Smith
Heather Robbins	3 Oaks
Geni Theriot	3 Oaks
Russell Chandler	3 Oaks
Rob McFee	Beaufort County
Nick Akers	Windmill Harbor
Mayor Lisa Sulka	LATS
Scott Marshall	Town of Bluffton
Julie Erickson	Mariners Cove Club
Frank Babel	HHI Bike Advisory Committee
Luana Graves Sellars	Native Island Leadership
Christian Dammel	Lowcountry Council of Governments
David Johnson	Town of HHI 278 Gateway Committee
Ray Deal	HHI-Bluffton Chamber of Commerce
Peter Kenneweg	Crazy Crab Restaurant
Charles Cousins	Town of Hilton Head Island
Mary Lou Franzoni	Palmetto Breeze
Rikki Parker	SC Coastal Conservation League
Juliana Smith	SC Coastal Conservation League

Agenda Items

- Team introductions – Amy then Craig
- Presentation – Craig
 - Update on Project
 - Where We Are in the Process
 - The project team has presented at a number of community and neighborhood events, such as the Bluffton Seafood and Arts Festival, Daufuskie Island Council, Indigo Run neighborhood meeting and others.
 - The project team is beginning to ramp up the noise evaluation.
 - The cost analysis is ongoing for each of the alternatives.
 - Comments Received
 - 340 Comments were received as part of the formal comment period in the fall. Craig provided a review of the public comments received.
 - As a result of the comments from the public and agencies, the project team conducted an alternatives refinement workshop. A few results include the project team exploring an underpass which would create better neighborhood connections under US 278 as well

as looking to shift those alternatives using the utility right of way out of the direct line to avoid power line relocations.

- Traffic Analysis
 - An explanation of the traffic analysis done to-date was provided as well as an explanation of the more detailed traffic analysis currently underway and what would be done for the preferred alternative.
- Project Next Steps & Questions – Members were asked if they had any questions or what they'd like to see in future presentations
 - The project team will be hosting community walk alongs with potentially impacted citizens.
 - Public Hearing will be scheduled for late 2020.

Q: We were understanding that a preferred alternative will be announced in the fall. Will it not?

A: The preferred alternative will be announced in the fall. However, there will be comments on that and potentially further refinements. Leading up to that, we will begin releasing data as it is finalized. For example, once the traffic memo is complete and approved, it will be released to the public.

Comment: When going onto the next steps, the biking community would be happy to sit down with the team to help assess or provide input as it relates to connecting to any bike paths.

Q: Is any consideration of future impacts to sea-level rise given? The Town of Hilton Head Island is addressing that in their Comprehensive Plan. Is that considered at any point?

A: These considerations will be discussed at the Preferred Alternative stage. FHWA has done some great studies on some natural barriers. Additionally, the hydrology analysis, which is forthcoming, will help us to better design for sea-level rise.

Q: When you respond with the wetland delineation and resources, that's when the federal agencies will decide if the project should be an EIS instead of an EA?

A: FHWA can elevate to an EIS at any point if warranted by impacts. FHWA has a good track record of understanding how to mitigate EAs to keep them down to non-significant impacts. When this project started, FHWA advised the project team to conduct the project with the appropriate coordination points for an EIS so the project would not have to go backwards if it were determined that an EIS was warranted. However, at this time, FHWA has seen all the draft numbers and potential impacts and is not expecting an elevation at this point. However, that is yet to be determined.

Comment: From a tourism perspective, the aesthetics of the bridge are very important just as the functionality. Reversible lanes would be a bad idea.

Q: Will we see some of the costs of the alternatives before the preferred?

A: We will start publishing some of that information on the website, social media and newsletters ahead of the public hearing. We are committed to an open dialogue on this project and do not want to go nine months without sharing.

Q: In the event that the safety project (Jenkins Island Improvements) does not pass council, what are the short-term alternatives to those in the adjacent neighborhoods.

A: From SCDOT's perspective, there are no short-term projects. Whether the Jenkins Island project moves forward or not is a Beaufort County decision. For the SCDOT US 278 Corridor Improvements project, we are assuming we can use the pavement width on Jenkins Island. However, there are additional things we are already looking at just in case. For instance, we will reach out to Windmill Harbour to discuss using the back gate or potentially using the second entrance that is platted at Jenkins Road. SCDOT would prefer using the back gate because we would not be adding additional traffic onto US 278 and could keep the main entrance as a right in-right out only entrance.

Q: You mentioned an underpass; is it possible to phase some of this work so that the underpass is done first?

A: The ability to phase the underpass first will somewhat be dependent on which alternative is chosen since some of the alternatives would require a temporary connection to Mariner's Cove.

Q: Any idea yet regarding turning into and out of the Crazy Crab?

A: That is yet to be determined. However, we will analyze each driveway to see if there is a safety issue allowing a left turn in or out.



SCDOT STAKEHOLDER MEETING SIGN-IN SHEET

Thursday, January 30, 2020

US 278 CORRIDOR IMPROVEMENTS Moss Creek Drive to Spanish Wells Road BEAUFORT COUNTY



NAME (please print)

Christian Dammel
David Johnson
Ray Deal
Peter Kenneweg
Charles Cousins
Mary Lou Franzoni
Rikki Parker
Juliana Smith

ORGANIZATION (please print)

lowcountry council of Governments
278 Gateway Corridor Committee (H
Hilton Head Island - Bluffton Chamber of Commerce
Crazy Crab Restaurant
Town of HHI
Palmetto Breeze
SC Coastal Conservation League
SC Coastal Conservation League



SCDOT STAKEHOLDER MEETING SIGN-IN SHEET

Thursday, January 30, 2020

US 278 CORRIDOR IMPROVEMENTS
Moss Creek Drive to Spanish Wells Road
BEAUFORT COUNTY



NAME (please print)

ORGANIZATION (please print)

ERIC BURGESS

KCI TECHNOLOGIES

R. Metcal

BHT. Co.

NICK AKERS

WINDMILL HARBOUR
LATS

Lisa Sulka

TOWN OF BLUFFTON

Scott Marshall

Mariners Cove Club

Julie Eriksson

HHI BIKE ADVISORY COMMITTEE

FRANK BABER

Native Island Leadership
SCDOT

Luana Graves Sellars

CRAIG WINN

NOTE: Information provided, including name and address, will be published and is subject to disclosure under the Freedom of Information Act.

US 278 Corridor Improvements

Stakeholder Meeting

January 30, 2020





Project Management



Purpose & Need

The purpose of this project is to **address structural deficiencies** at the existing eastbound Mackay Creek bridge, as well as **increase capacity** and **reduce congestion** along US 278 from Moss Creek Drive to Spanish Wells Road.



**Structural
Deficiencies**



Capacity



Congestion

THE DEVELOPMENT PROCESS FOR HIGHWAYS

This graphic demonstrates the general project development process for planning and building highways.



*Process depicted on this graphic is for projects being developed under an Environmental Assessment or Environmental Impact Statement; smaller projects developed under a Categorical Exclusion do not require a Public Hearing.

Public Information Meeting 2 Summary



The second Public Information Meeting for the US 278 Corridor Improvements Project was held on Thursday September 19, 2019 from 5-7 PM at the Boys & Girls Club of Hilton Head Island.

Response Type

Written Comment Forms



62

Website Comments



247

Emailed Comments & Letters



31

330
Total Attendees

5,979
Web Visitors

What We Heard

340
Total Comments

In Favor of Bike/
Ped or Transit



In Favor of
Additional
Access Point



In Favor of
Reversing Traffic



Concerned with
Noise Impacts



Concerned with
Preserving the
Natural Environment



In Favor of
Widening



Against
Widening

Concerned with
Preserving Gullah
Heritage



Where We Have Been



Public &
Agency
Comments
Review



Alternatives
Refinement

Where We Have Been Community Engagement



Bluffton Seafood & Arts
Festival



Daufuskie Island Council

Democratic Club
(South of the Broad)

Indigo Run

Bluffton Chamber
of Commerce

Mariners Cove

Hilton Head Island
Gateway Committee

Hilton Head Island
Chamber of Commerce





Traffic Engineering



Traffic Analysis

Planning-Level

For Environmental Analysis & Development of Alternatives

- Purpose and Need
- Development of Alternatives
- Evaluation of Alternatives
- Concept Plans for Recommended Preferred Alternative

Engineering-Level

For Final Design of the Recommended Preferred Alternative

- Mainline Capacity
- Intersection Design
- Access Management
- Traffic Operations and Signalization
- Wayfinding



Traffic Analysis

Data Collection



Existing Geometry

- Segment number of lanes
- Intersection configuration & traffic control
- Posted speed limits

Traffic Volumes

INRIX Speed Data

Historical AADT from SCDOT

5-Year Crash History

Existing Signal Timings



Traffic Analysis

Data Collection



Existing Geometry

Traffic Volumes

- Over 24-hour period (Segments)
- Peak Periods: AM, Mid-day, PM (intersections)

INRIX Speed Data

SCDOT Historical AADT

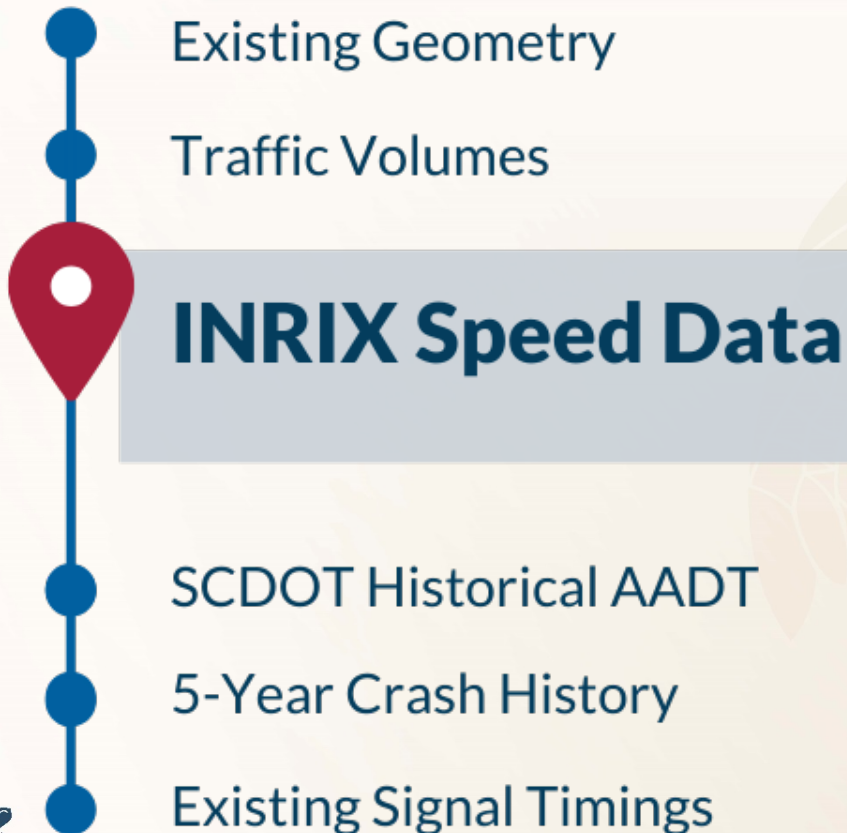
5-Year Crash History

Existing Signal Timings



Traffic Analysis

Data Collection



AM

**OBSERVED
SPEED**

30-35

Eastbound

PM

**OBSERVED
SPEED**

35-45

**Both
Directions**

Traffic Analysis

Data Collection



Existing Geometry

Traffic Volumes

INRIX Speed Data



**SCDOT Historical Average
Annual Daily Traffic (AADT)**

5-Year Crash History

Existing Signal Timings



Traffic Analysis

Data Collection

Existing Geometry

Traffic Volumes

INRIX Speed Data

SCDOT Historical AADT

5-Year Crash History

Existing Signal Timings



Traffic Analysis

Data Collection



Existing Geometry

Traffic Volumes

INRIX Speed Data

SCDOT Historical AADT

5-Year Crash History



Existing Signal Timings



Existing Traffic Analysis

Software

- Analysis is based on Highway Capacity Manual (Industry Guidelines)
- Segment Analysis – HCS7
- Intersection Analysis – Synchro10

Design Volume

- Design Hour Standard Practice: establish highway design volumes based on an hour between the 30th and 100th highest hour of the year

American Association of State Highway and Transportation Officials (AASHTO)



Mainline Volume Analysis

Will a Reversible Lane Work?

AM Peak:

- 4,150 eastbound: Need 3 eastbound lanes to maintain LOS D
- 2,120 westbound: Need 2 westbound lanes to maintain LOS C

PM Peak:

- 4,390 westbound : Need 3 westbound lanes to maintain LOS D
- 3,080 eastbound: Need 2 eastbound lanes to maintain LOS D



Levels of Service

FREE FLOW

Low volumes and no delays.

LOS
A



STABLE FLOW

Speeds restricted by travel conditions, minor delays.

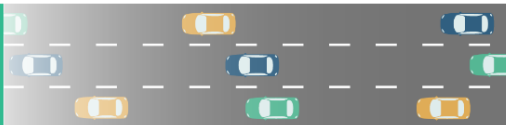
LOS
B



STABLE FLOW

Speeds and maneuverability closely controlled because of higher volumes.

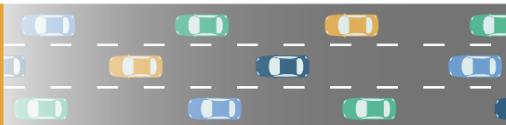
LOS
C



STABLE FLOW

Speeds considerably affected by change in operation conditions. High density traffic restricts maneuverability; volume near capacity.

LOS
D



UNSTABLE FLOW

Low speeds; considerable delay; volume at or slightly over capacity.

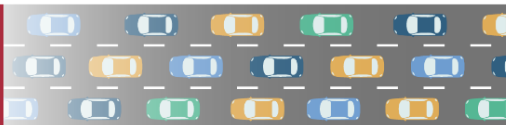
LOS
E



FORCED FLOW

Very low speeds; volumes exceed capacity; long delays with stop-and-go traffic.

LOS
F



Define Level of Service (Mainline)

Traffic Signal Level of Service

A

- Highly stable, free-flow condition with little or no congestion
- No vehicle waits longer than one signal indication
- Delay: <10 seconds/vehicle



B

- Stable, free-flow condition with little congestion
- On rare occasions vehicles wait through more than one signal indication
- Delay: 10 to 20 seconds/vehicle



C

- Free-flow conditions with moderate congestion
- Intermittently vehicles wait through more than one signal indication and occasional backups may develop
- Delay: 20 to 35 seconds/vehicle



D

- Approaching unstable condition with increasing congestion but without excessive backups
- Level of service D has historically been regarded as a desirable design in urban areas
- Delay: 35 to 55 seconds/vehicle



E

- Unstable, congested condition
- Very long queues may create lengthy delays
- Delay: 55 to 80 seconds/vehicle



F

- Stop and go
- Backups from locations downstream restrict or prevent movement of vehicles out of approach creating "gridlock" condition
- Delay: >80 seconds/vehicle

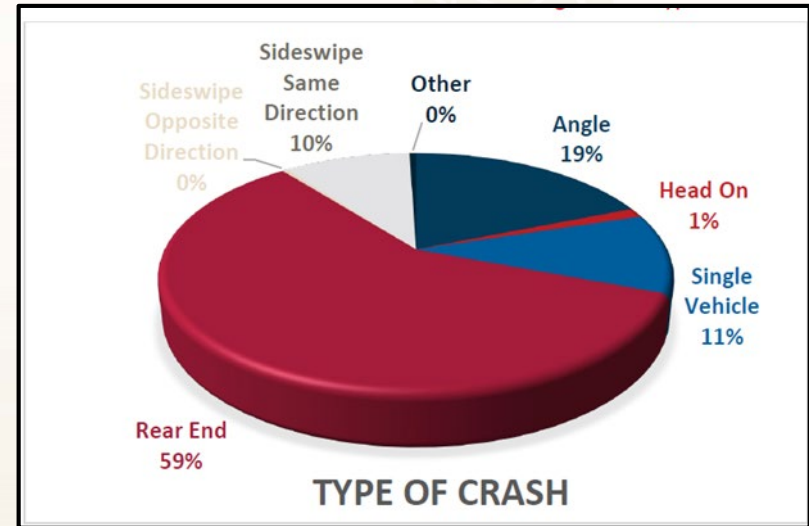


Define Level of Service (Intersection)

Safety Analysis

How do we analyze crashes?

