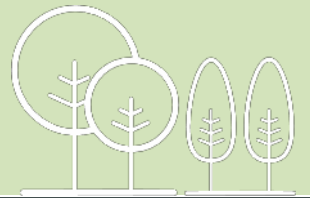
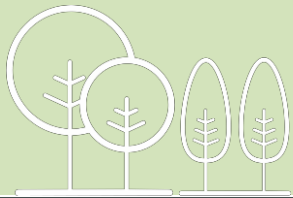




Charleston County
Transportation Development

Central Park Road & Riverland Drive Intersection Improvements

Public Meeting
October 24, 2018



What is the Project History?

Where we
are today

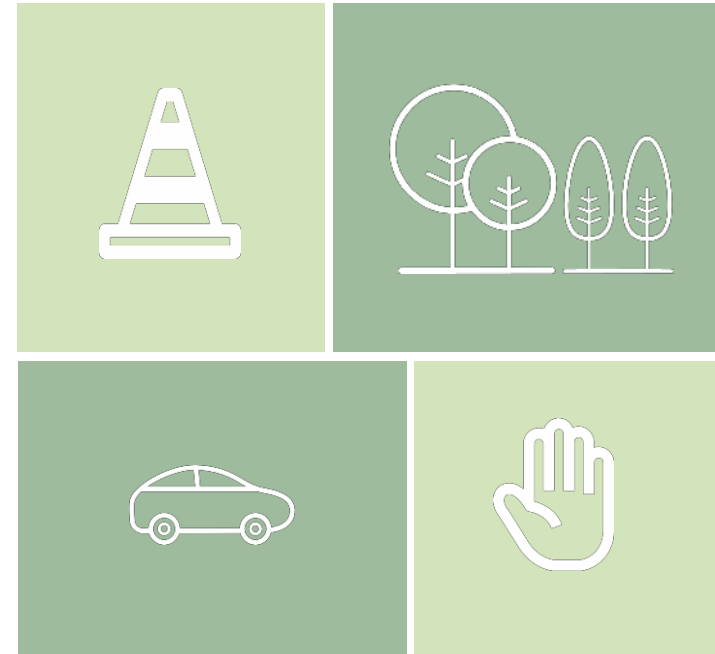


Project Timeline

2012	2014	2015	2018
<ul style="list-style-type: none">▪ SCDOT initiates project to improve safety at intersection▪ SCDOT plan includes turn lanes with signalization and impacts to 12 Grand Oaks (4 that are in poor condition)	<ul style="list-style-type: none">▪ Riverland Drive Corridor Management Plan was completed	<ul style="list-style-type: none">▪ SCDOT plan not implemented by City of Charleston and project placed on hold	<ul style="list-style-type: none">▪ Central Park and Riverland Drive Intersection Improvements project begins

What is the Project Purpose?

The purpose of the proposed project is to improve the safety and traffic flow at the intersection of Riverland Drive and Central Park Road for all modes of transportation while minimizing impacts to “grand” trees.