- Total Number of Crashes
- Types of Crashes
 - *Angle, Head On, Single Vehicle, Rear End, Sideswipe*
- Severity of Crashes
 - *Property Damage Only, Injury, Fatality*
- Crashes During the Peak Hours
- Location or Clustering of Crashes
- Involvement with Pedestrians or Bicyclists



Alternatives Analysis

6 Reasonable Alternatives each consisting of the following:

- Between Moss Creek Drive and Salt Marsh Drive
 - *No widening*
 - *10-foot paved multiuse path on south side of US 278*
 - *5-foot sidewalk on north side of US 278 (optional)*
- Multiuse path located on south side from Moss Creek Drive to Blue Heron Point Road and on north side from Blue Heron Point Road to Wild Horse Road/Spanish Wells Road
- Jenkins Island Superstreet is assumed
- Eastbound bridge over Mackay Creek will be replaced
- Access to Pinckney Wildlife Refuge will be right-in/right-out





Next Steps



Traffic Next Steps...

- Input from Public Meetings and Comments
- Refinement of Alternatives – operational and design modifications
- Incorporate Wayfinding
- Final design of “Recommended Preferred” alternative
- Begin refining roadway design to optimize traffic flow for the mainline as well as intersections

Project Next Steps...

- Refinement of alternatives
- Meeting with potentially impacted community members individually
- Continuation of traffic analysis
 - *Look at intersection improvements to maximize efficiency*
- Continuation of impacts analysis:
 - *Delineated Wetlands, Threatened & Endangered Species, Shellfish Harvesting Waters, Essential Fish Habitat, etc.*
 - *Noise impacts*
 - *Historical & Cultural Resources*
- Cost Analysis
- Public Hearing (Late 2020)



Contact



www.SCDOT278Corridor.com



info@SCDOT278Corridor.com



Facebook.com/SCDOT278Corridor



[@SCDOT278Corridor](https://twitter.com/SCDOT278Corridor)



Craig Winn, PE, CFM
Project Manager
SCDOT





May 28, 2020 Stakeholders Group Meeting

Stakeholder Meeting 5 - Summary

Event Information

Date: May 28, 2020

Time: 10:00 AM to 11:30 AM

Location: Virtual Meeting via Adobe Connect

Meeting Goals

Present to the stakeholders and gather feedback on:

- What are the 3 new alternatives (4A, 5A, 6A) and why were they created
- Initial Intersection Improvements analysis – full concepts and the current preferred concepts

Attendees

Person	Organization
Craig Winn	SCDOT
Megan Groves	SCDOT
Nicole Riddle	SCDOT
Shane Belcher	FHWA
Eric Burgess	KCI
Phil Leazer	KCI
Amy Livingston	CDM Smith
Jenny Humphreys	CDM Smith
Hisham Abdelaziz	CDM Smith
Victoria Wornom	CDM Smith
Melissa Santley	CDM Smith (Observer)
Heather Robbins	3 Oaks
Geni Theriot	3 Oaks
Deja Jackson	Beaufort County
David Wilhelm	Beaufort County
Nick Akers	Windmill Harbor
Mayor Lisa Sulka	LATS
Scott Marshall	Town of Bluffton
Alan Seifert	Town of Bluffton
Julie Erickson	Mariners Cove Club

Frank Babel	HHI Bike Advisory Committee
Belinda Stewart Young	Resident of Stoney Community
Luana Graves Sellars	Native Island Leadership
Christian Dammel	Lowcountry Council of Governments
David Johnson	Town of HHI 278 Gateway Committee
Bill Miles	Hilton Head Island – Bluffton Chamber of Commerce
Courtney Kenneweg	Crazy Crab Restaurant
Charles Cousins	Town of Hilton Head Island
Mary Lou Franzoni	Palmetto Breeze
Meg James	Home Builders Association of Hilton Head
Juliana Smith	SC Coastal Conservation League

Meeting Highlights

- Began meeting with an overview of the software platform and how the meeting would be moderated. Ensured stakeholders understood the tools and process.
- Introduced the Team that was on the line and pointed everyone to the participants list. (No one called in only, everyone was logged into the Adobe Connect software.)
- Presentation – Craig Winn gave a presentation on the following items:
 - Update on Project
 - Where We Are in the Process
 - What are and What is the purpose of 3 new alternatives (4A, 5A, 6A)
 - A deep dive into the intersection analysis along US 278 specifically at the intersections with the Squire Pope Road, Old Wild Horse Road and Spanish Wells/Wild Horse Road
- Question & Answer
 - Stakeholders typed questions into the chat box during the presentation. These questions were read aloud between each segment in the presentation. First, Craig answered those questions. Then, stakeholders with their hands raised were called on to ask their questions. Following this, the floor was opened to anyone.

Questions and Comments Received

- Can you expound on the Jenkins Island Access to Westbound US 278 from Windmill Harbour?
 - A more detailed map was displayed.
 - Will there be a greater level of detail on this at the next stakeholder meeting?
 - That is our next steps of where we are going. Right now, they are setup as right in/out and evaluating gateway drive as a full intersection in 4A 6A and the impacts of providing connection between Mariner's Cove, Windmill Harbour
 - Would something like this require a grade-level separation?
 - We're evaluating how do we make that, what does that do to the safety, etc.
 - ◆ Could be evaluated with full signalization
- Would like a more individualized construction cost estimate for each of the alternatives

- This is the next step of alternative and will be provided at the next step.
- It looks like 4A has risen to the top, is there any reason to think otherwise?
- Can you speak to access for the Crazy Crab or the Stewart Property?
 - If there is a median through that area, there would be a turn lane in the vicinity of the Crazy Crab and Stewarts in that area. However, we have not yet gotten specifically to that area yet.
- Will you be showing post construction and intermediate levels of service aside from the LOS in 2045? Will you show at all the degradation, when the project is finished through 2045?
 - Yes. We will see the open year traffic and do an interim analysis to see what it does year 10 and year 20. That is likely something we would show at the public hearing late this year.
- What are next steps with general public and Corridor committee and Town.

The next stakeholder meeting will likely be in the August time frame. Currently, I'm not sure exactly the details or topics of that meeting. It could be that we provide more details and report back on intersections or changes or modifications as we modify the corridor.
- Do you want to talk about why it wasn't brought forward in more detail to do a direct connection to the Cross Island?
 - We had better alternatives that did not have as much impacts from visual, to traffic performance, of the alts we looked at it was the most expensive and borderline D or E intersection - didn't provide the level of performance we should
- Concerns about traffic being diverted to Gumtree Road.

Participant Feedback on Meeting

US 278 Stakeholder Meeting – Polling Questions and answers.

What did you like most about today's meeting format?

Type your answer here...

☐ Broadcast Results

Answers (6)

Presenters were well prepared and feedback was acknowledged.

Good for virtual meeting

easy to interact

Easy to ask questions across multiple formats.

Thank you

Well organized and structured

What could we improve on for the next meeting?

Type your answer here...

☐ Broadcast Results

Answers (5)

visuals could be a little clearer. Some alternatives hard to read

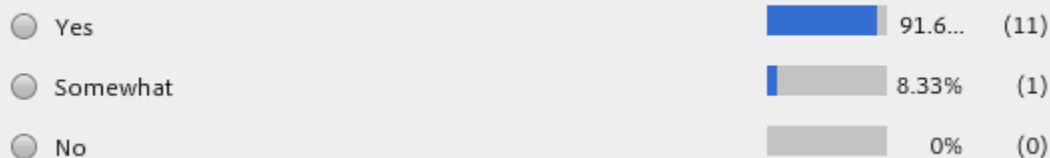
simply options and dive into greater detail

With so much information, it's difficult for me to keep track of everything that's being presented. I'm certain having the packet prior to the meeting would be helpful, but any other ways to simplify info would be great!

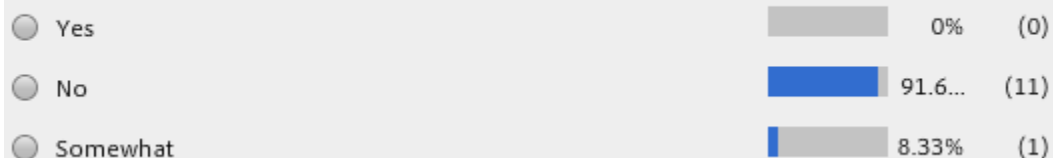
Thank you

More detail and info on costs for each item

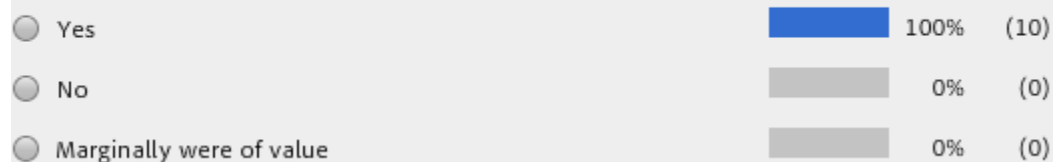
Do you feel there were enough ways to provide feedback during this meeting?



Did you have trouble connecting to this meeting?



Do you think having the paper copies of the meeting materials in advance helped with your participation in the online meeting?



Meeting Preparation

An extensive schedule of notification and instructions were provided to stakeholders to ensure a successful meeting.

Date	Item
Upon Setting Date	Sent out email to stakeholders confirming the date (formal invitation to follow); confirm it will be a virtual meeting, and ask if they have any concerns/let them know a practice session for logging-in to Adobe Connect will happen ahead of the meeting
5/19/2020	Sent formal meeting invitation in the mail to all participants alerting them to the platform, that a formal printed packet will come with the presentation ahead of the meeting and where they can download online ahead of the meeting (and on which date), ask if they have any concerns with platform
5/20/2020	Practiced Adobe Connect/Presentation with project team and recorded the presentation as a back-up
5/22/2020	Mailed packet to stakeholders using mail tracking (PowerPoint, Log-in and Engagement Tools Instructions, Contact Information)
5/26/2020	Hosted login practice session for stakeholders to go through platform functions to ensure they understand how to use it and to engage (Stakeholder participants included Frank Babel, Nick Ackers, and Charles Cousins)
5/26/2020	Stakeholder Meeting Dry - Run
5/28/2020	Stakeholder Meeting; Collected Meeting Feedback in meeting poll

US 278 Corridor Improvements

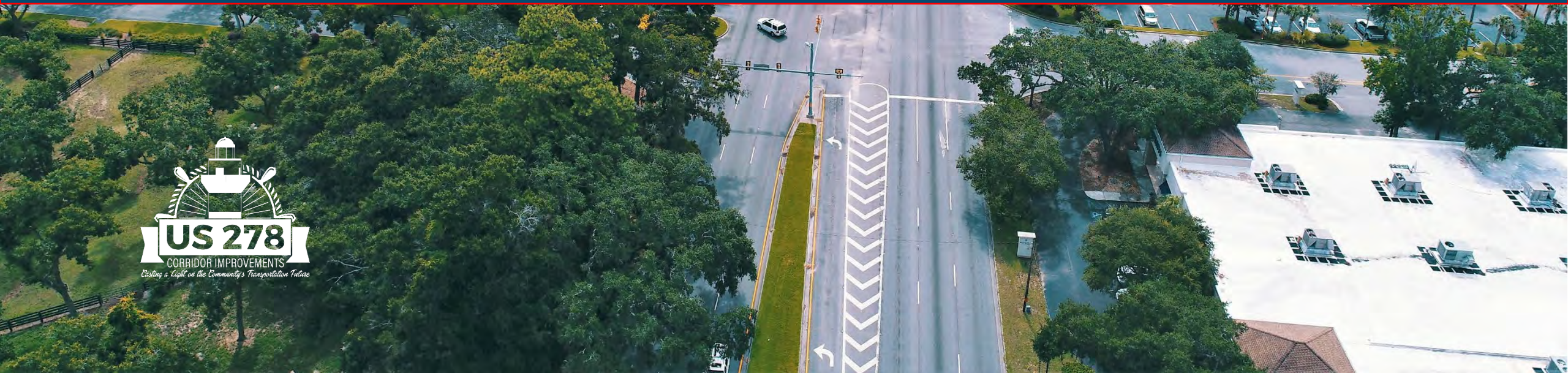
US 278 Corridor Improvements Stakeholder Meeting #5

May 28, 2020





Project Management

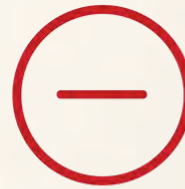


Purpose & Need

The purpose of this project is to address structural deficiencies at the existing eastbound Mackay Creek bridge, and reduce congestion along US 278 from Moss Creek Drive to Spanish Wells Road.



**Structural
Deficiencies**



Congestion



--Public Engagement--



The NEPA Process

Start the Environmental Assessment

Public Information Meeting **1**

Perform Technical Studies **2**

Develop Alternatives **3**

Analyze Alternatives **4**

Second Public Information Meeting **5**

Develop Preferred Alternative **6**

Prepare Environmental Assessment **7**

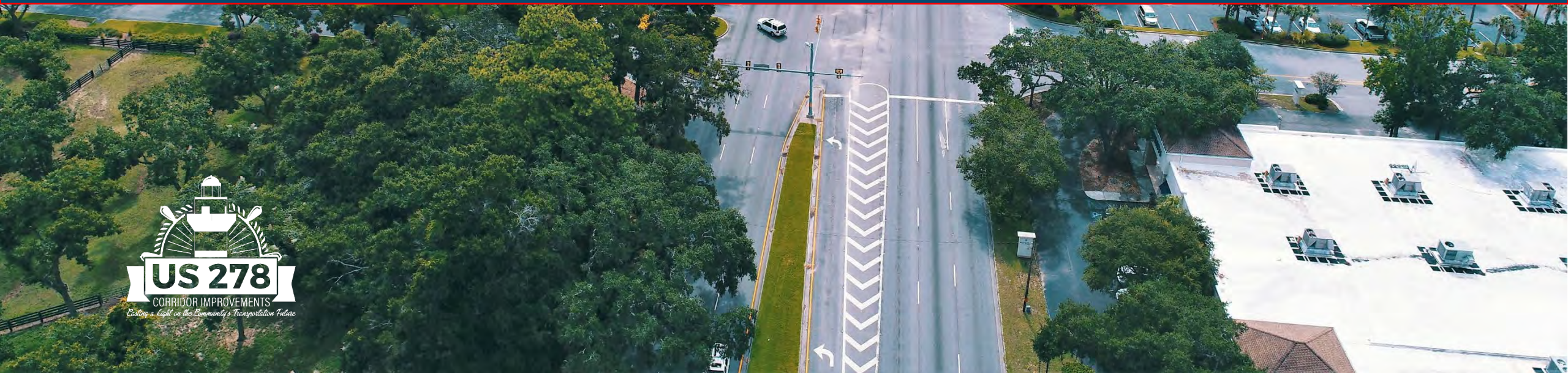
Public Hearing **8**

Revise Alternative **9**

FHWA Decision **10**



Alternatives Update



Reasonable Alternatives

DRAFT

Pinckney Island National
Wildlife Refuge

Skull Creek

Hog Island

Jenkins Island

Hilton Head Island

Bluffton

Legend

- | | | |
|--|---|---|
|  Reasonable Alternative 1 |  Reasonable Alternative 5 |  Pinckney Island NWR |
|  Reasonable Alternative 2 |  Reasonable Alternative 5A | |
|  Reasonable Alternative 3 |  Reasonable Alternative 6 | |
|  Reasonable Alternative 4 |  Reasonable Alternative 6A | |
|  Reasonable Alternative 4A | | |

Reasonable Alternatives

Draft

Bluffton

Pinckney Island

Legend

- | | | |
|---|---|---|
|  Reasonable Alternative 1 |  Reasonable Alternative 5 |  Pinckney Island NWR |
|  Reasonable Alternative 2 |  Reasonable Alternative 5A | |
|  Reasonable Alternative 3 |  Reasonable Alternative 6 | |
|  Reasonable Alternative 4 |  Reasonable Alternative 6A | |
|  Reasonable Alternative 4A | | |

Hog Island

Reasonable Alternatives

Draft

Hog Island

Jenkins Island

land
Legend

- Reasonable Alternative 1
- Reasonable Alternative 2
- Reasonable Alternative 3
- Reasonable Alternative 4
- Reasonable Alternative 4A
- Reasonable Alternative 5
- Reasonable Alternative 5A
- Reasonable Alternative 6
- Reasonable Alternative 6A
- Pinckney Island NWR

278

Hilton Head Island

US 278

Reasonable Alternatives

All reasonable alternatives meet the purpose & need of the project and result in impacts on Pickney Island National Wildlife Refuge, Floodplains, Threatened & Endangered Species, Essential Fish Habitat, Shellfish Harvesting Waters, Environmental Justice communities, and Cultural Resources.