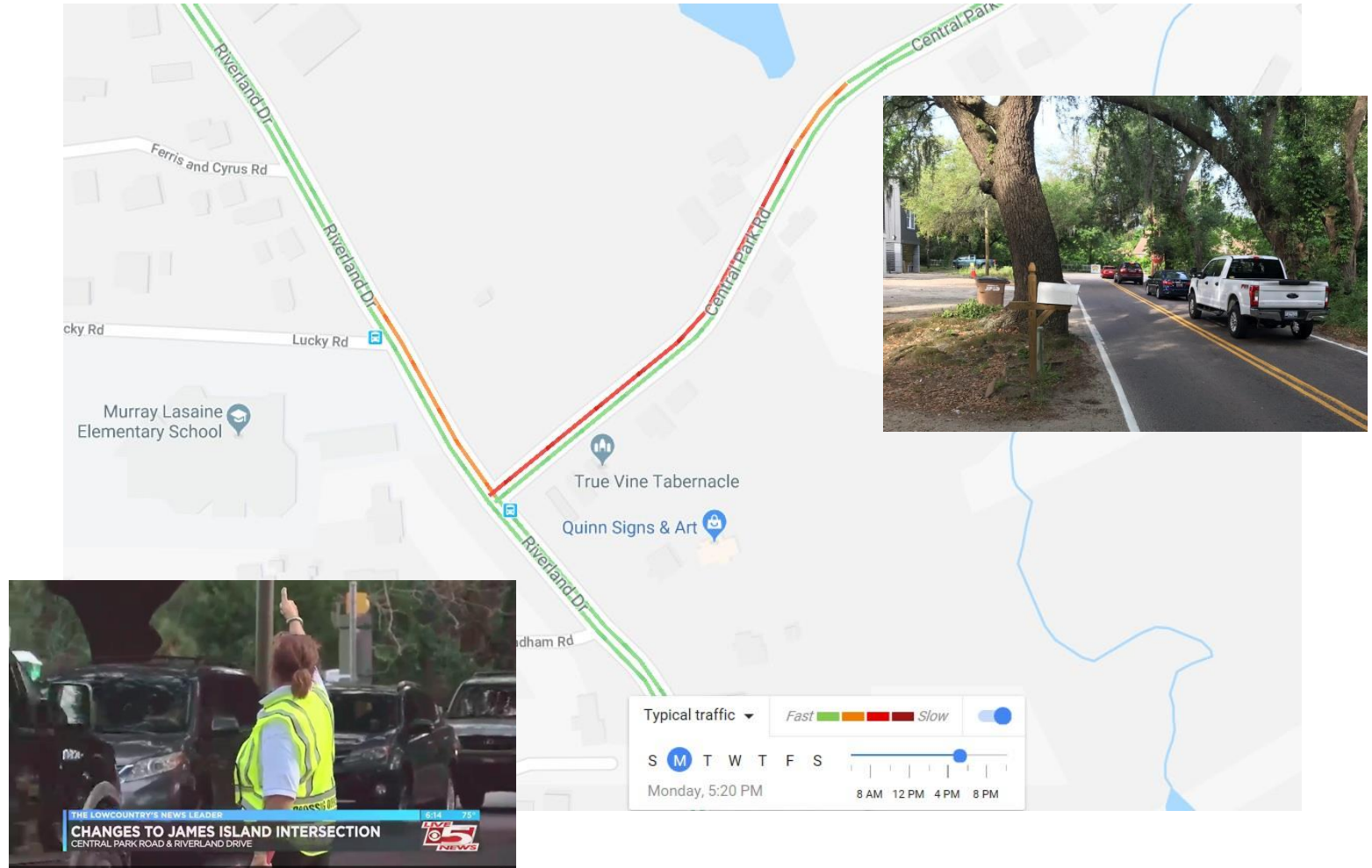
Why is this project needed?



Why is this project needed?

Relieve Traffic Congestion

- 11,000 Vehicles a Day on Riverland Dr
- Significant delay to turn onto Riverland Dr from Central Park Rd
- Delay from School Traffic is excessive
- Lack of Turn Lanes



Why is this project needed?

Improve Safety

- Sight Distance Issues at intersections
- 23 Crashes – 1 Fatality and 8 Injuries (during 3 year period)
- Narrow lanes
- Crosswalks



Why is this project needed?

Options for Bicyclists & Pedestrians

- Students Walking to School
- James Island County Park
- Recreational Cyclists
- Need More crosswalks, signs and designated areas
- Transit Stops



What are the project challenges?



What are the Project Challenges?