Reasonable Alternatives

	Delineated Wetlands	New Right-of-Way to be Purchased	Relocations	Meets Current Seismic Design Standards	Construction Duration
	TOTAL Acres	Acres	TOTAL #	# of Structures	Years
RA 1	19.28	28.1	10	1 of 4 (eastbound Mackay Creek)	5
RA 2	18.4	27.2	10	1 of 4 (westbound Mackay Creek)	5
RA 3	19.3	31.5	10	2 of 4 (eastbound Mackay Creek and eastbound Skull Creek)	5
RA 4	18.9	35.2	11	4 of 4 (both Mackay Creek and both Skull Creek)	3
RA 4A	18	36.8	11	4 of 4 (both Mackay Creek and both Skull Creek)	3
RA 5	30.5	63.9	17	2 of 4 (eastbound Mackay Creek and eastbound Skull Creek)	5.5
RA 5A	26.9	63.3	20	2 of 4 (eastbound Mackay Creek and eastbound Skull Creek)	5.5
RA 6	29.8	71.7	18	4 of 4 (both Mackay Creek and both Skull Creek)	3.5
RA 6A	25.3	72.3	21	4 of 4 (both Mackay Creek and both Skull Creek)	3.5

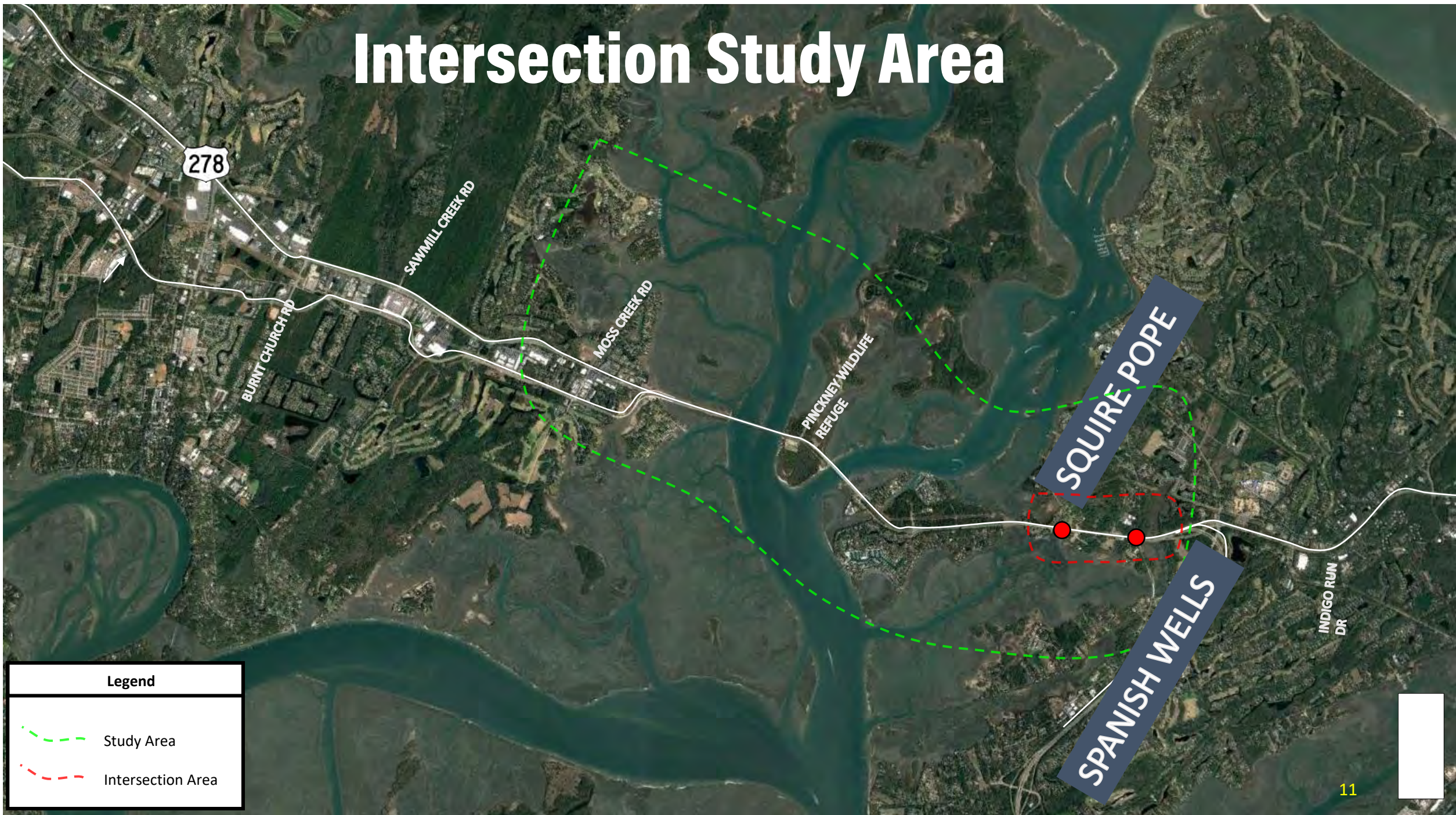
Estimated construction costs range from \$218 to \$356 million



US 278 Intersection Concepts

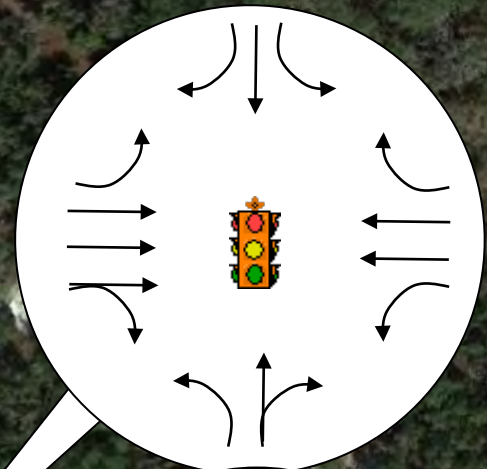


Intersection Study Area

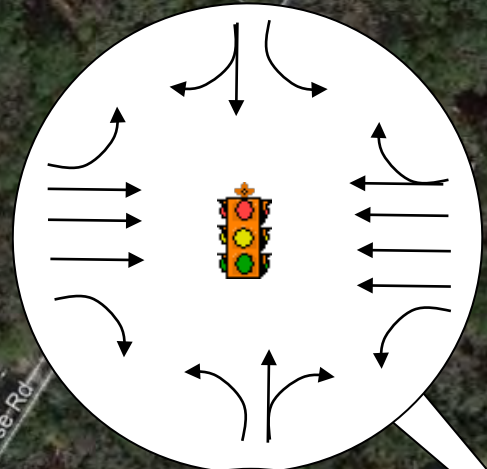


Existing Intersection Layout (2018)

SQUIRE POPE



A (F)
6.7 (87.9)



B (D)
14.3 (46.8)

US 278

SPANISH WELLS RD

Legend	
→	Existing Lane

Levels of Service	
AM (PM)	Intersection LOS
AM (PM)	Int. Delay

Explored Intersection Concepts

Squire Pope

1. Jughandle
2. Displaced Left
3. Continuous Green T
4. Flyover

Spanish Wells

5. Detour Northbound Left
6. Half Diamond Interchange
7. Flyover
8. Displaced Left

Multiple Intersections

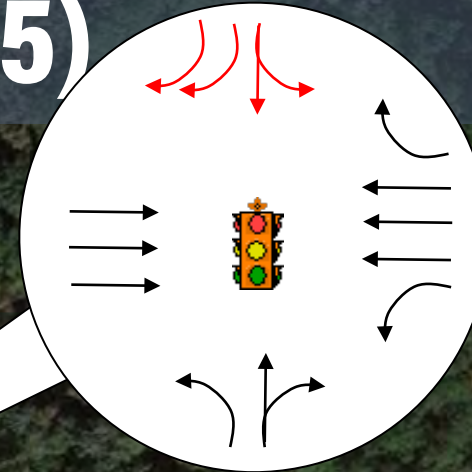
9. Maximize Lanes
10. Remove Lefts from Squire Pope & Spanish Wells – Signalize Old Wild Horse
11. Two T-Intersections at Old Wild Horse & Spanish Wells
12. Roundabouts with Underpass at Spanish Wells
13. Roundabouts for Left Turn Movements
14. Viaduct



Proposed Concept 1 (2045)

"JUG-HANDLE"
AT SQUIRE POPE RD

SQUIRE POPE



(D)
(50.0)

Advantages

- Increased Safety
- Removes Signal Phase
- Improves Operations

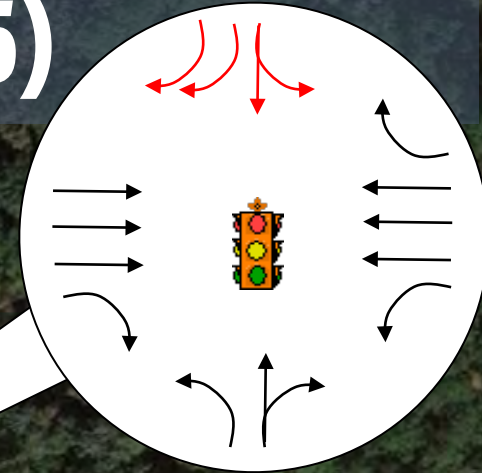
Disadvantages

- ROW needed
- Drivers need to use right lane to turn left

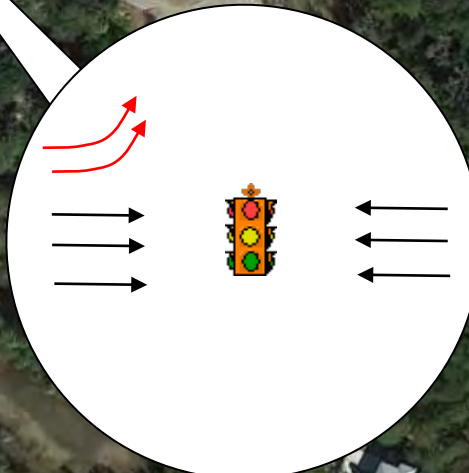
Proposed Concept 2 (2045)

"DISPLACED EASTBOUND LEFT"
AT SQUIRE POPE RD

SQUIRE POPE



(D)
(48.4)



(F)
(84.9)



Advantages

- Increased Safety
- Removes Signal Phase
- Typically used for high opposing through movements

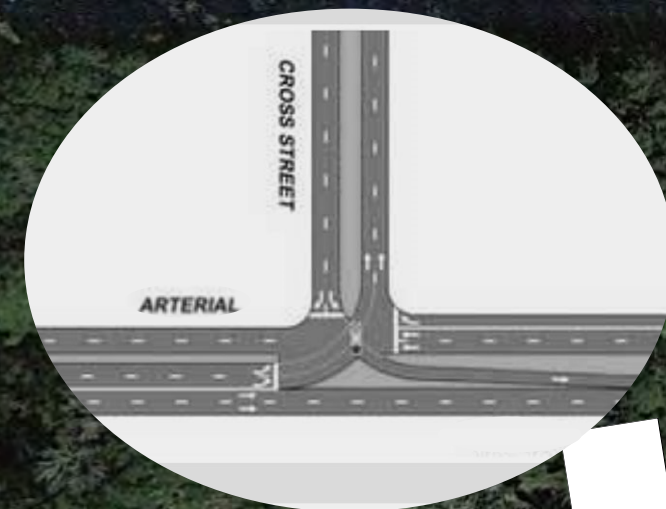
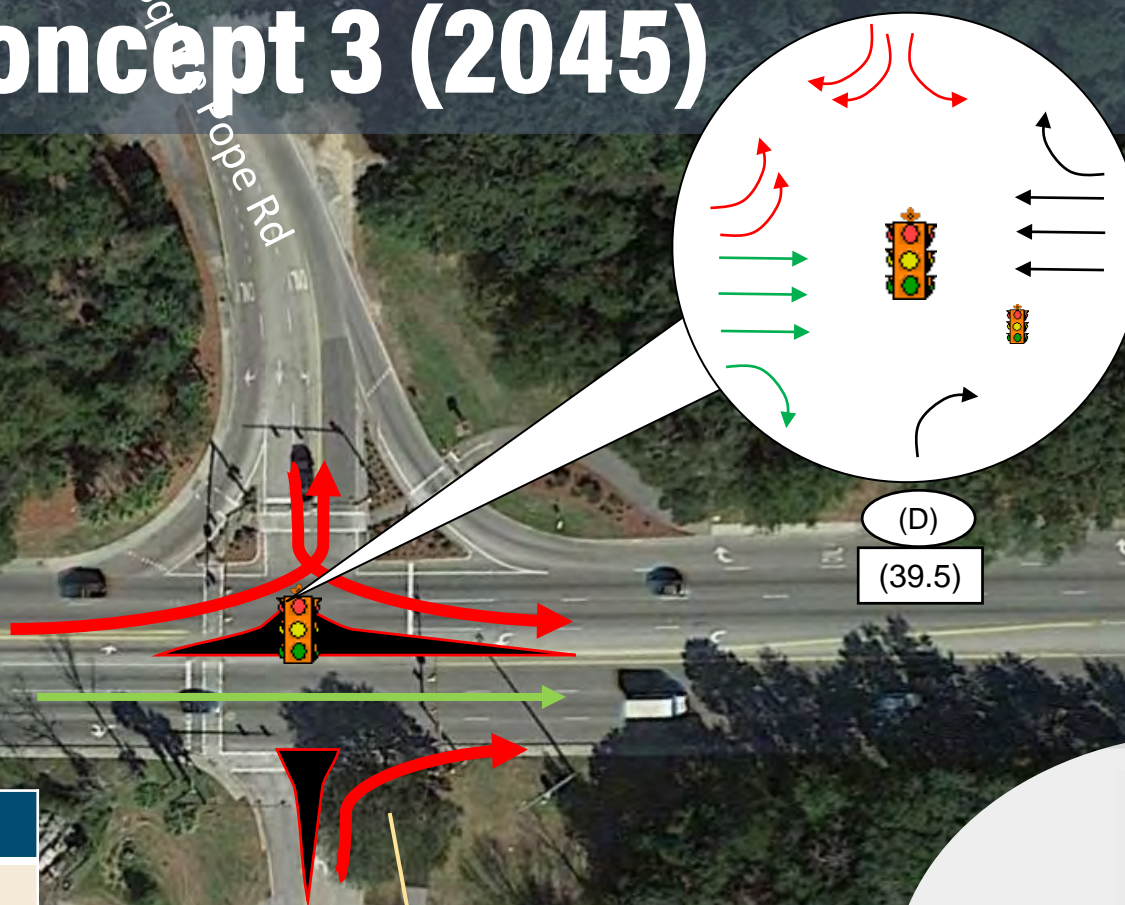
Disadvantages

- ROW needed
- Potential for wrong way travel
- Potential right turn conflicts
- Additional Signal

Proposed Concept 3 (2045)

“CONTINUOUS GREEN-T”
AT SQUIRE POPE RD

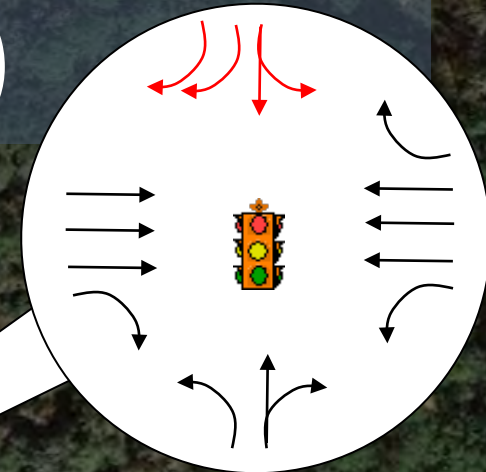
Advantages	Disadvantages
<ul style="list-style-type: none">Increased SafetyRemoves Signal PhaseEB US 278 free-flow	<ul style="list-style-type: none">RI/RO at Chamberlin DrRequires large ROW footprintLong delays for Chamberlin Dr right turns onto US 278Long distance to U-Turns (Spanish Wells and Jenkins Road)



Proposed Concept 4 (2045)

"LEFT TURN FLY-OVER"
AT SQUIRE POPE RD

SQUIRE POPE



(C)

(33.3)

Advantages

- Grade Separation
- Free flow travel to Squire Pope
- Removes Signal Phase

Disadvantages

- High Cost
- ROW needed
- Visual Obstructions

Proposed Concept 5 (2045)

RESTRICT NORTHBOUND LEFT
TURNS ON SPANISH WELLS RD
AT US 278

US 278

SIGNIFICANT LEFT
TURN VOLUME
RESTRICTED

Spanish Wells

AN ALTERNATIVE
IS TO TURN RIGHT
ONTO US 278 &
MAKE U-TURN AS
SHOWN

AN ALTERNATIVE
IS TO BACKTRACK
TO CROSS ISLAND
PKWY AS SHOWN

Advantages	Disadvantages
<ul style="list-style-type: none">• Increased Safety• Removes Signal Phase• Low Cost	<ul style="list-style-type: none">• Long Travel Times• Special Signage• Weaving Movements at US 278 and Spanish Wells

Proposed Concept 6 (2045)

HALF DIAMOND INTERCHANGE AT SPANISH WELLS RD

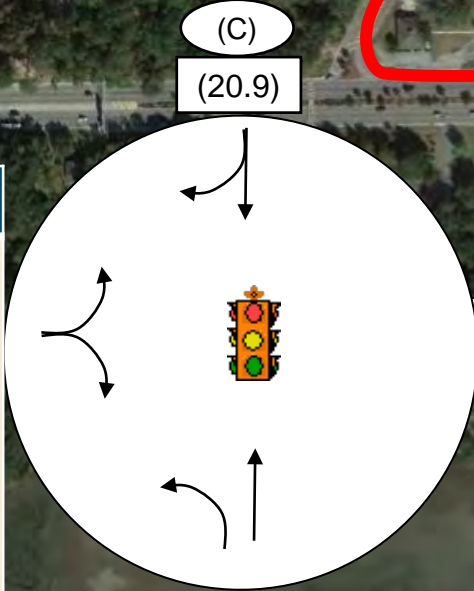
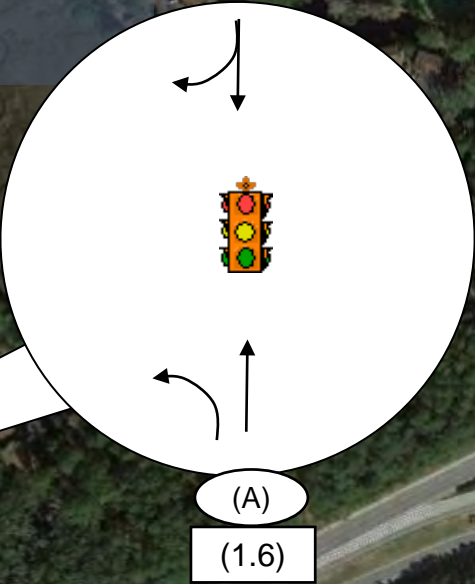
ACCESS NORTHBOUND
AND SOUTHBOUND
SPANISH WELLS RD VIA
IMPROVED OLD WILD
HORSE RD

Old Wild Horse

ON RAMP

OVERPASS

OFF RAMP

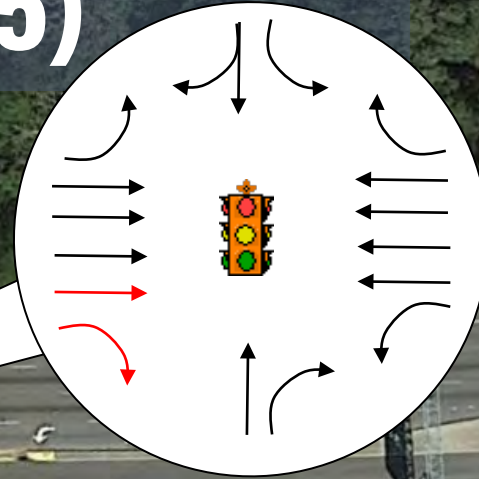
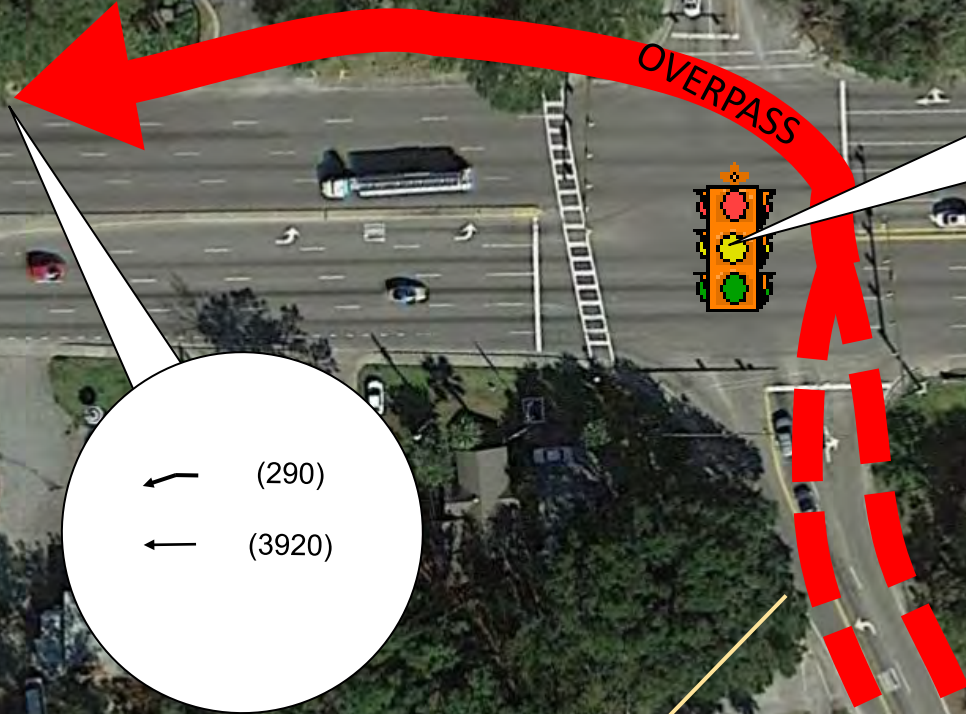


Spanish Wells

Advantages	Disadvantages
<ul style="list-style-type: none">• Grade Separation• Free flow on US 278	<ul style="list-style-type: none">• High Cost• Visual Obstructions• Weaving Movements between Wild Horse and Old Wild Horse

Proposed Concept 7 (2045)

“LEFT TURN FLY-OVER”
AT SPANISH WELLS RD



(C)
(30.7)



CAN ORIGINATE
FROM RIGHT
SIDE, OR LEFT
SIDE SIMILAR TO
INSET IMAGE

Advantages

- Grade Separation
- Free flow travel to US 278
- Removes Signal Phase

Disadvantages

- High Cost
- ROW needed
- Visual Obstructions

Spanish Wells

Proposed Concept 8 (2045)

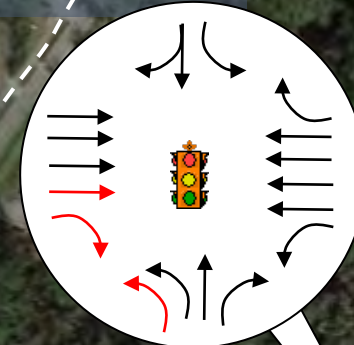
“DISPLACED EASTBOUND LEFT”
AT SPANISH WELLS RD

EASTBOUND LEFT TURN
TRAFFIC REDIRECTED TO
SPANISH WELLS
RD/WILD HORSE RD TO
REVERSE FLOW ON OLD
WILD HORSE RD

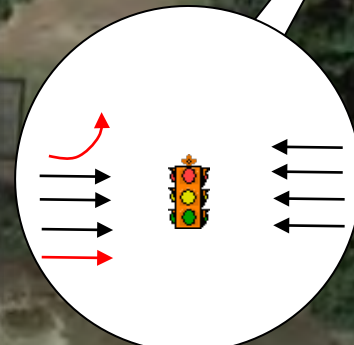
DISPLACED LEFT
TURN AT SPANISH
WELLS RD

REMOVE LEFT TURNS
FROM SQUIRE POPE RD

Advantages	Disadvantages
<ul style="list-style-type: none">Increased SafetyRemoves Signal PhaseTypically used for high opposing through movements	<ul style="list-style-type: none">ROW neededPotential for wrong way travelAdditional Signal



(E)
(60.2)

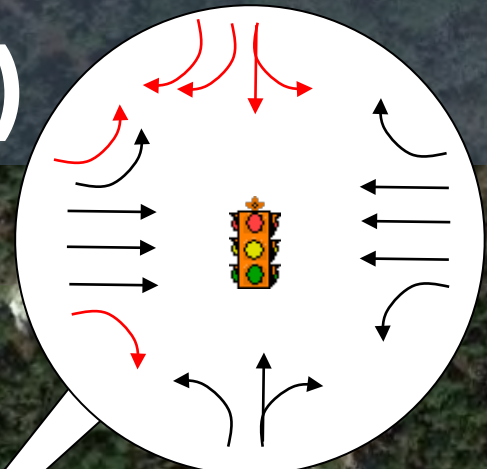


(E)
(66.4)

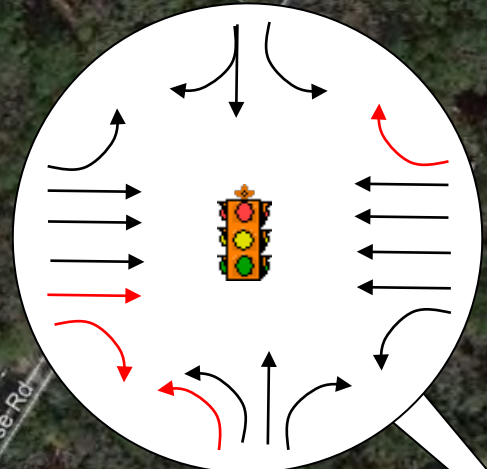
Spanish Wells

Proposed Concept 9 (2045)

SQUIRE POPE



(D)
(46.8)



(D)
(45.6)

US 278

MAXIMIZE TURN LANES AT BOTH EXISTING INTERSECTIONS

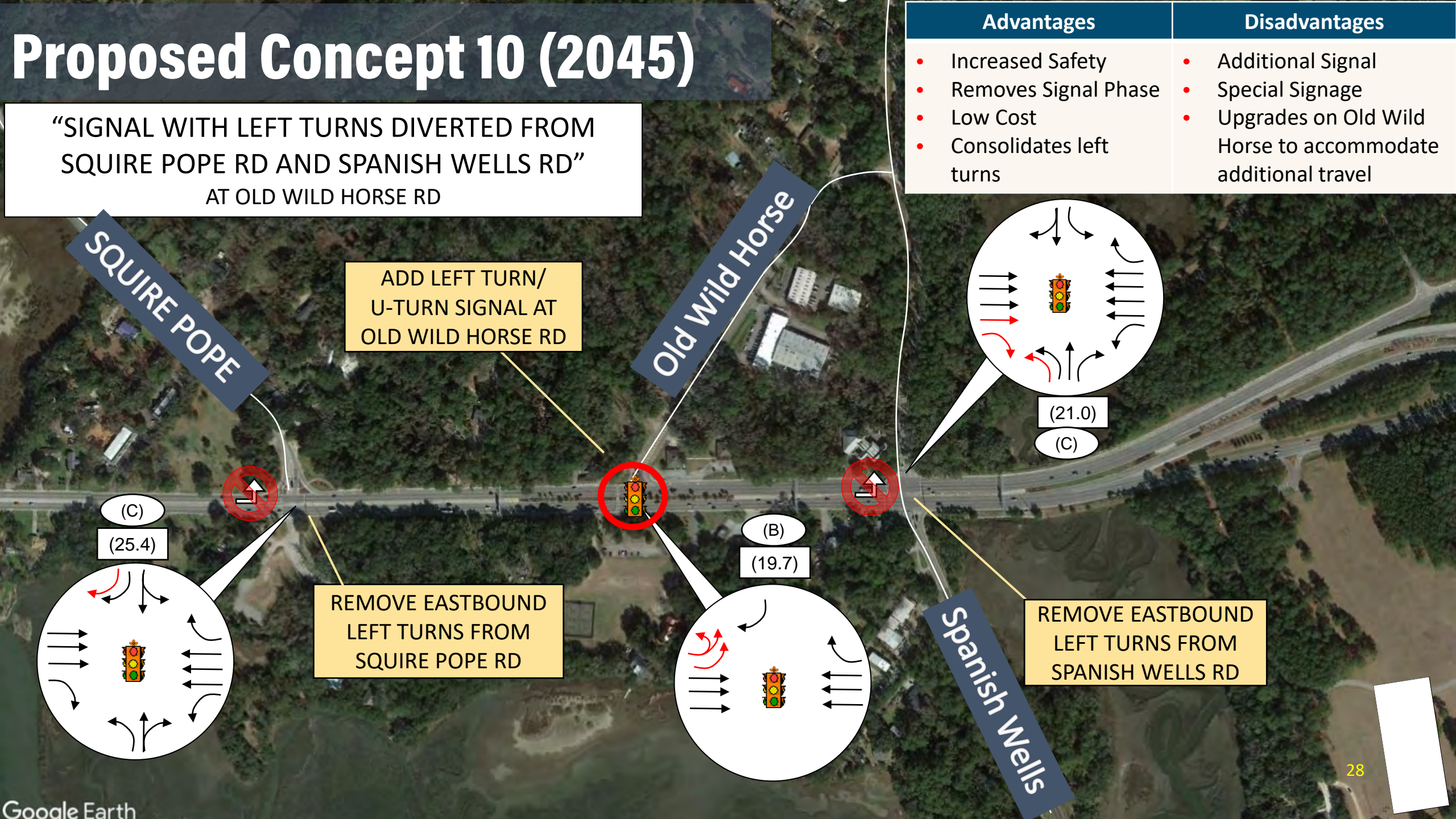
Legend	
	Existing Lane
	Proposed Lane

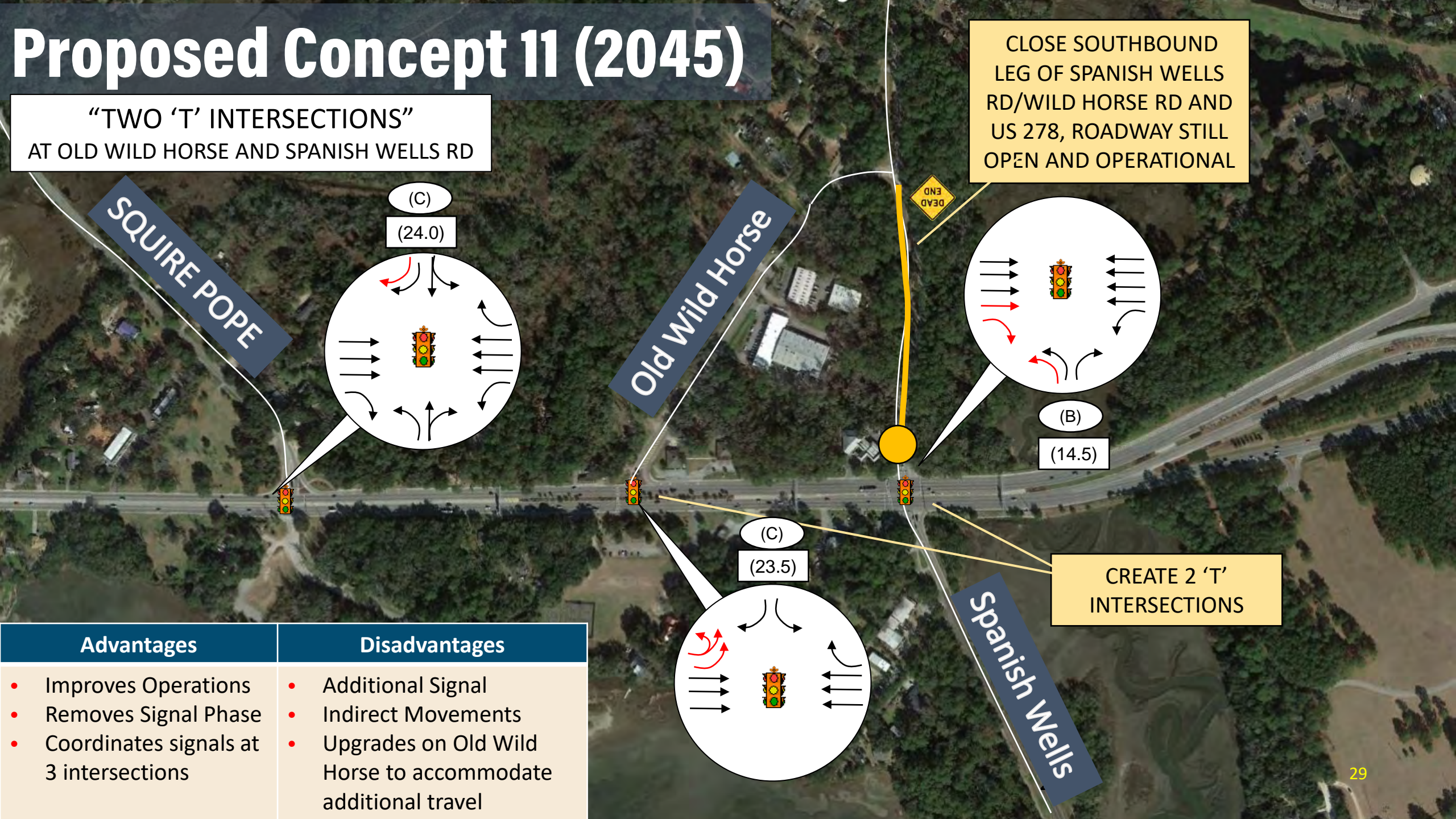
Advantages	Disadvantages
<ul style="list-style-type: none">• Low Cost	<ul style="list-style-type: none">• Minimal LOS Improvements• Additional Signal Timing• Long tapers on side roads