Grand Oak Trees

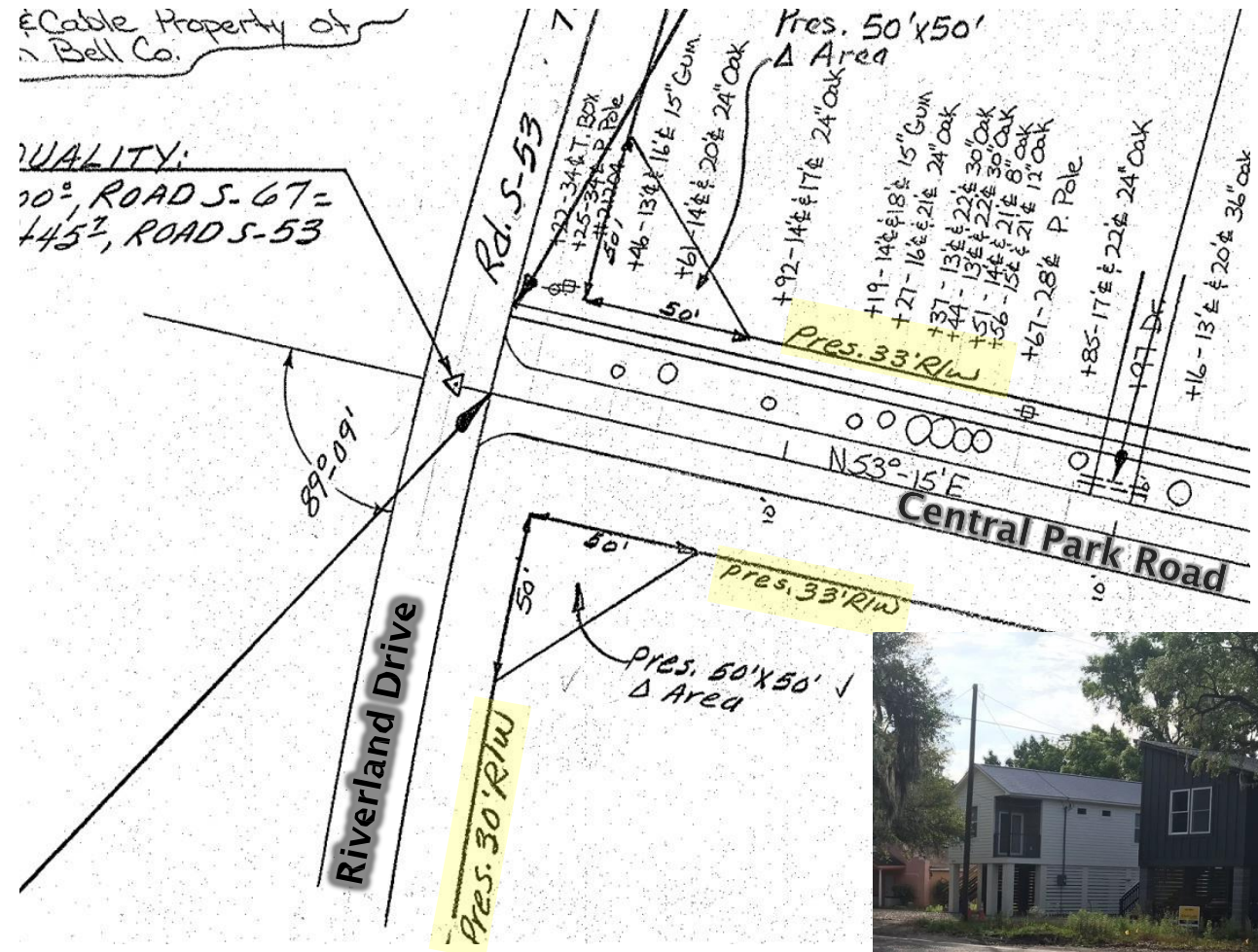
- Essential Natural Resources that must be preserved
- Provide Economic and Aesthetic benefits
- Provide Habitats
- Riverland Drive is designated as a Scenic Highway
- City of Charleston Tree Ordinance



What are the Project Challenges?

Limited Right of Way

- Existing 33 feet Right of Way from Centerline on Central Park Road
- Existing 30 feet Right of Way from Centerline on Riverland Drive
- New Construction
- Residential
- Commercial



What are the Project Challenges?