Spanish Wells

Proposed Concept 10 (2045)

"SIGNAL WITH LEFT TURNS DIVERTED FROM
SQUIRE POPE RD AND SPANISH WELLS RD"
AT OLD WILD HORSE RD





Proposed Concept 11 (2045)

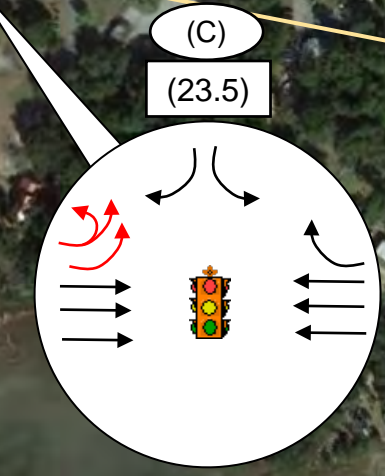
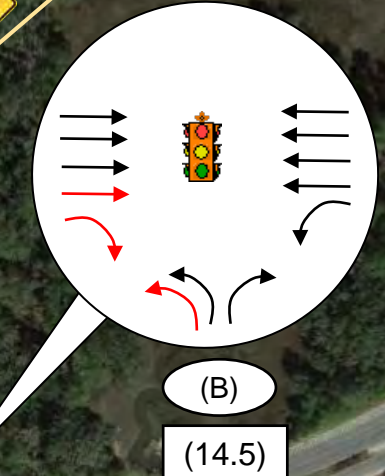
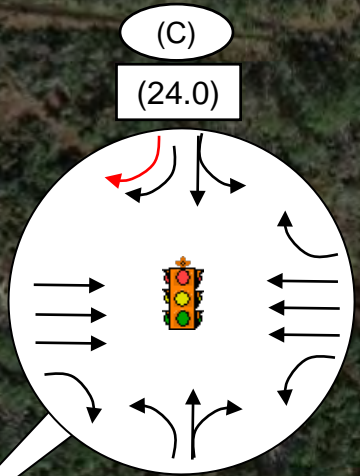
“TWO ‘T’ INTERSECTIONS”
AT OLD WILD HORSE AND SPANISH WELLS RD

CLOSE SOUTHBOUND
LEG OF SPANISH WELLS
RD/WILD HORSE RD AND
US 278, ROADWAY STILL
OPEN AND OPERATIONAL

SQUIRE POPE

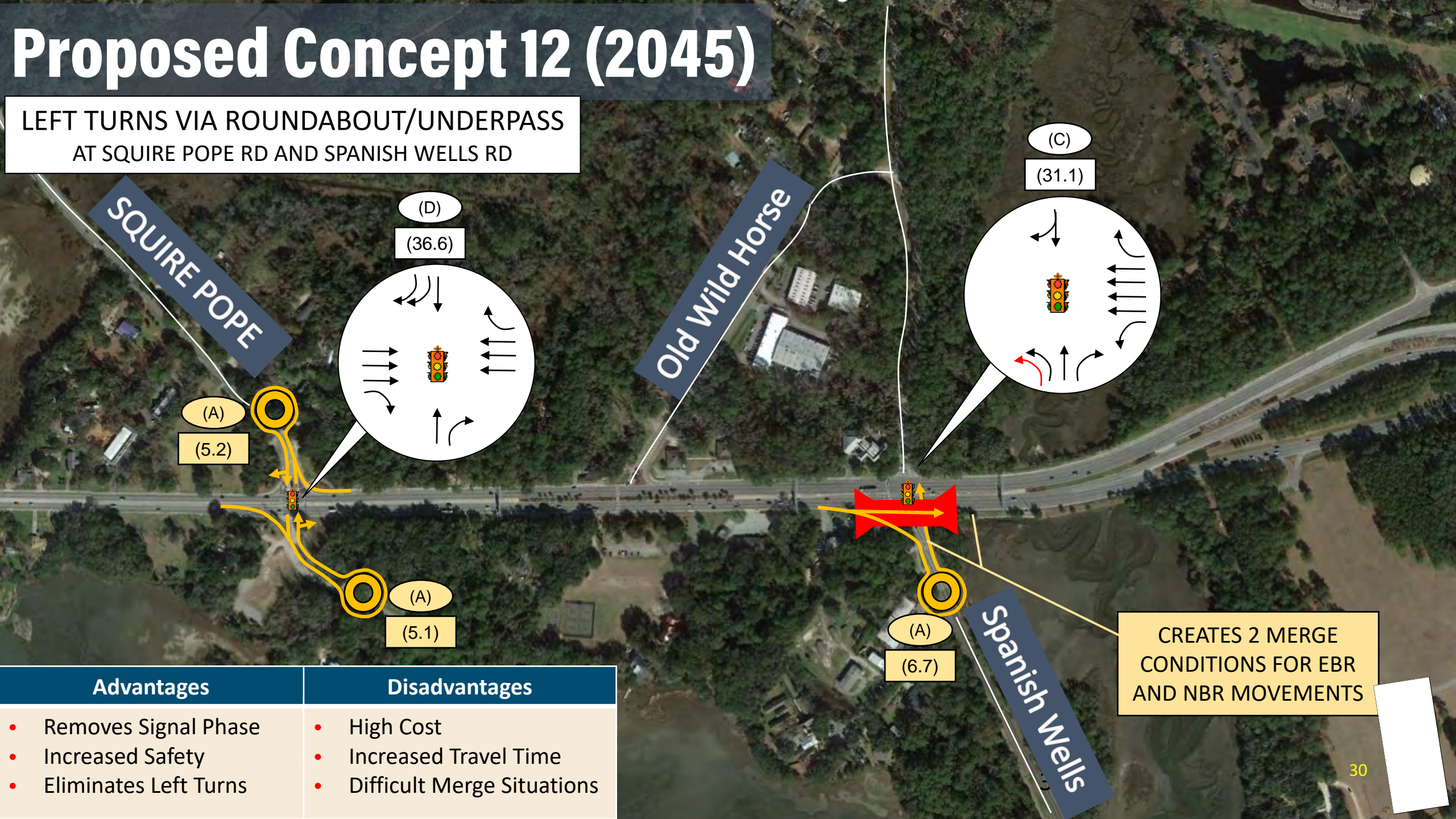
Old Wild Horse

Spanish Wells



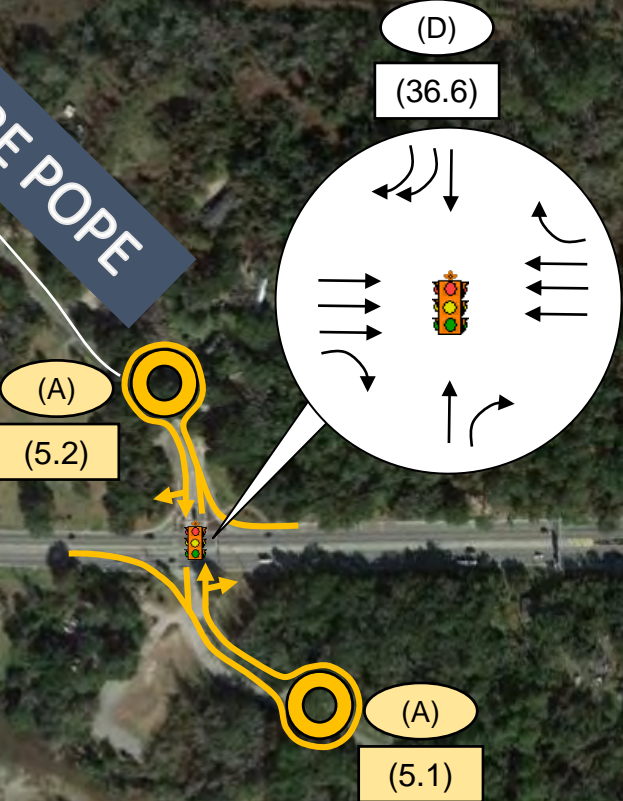
CREATE 2 ‘T’
INTERSECTIONS

Advantages	Disadvantages
<ul style="list-style-type: none">Improves OperationsRemoves Signal PhaseCoordinates signals at 3 intersections	<ul style="list-style-type: none">Additional SignalIndirect MovementsUpgrades on Old Wild Horse to accommodate additional travel



Proposed Concept 12 (2045)

LEFT TURNS VIA ROUNDABOUT/UNDERPASS
AT SQUIRE POPE RD AND SPANISH WELLS RD



Old Wild Horse

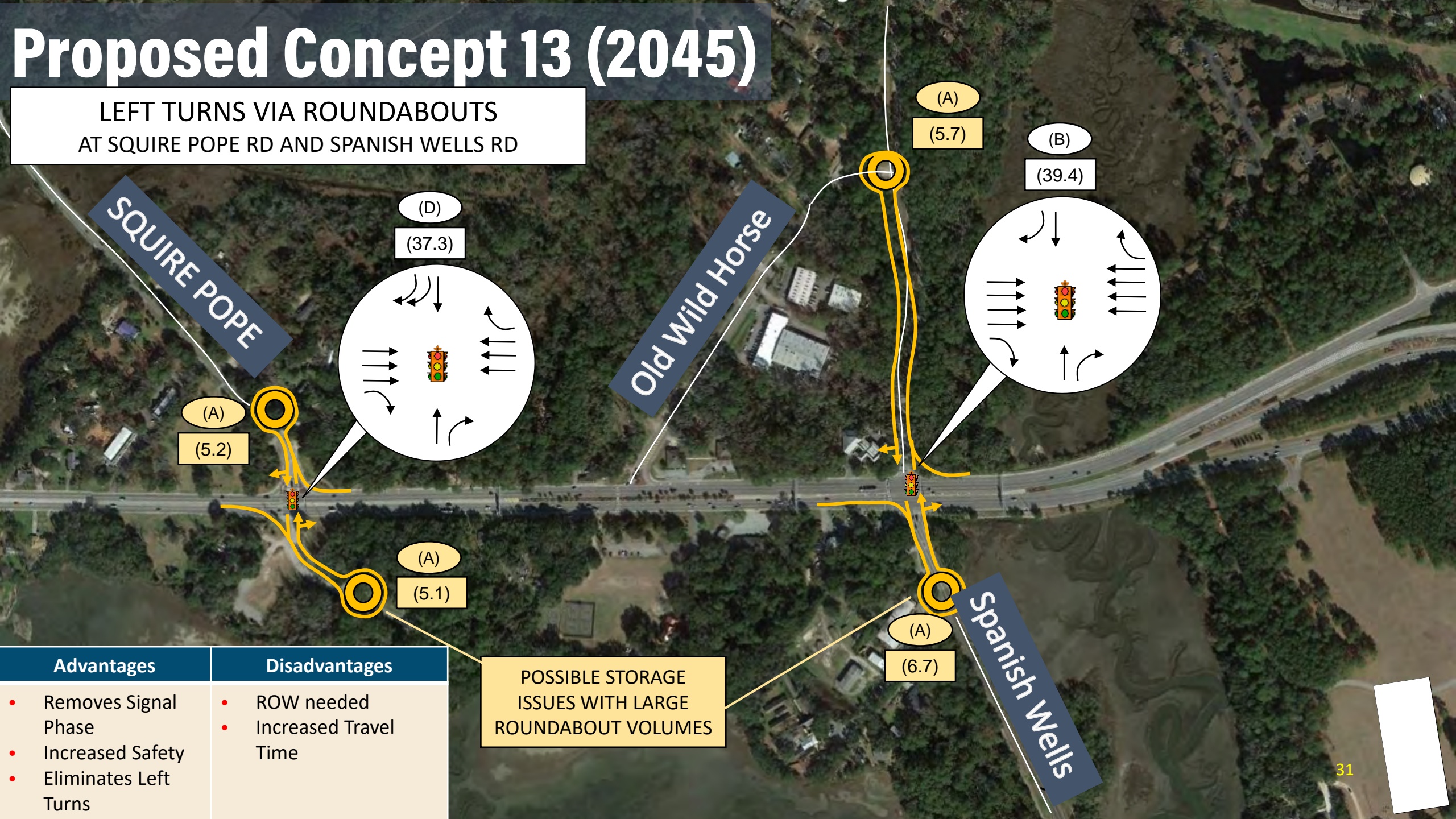


CREATES 2 MERGE
CONDITIONS FOR EBR
AND NBR MOVEMENTS

Advantages	Disadvantages
<ul style="list-style-type: none">• Removes Signal Phase• Increased Safety• Eliminates Left Turns	<ul style="list-style-type: none">• High Cost• Increased Travel Time• Difficult Merge Situations

Proposed Concept 13 (2045)

LEFT TURNS VIA ROUNDABOUTS AT SQUIRE POPE RD AND SPANISH WELLS RD



Advantages	Disadvantages
<ul style="list-style-type: none"> Removes Signal Phase Increased Safety Eliminates Left Turns 	<ul style="list-style-type: none"> ROW needed Increased Travel Time

POSSIBLE STORAGE ISSUES WITH LARGE ROUNDABOUT VOLUMES

Proposed Concept 14 (2045)

ELEVATED VIADUCT
FROM JENKINS ISLAND TO CROSS ISLAND PARKWAY

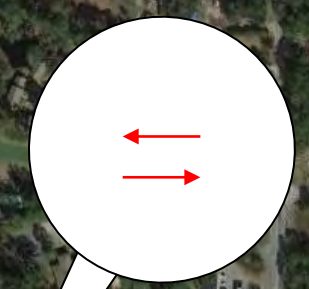
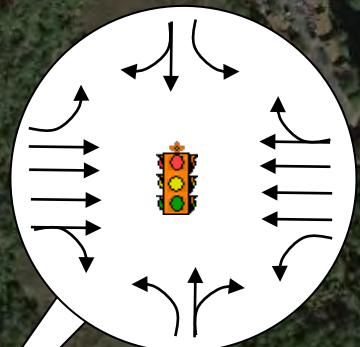
SQUIRE POPE

Old Wild Horse

Spanish Wells

(D)
(45.3)

























































(D)
(52.1)



Advantages	Disadvantages
<ul style="list-style-type: none">• Adds capacity without changing US 278 footprint• Control Access• Separates local traffic	<ul style="list-style-type: none">• High Cost• Visual Obstructions• Minimal LOS Improvements



Intersection Concepts Summary

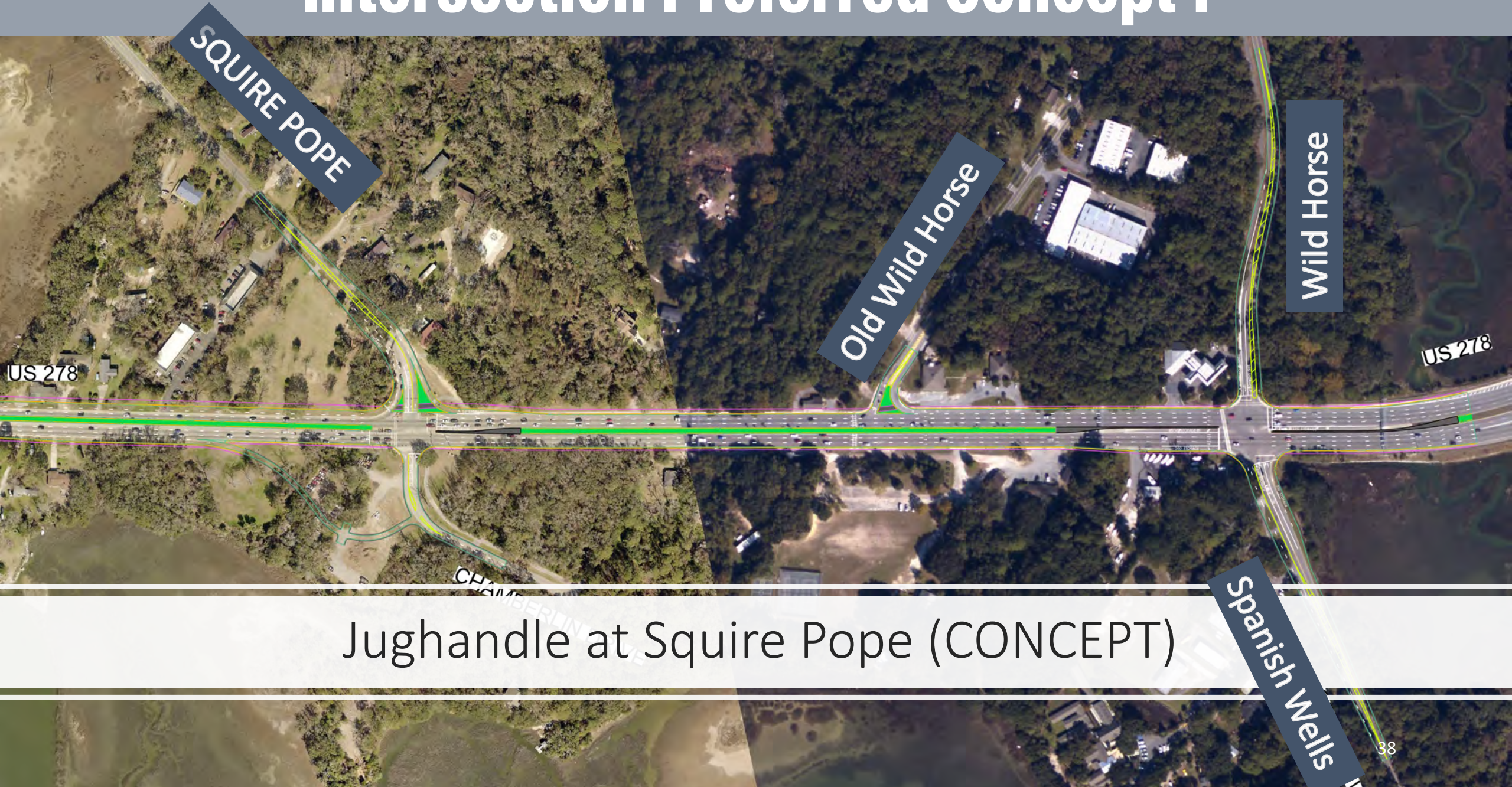
Alternative		Level of Service			New Travel Pattern	ROW Acquisition	Cost	View Obstructions	Advanced?
		Squire Pope	Old Wild Horse	Spanish Wells					
Squire Pope	1 – Jughandle	D	-	D					Yes
	2 – Displaced Left	F/D	-	D					No
	3 – Continuous Green T	D	-	D					No
	4 – Flyover	C	-	D					Yes
Spanish Wells	5 – Restricted NB Lefts	D	-	-					No
	6 – Half Diamond Interchange	D	-	C/A					No
	7 – Flyover	D	-	C					No
	8 – Displaced Left	D	-	E/E					No
Multiple Intersections	9 – Maximize Lanes	D	-	D					Yes
	10 – Signal at Old Wild Horse	C	B	C					Yes
	11 – Two T-Intersections	C	C	B					No
	12 – Roundabouts and Overpass	D	-	C					No
	13 – Roundabouts for Left Turn Movements	D	-	B					No
	14 - Viaduct	D	-	D					No



Preferred Intersection Concepts



Intersection Preferred Concept 1

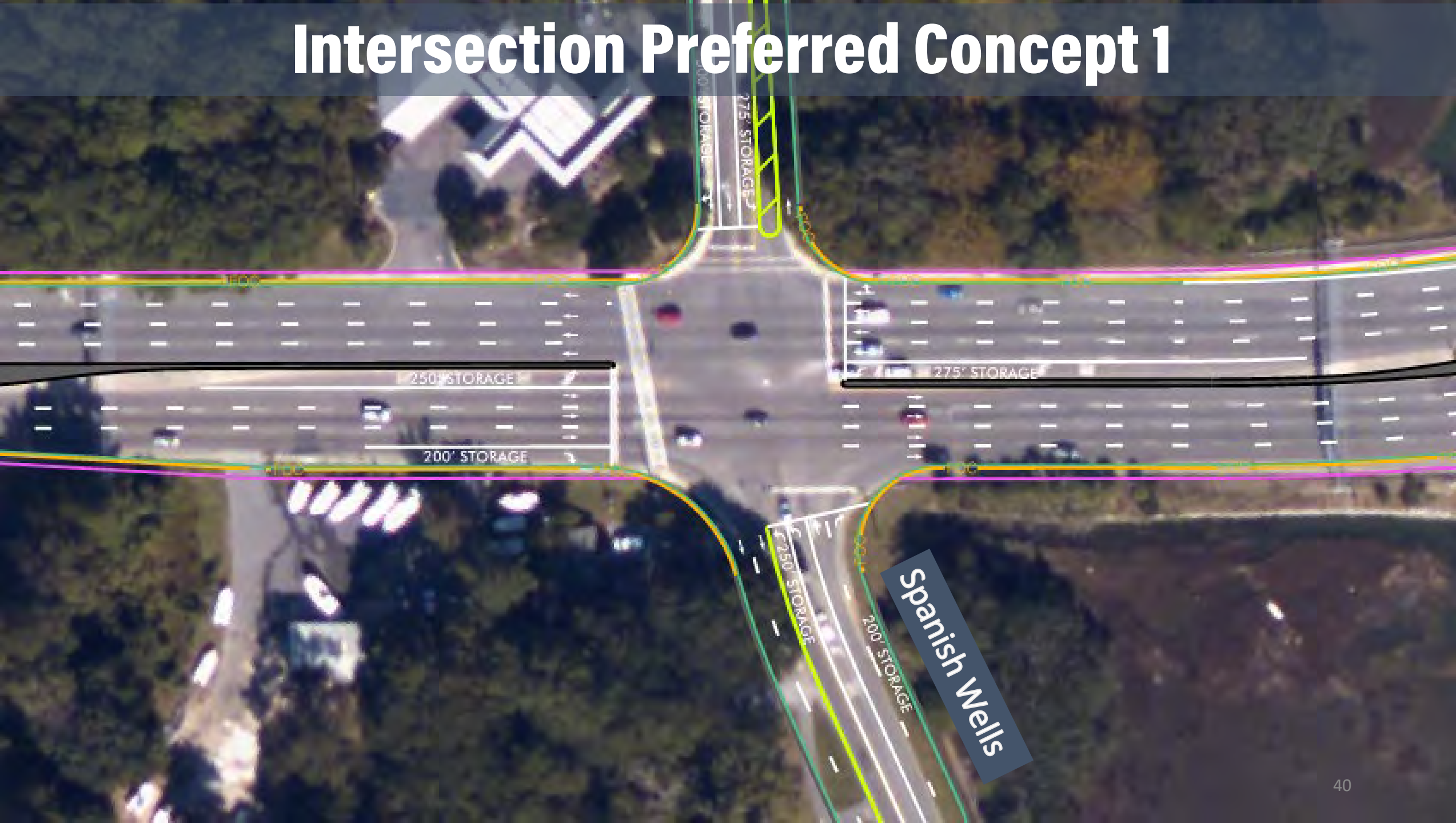


Jughandle at Squire Pope (CONCEPT)

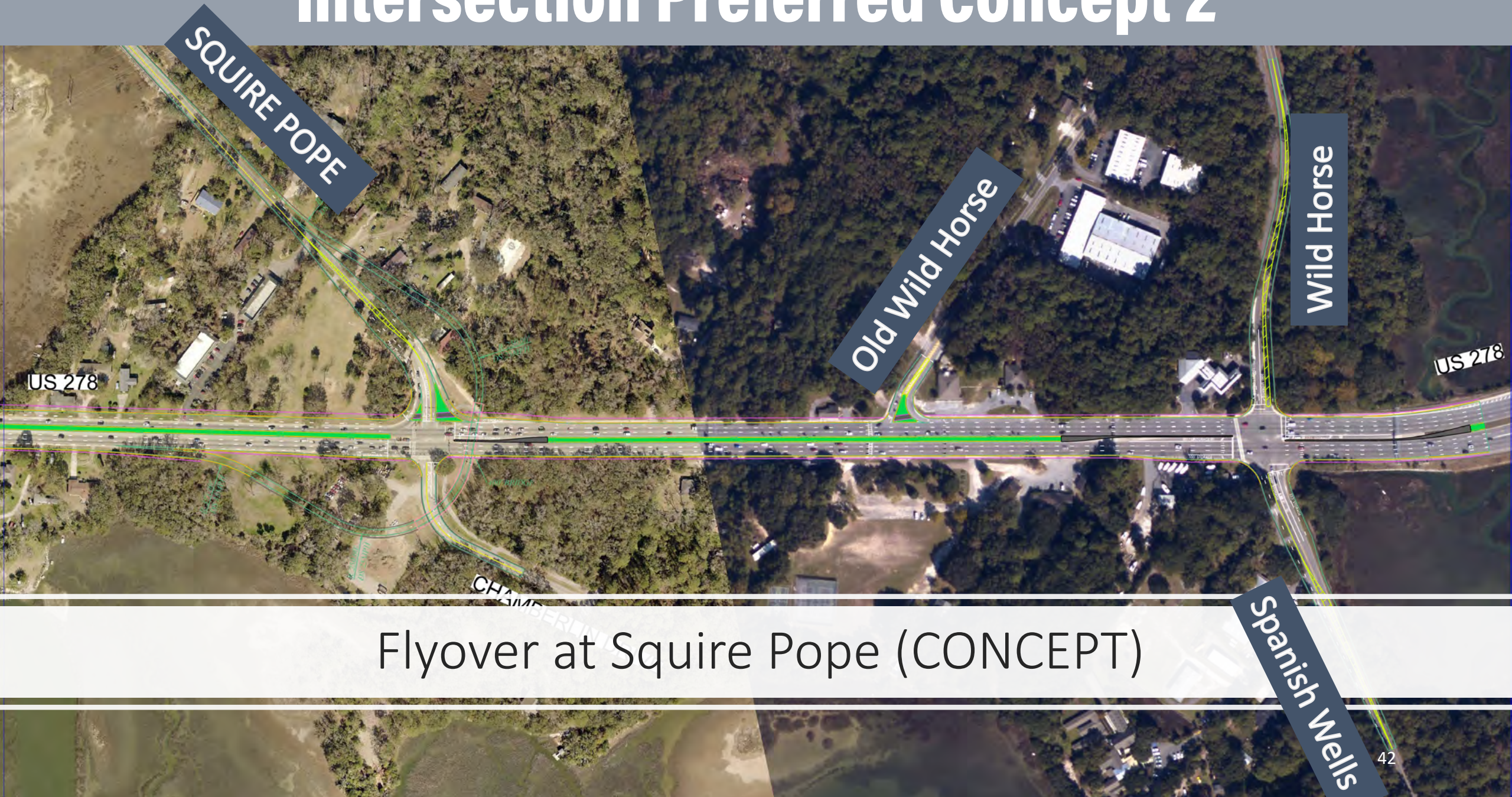
Intersection Preferred Concept 1



Intersection Preferred Concept 1



Intersection Preferred Concept 2



Flyover at Squire Pope (CONCEPT)

Intersection Preferred Concept 2



Intersection Preferred Concept 2



Intersection Preferred Concept 3

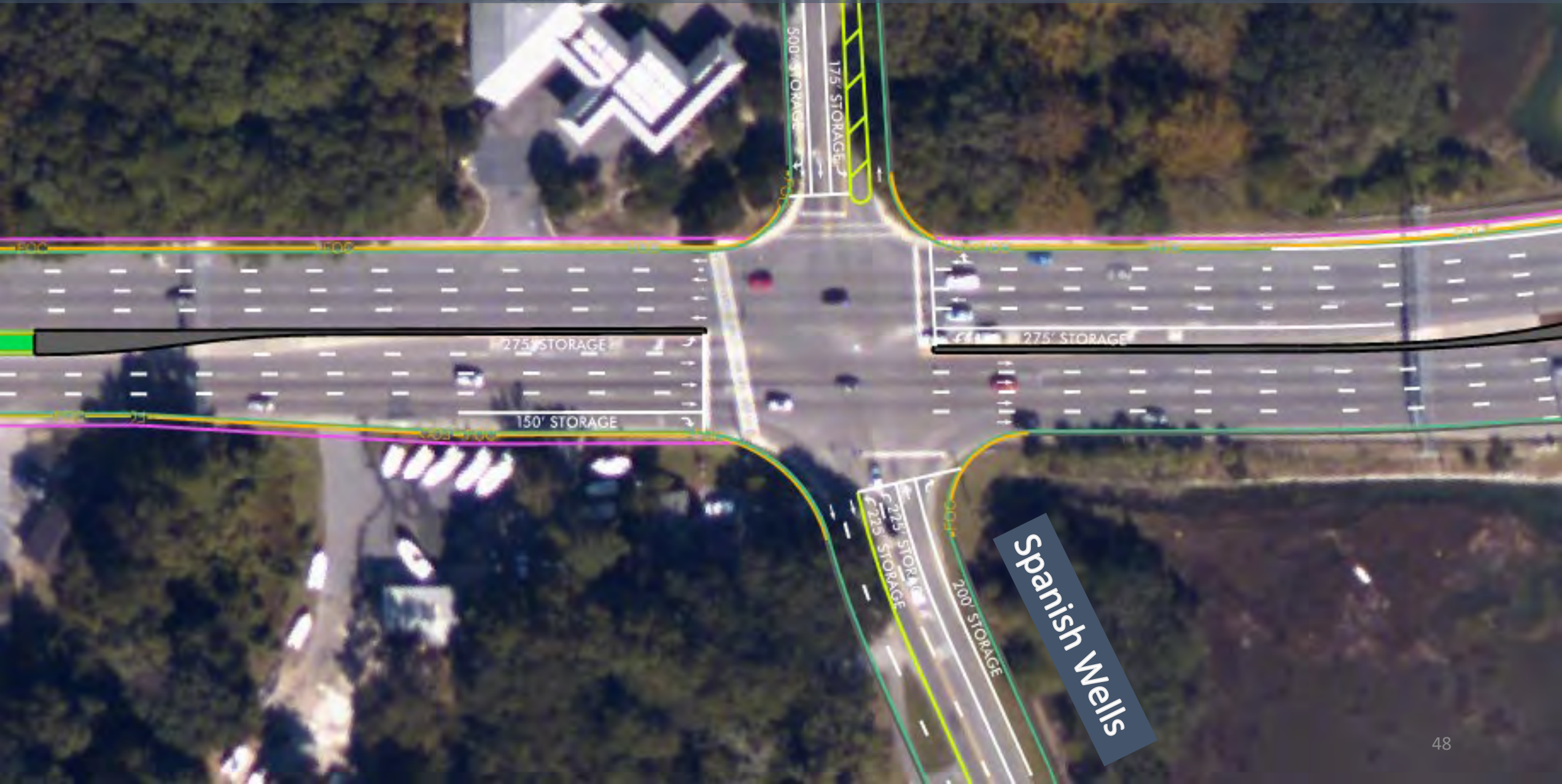


Maximize Lanes (CONCEPT)