Existing and Future Traffic

- School Traffic Peaks
7:00 a.m. to 8:00 a.m. and
2:30 p.m. – 3:30 p.m.
- Afternoon Traffic Peaks
5:00 p.m. to 6:00 p.m.
- Opening day Traffic 2020
- Planning for the future
2040 Traffic

Intersection	Existing Level of Service		
	AM Peak	School Peak	PM Peak
Riverland Dr @ Hollings Rd	C	C	D
Riverland Dr @ Lucky Rd	F	C	C
Riverland Dr @ Central Park Rd	F	F	F
Riverland Dr @ Bradham Rd	C	C	D



Level of Service: LOS is used to analyze highways by categorizing traffic flow and assigning quality levels of traffic based on speed, delay, density, etc

Alternatives Considered.... But Eliminated.



No Build

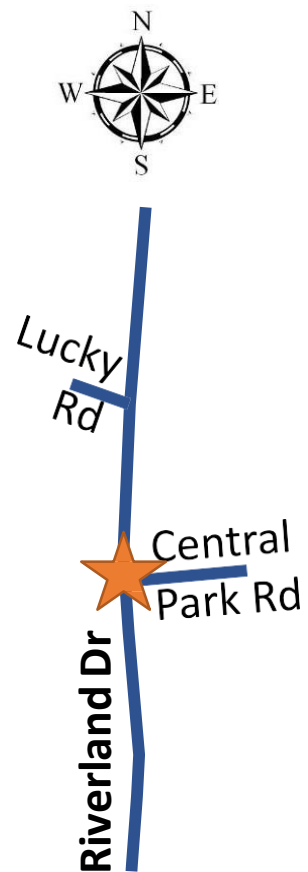
Summary: This alternative assumes we cannot find a reasonable alternative to implement and no improvements are completed.

Traffic:

	Year 2040 Traffic		
	AM	School	PM
Level of Service (LOS)	F	F	F
Riverland Dr Northbound Queue	51 ft	26 ft	18 ft
Riverland Dr Southbound Queue	206 ft	209 ft	217 ft
Central Park Rd Westbound Queue	3,336 ft	3,216 ft	3,304 ft

Eliminated:

- Does not address Safety Issues
- Does no improve Multi-Modal Options
- Does not address Traffic Congestion