Intersection Preferred Concept 3



Intersection Preferred Concept 3

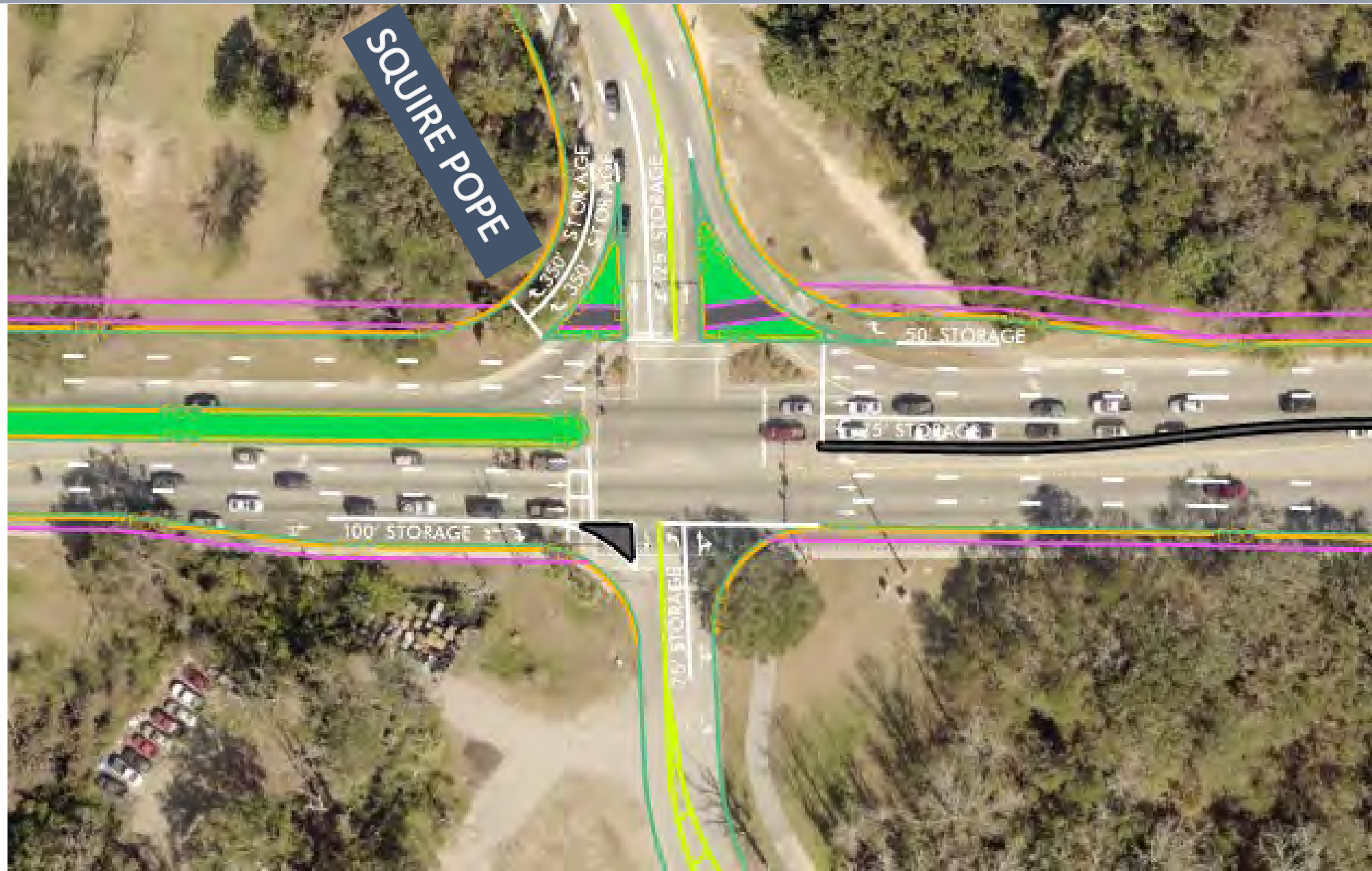


Intersection Preferred Concept 4

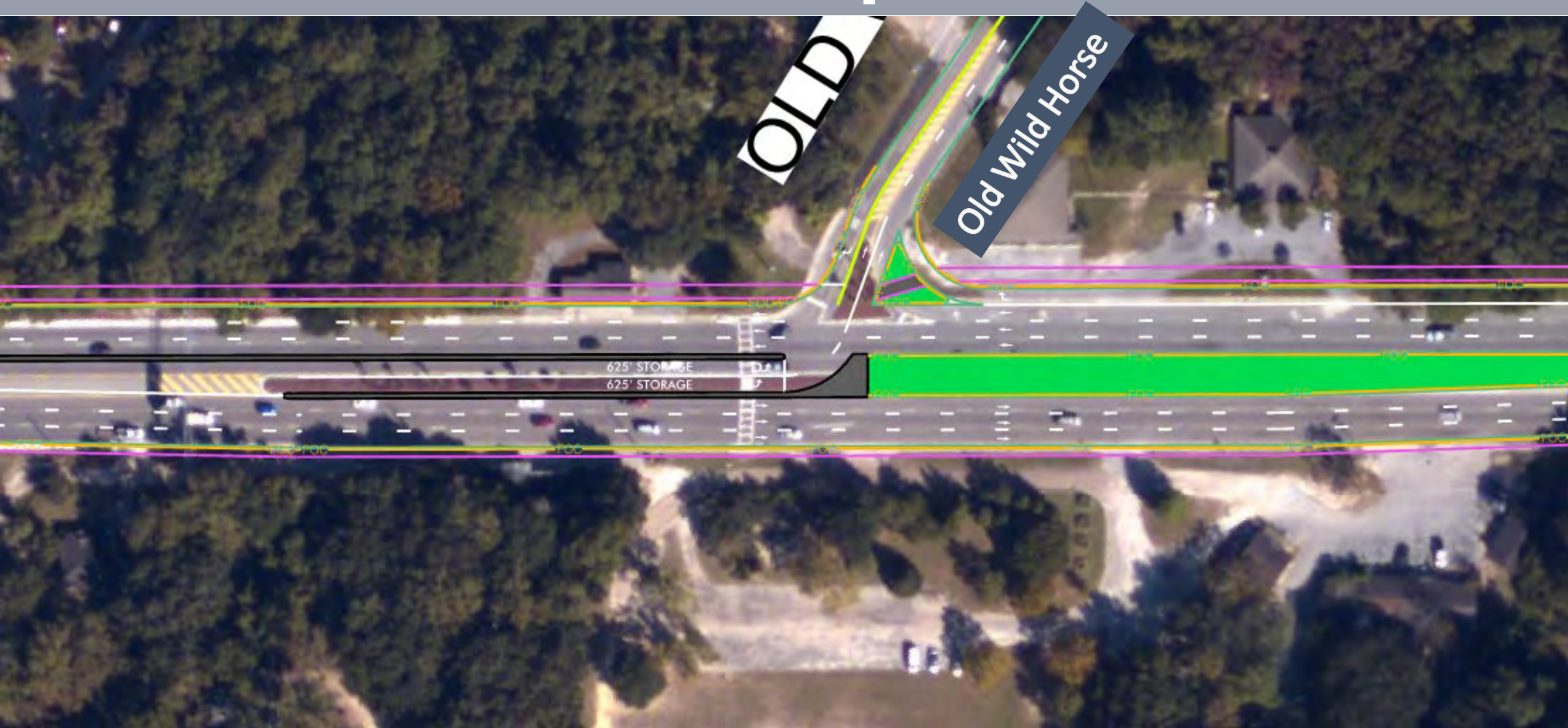


Signalize Old Wild Horse (CONCEPT)

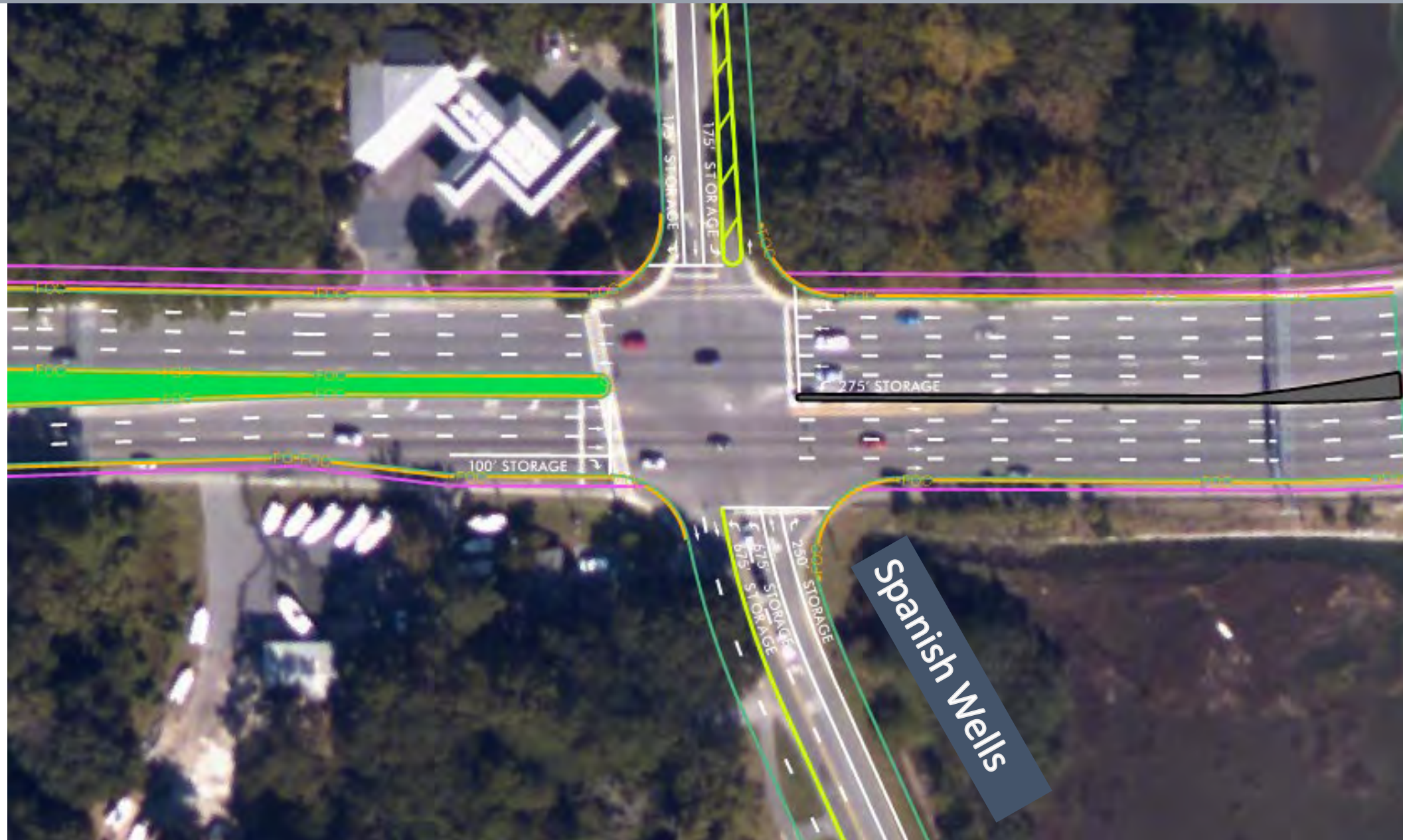
Intersection Preferred Concept 4



Intersection Preferred Concept 4



Intersection Preferred Concept 4



Intersection Preferred Concept 5



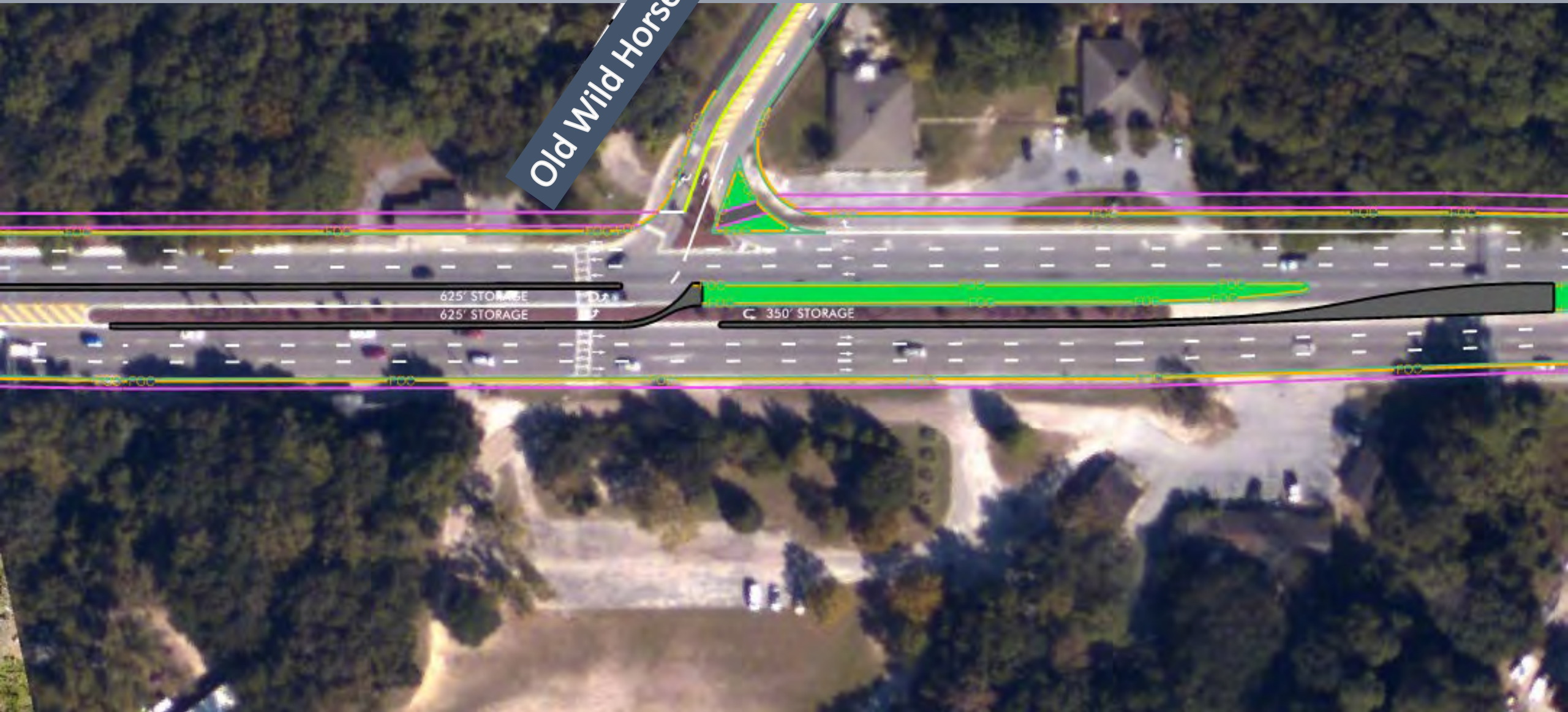
Signalize Old Wild Horse – Alt A (CONCEPT)

Intersection Preferred Concept 5

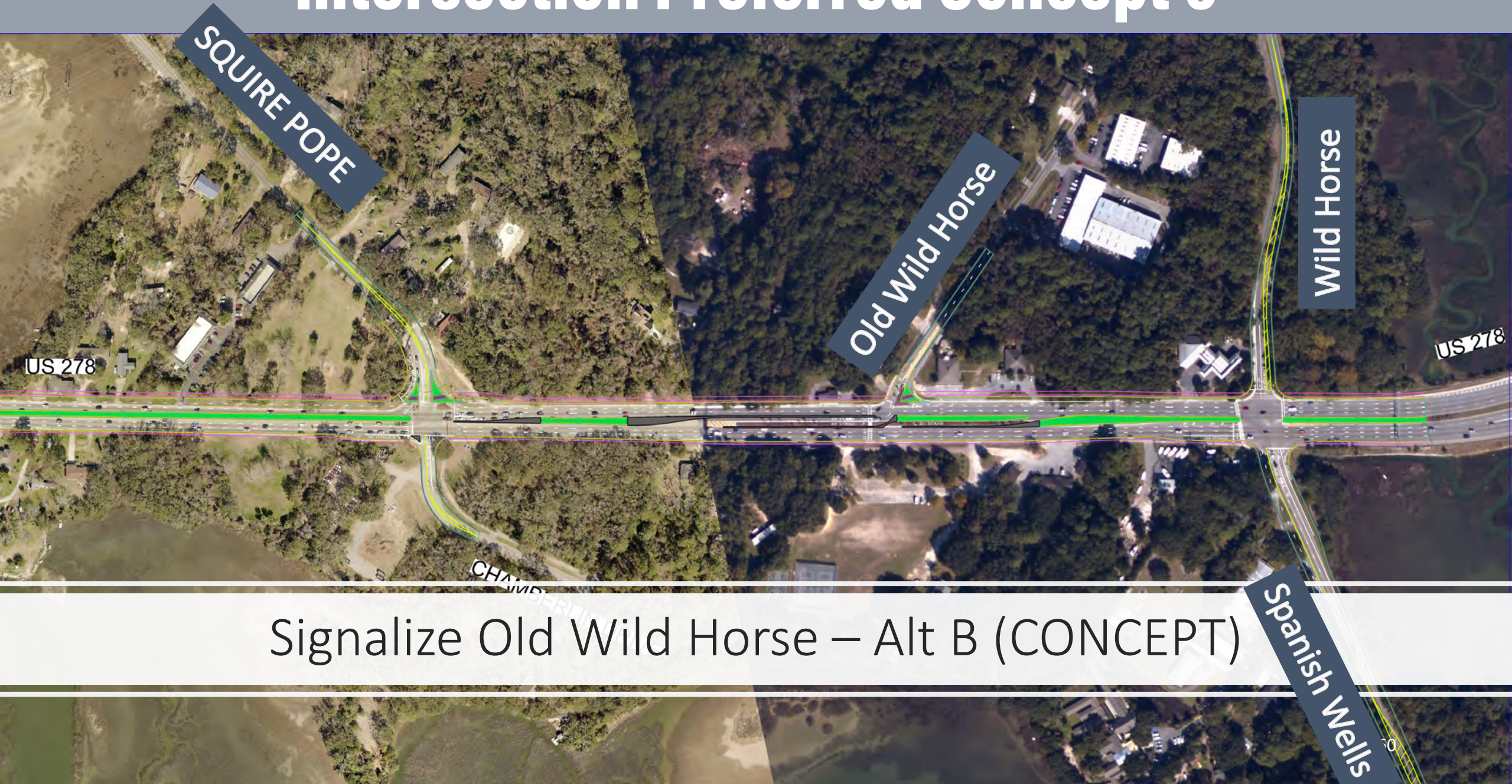


Intersection Preferred Concept 5

Old Wild Horse

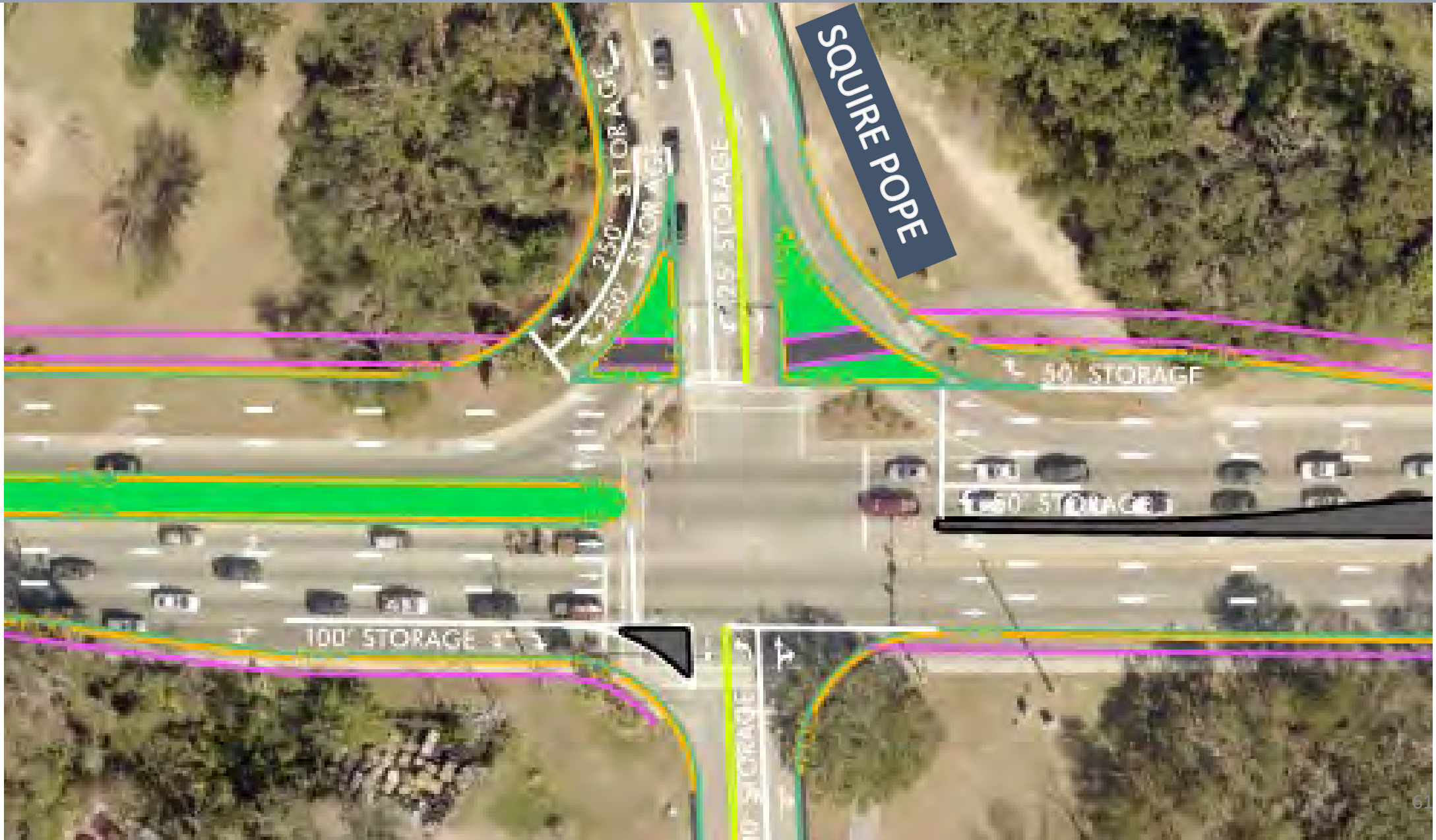


Intersection Preferred Concept 6



Signalize Old Wild Horse – Alt B (CONCEPT)

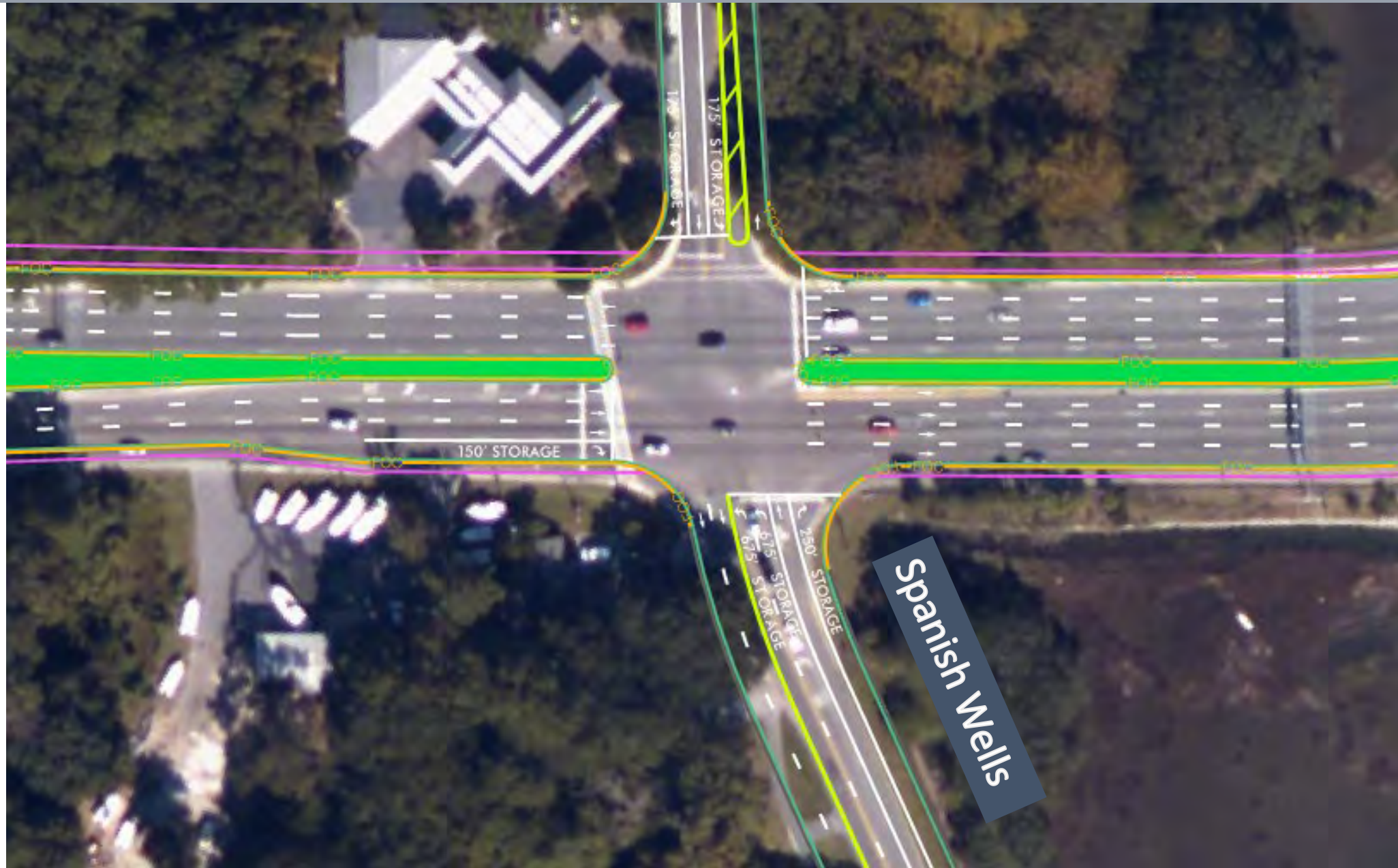
Intersection Preferred Concept 6



Intersection Preferred Concept 6



Intersection Preferred Concept 6





Questions?





October 28, 2020 Stakeholders Group Meeting

Stakeholder Meeting 6 - Summary

Event Information

Date: October 28, 2020

Time: 10:00 AM to 11:30 AM

Location: Virtual meeting via Microsoft Teams (call-in option available)

Meeting Goals

Present to the stakeholders and gather feedback on:

- Community mitigation – recent activities and path forward
- Current intersection refinements
- The status and expectations of the Public Hearing

Attendees

Person	Organization
Craig Winn	SCDOT
Megan Groves	SCDOT
David Kelly	SCDOT
Eric Burgess	KCI
Phil Leazer	KCI
Amy Livingston	CDM Smith
Hisham Abdelaziz	CDM Smith
Victoria Wornom	CDM Smith
Heather Robbins	3 Oaks
Jessie White	Coastal Conservation League
John Miller	Moss Creek Owners Association
Juliana Smith	Costal Conservation League
Maureen Smith	Mariner's cove
Mike Garrigan	Windmill Harbour
Dejuan Holmes	Stoney Community
Sarah Stewart	Stoney Community
Frank Babel	HHI Bike Advisory Committee
David Johnson	Town of HHI 278 Gateway Committee
Ray Deal	Hilton Head Island – Bluffton Chamber of Commerce
Hannah Horn	Hilton Head Island – Bluffton Chamber of Commerce

Courtney Kenneweg	Crazy Crab Restaurant
Mary Lou Franzoni	Palmetto Breeze

Meeting Highlights

- Began meeting with an overview of the software platform and how the meeting would be moderated. Ensured stakeholders understood the tools and process.
- Introduced the Team that was on the line and the participants
- Presentation – Craig Winn gave a presentation on the following items:
 - What is happening with community mitigation?
 - Our current intersection refinements
 - The status and expectations of the Public Hearing
- Question & Answer
 - Stakeholders were able to type questions into the chat box and ask questions out loud throughout the meeting. There were specific pauses in the presentation to allow for a more open question and answer session.

Questions and Comments Received

- RA 2, 3, 4A were in front of the others, so one of those 3 would be the Reasonable Preferred Alternative? Are you still refining the costs of those alternatives? Is there any indication of when a start date would be for construction? (Mike Garrigan)
 - We anticipate it starting in early 2024. Federal funding isn't available until October 2023. Yes, those are the alternatives that are still rising to the top.
- Why did the relocations go down in number?
 - When we first looked at relocations, we were looking at a study-level assessment. As we refined the alternatives, we were able to reduce the impacts. We're looking at 2 business relocations now and no residential relocations.
- Has the construction contract been awarded yet? (Maureen Smith)
 - No, this would not be awarded until the end of 2023.
- I think it would be helpful to get a rough estimate of the Alternatives 2, 3, 4A's construction costs. (Frank Babel)
 - We will be providing costs estimates for the alternatives at the Public Hearing once we have completed all refinements and work required by NEPA.
- Are there pathways on both sides of US 278 (referring to the multi-use paths)? (Frank Babel)
 - We are proposing a new 10-foot multi-use path (on one side) for the entire project and connecting to some of the existing trails.
 - We need to have a separate conversation about this. LATS chair wants to see a plan. (Frank Babel)
- Adding another light will require skillful "selling" for concept 4 (Frank Babel)
 - Yes, the proposed intersections will require a lot of explanation and education which we will certainly plan for, however, we would like this group to help with that education outreach.
- I do not agree that Gateway Road diverted to Jenkins Road is a disadvantage. In fact, it may be an advantage (Mike Garrigan)

- You mentioned that you have minimized the relocations down to 2 businesses, is that correct? (Maureen Smith)
 - Yes, that is correct. All alternatives (2, 3, and 4A) that have risen to the top have only 2 relocation impacts now. There are no residential relocations.
 - Which businesses will be impacted?
 - We cannot say now because we prefer to contact the businesses first. (Maureen said she understood)
 - Yes. The 2 relocations are also inclusive of the intersection reconstructions.
- When Craig spoke for the public policy meeting, one concern we had was the intersection of Squire Pope Road. I'm making this concern known again. (Mike Garrigan)
- I did not see any turn-around for how customers will get to us (Cray Crab) coming from the Island? (Courtney Kenneweg)
 - We are still working through that, but the concept is having a left-turn lane in the median for people coming to the Crazy Crab from the Island. They would turn right if coming from Bluffton.
 - We are looking at allowing right turns in, but not allowing left turns out. People would have to go to Old Wild Horse Road to make a U-turn.
- Can you define "mitigation bank"? (Maureen Smith)
 - USACE's preferred method of mitigation
 - Purchasing wetlands that are unimpacted to offset impacts
- Are studies underway for how noise can be reduced? (Mike Garrigan)
 - Studies are underway and the results of those will be available at the Public Hearing.
- The public's demand for information will increase as this gets closer to decision time. We need to engage the County, Town of Hilton Head Island, and the Chamber to assist getting the message out (Frank Babel)
- Ways to engage for the Public Hearing:
 - Suggests using YouTube videos
 - Visualization efforts are underway – a video fly through of the entire corridor will be part of the PH.
 - Leaning towards doing virtual and in-person meetings
 - Mariners Cove found the in-person meeting with the team to be very helpful in understanding the scope

Meeting Preparation

- Save-the-Date eblasts were sent on October 7, 2020
- Formal invitations were sent through eblast and USPS mail on October 22, 2020
 - Formal meeting packets mailed included the full slideshow printed in-case individuals were not able to log on through their computer
- A reminder of the stakeholder meeting was sent from project manager Craig Winn's SCDOT email to all stakeholders on October 26, 2020 (inclusive of login information).
- Meeting presentation was posted to the website on October 30, 2020 following the meeting