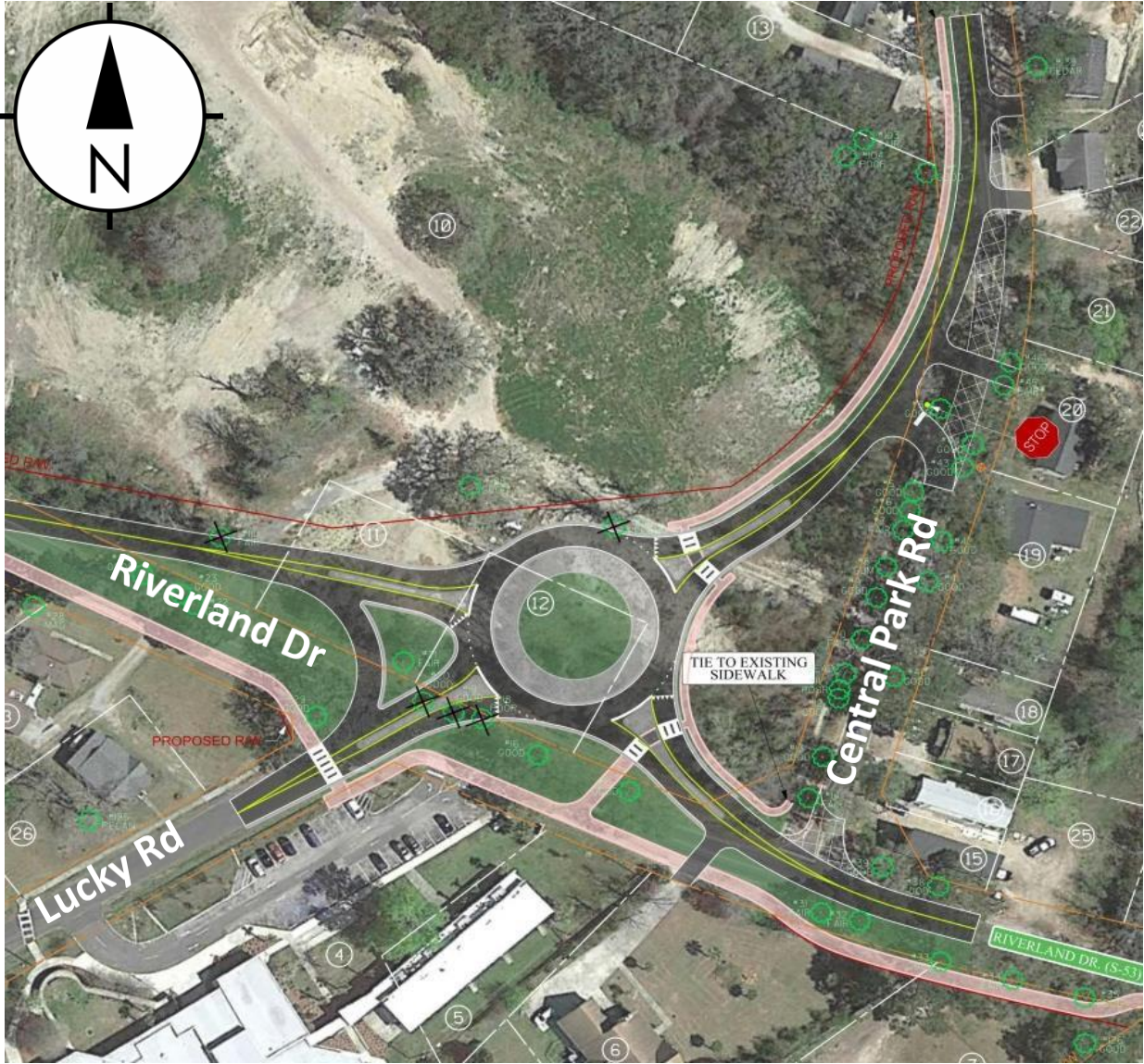


Alternative 4 (Eliminated)

Summary: Realign Central Park Rd and Riverland Dr to tie into a NEW roundabout intersection with Lucky Rd.

ROW Impacts	91260 sft 2.10 ac		
Total Grand Tree Impacts	5		
Grand Oak Tree Impacts	4		
2040 Peak Hour	AM	School	PM
LOS	F	C	F

Eliminated: This alternative does not address Traffic Congestion in 2040, as it has a LOSF.



Alternative 5 (Eliminated)

Summary: Realign Central Park Rd to tie into a NEW Roundabout on Riverland Dr at Lucky Rd while saving the 80” Oak Tree on the Corner of Lucky Rd and Riverland Dr.

ROW Impacts	107750 sft 2.47 ac		
Total Grand Tree Impacts	6		
Grand Oak Tree Impacts	4		
2040 Peak Hour	AM	School	PM
LOS	F	C	F

Eliminated: This alternative does not address Traffic Congestion in 2040, as it has a LOS F.

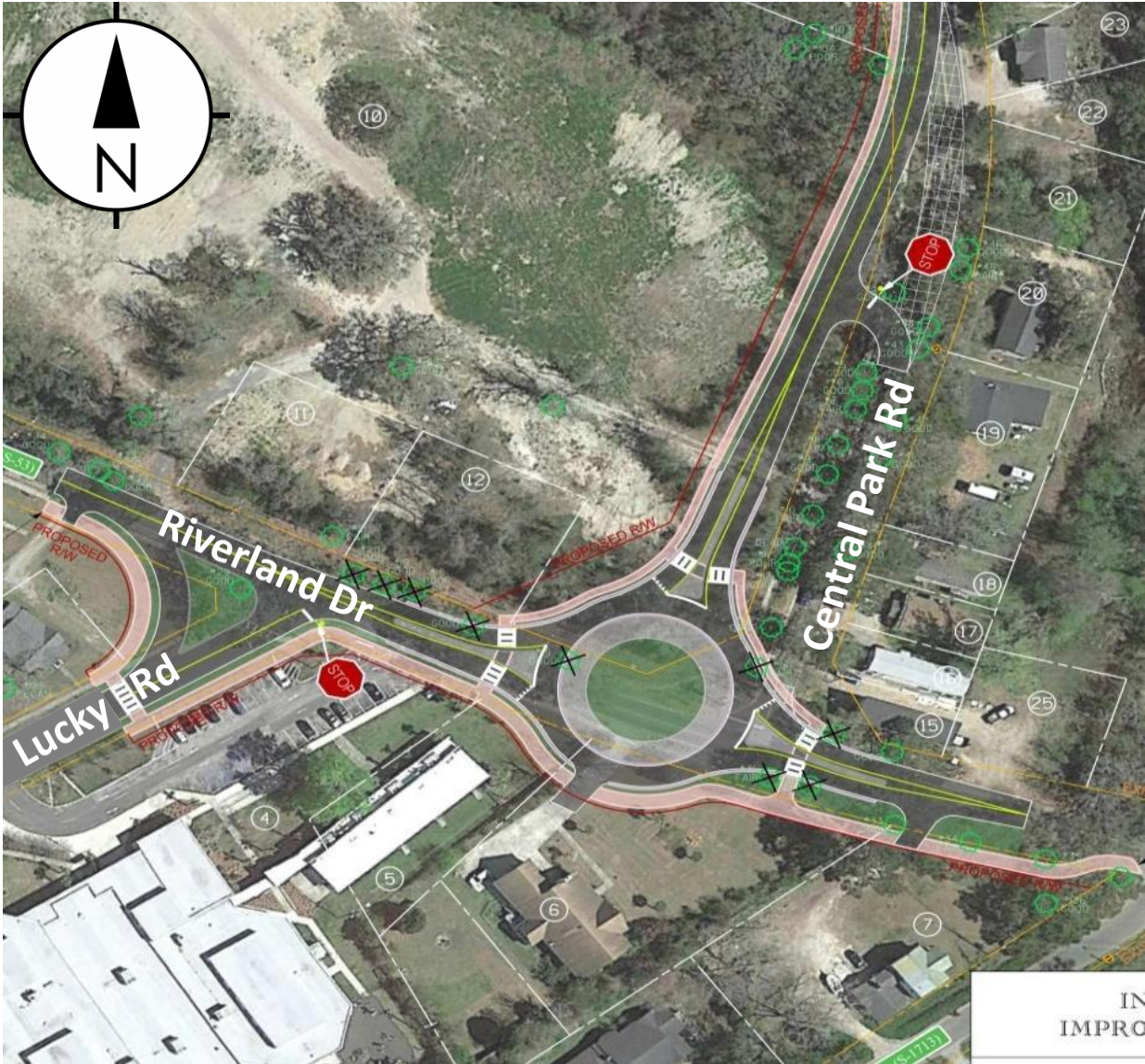


Alternative 6 (Eliminated)

Summary: Parallel existing Central Park Rd to tie into a NEW Roundabout at Riverland Dr.

ROW Impacts	48835 sft 1.12 ac		
Total Grand Tree Impacts	9		
Grand Oak Tree Impacts	9		
2040 Peak Hour	AM	School	PM
LOS	B	B	F

Eliminated: This alternative does not address Traffic Congestion in 2040, as it has a LOS F in the PM.

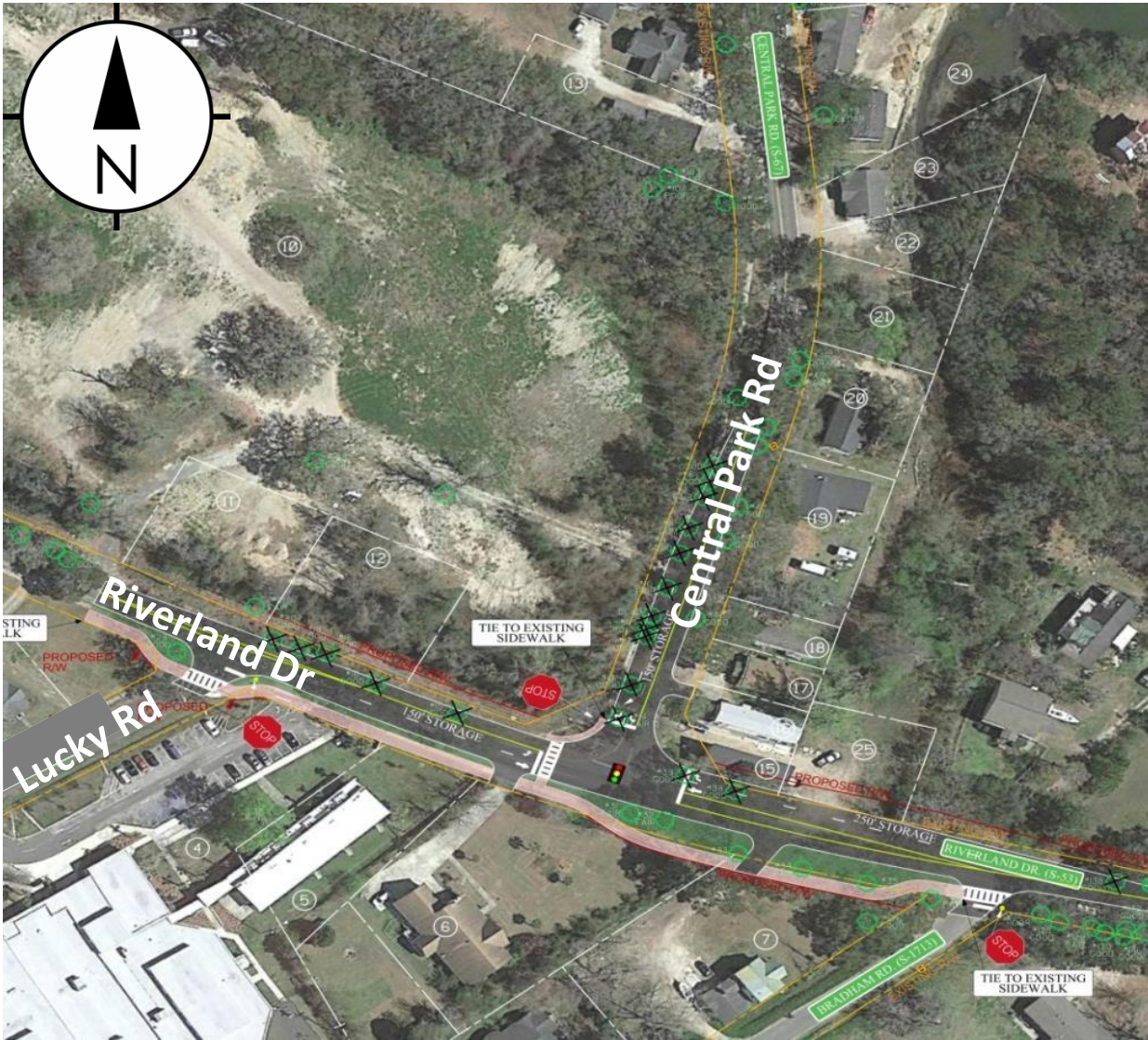


Alternative 7 (Eliminated)

Summary: Similar to previous SCDOT alternative. New signal with turn lanes. Meets Traffic needs, but eliminates trees.

ROW Impacts	10531 sft 0.24 ac		
Total Grand Tree Impacts	19		
Grand Oak Tree Impacts	18		
2040 Peak Hour	AM	School	PM
LOS	B	B	B

Eliminated: This alternative was eliminated because it impacted nearly all trees at the intersection.



Alternative 8 (Eliminated)

Summary: Unique Small “Dog Bone”
New Roundabout that includes
Central Park Rd, Lucky Rd and
Riverland Dr.

ROW Impacts	84,070 sft 1.93 ac		
Total Grand Tree Impacts	4		
Grand Oak Tree Impacts	2		
2040 Peak Hour	AM	School	PM
LOS	F	A	F

Eliminated: This alternative does
not address Traffic Congestion in the
AM and PM.



Please return to the Public Meeting page to review the Top 3 Alternatives being considered.

