

# WHAT WORKED

**Viable Intersection Alternative**



# Viability Intersection Alternative

The recommended intersection design concept is a combination of components from multiple intersection alternatives that were examined during the alternative examination process.

## The recommended intersection design concept includes:

- Restricted Crossing U-Turn Intersection at the Porchers Bluff Road and Highway 17 intersection.
- Modified Diverging Diamond Intersection at the Highway 41 and Highway 17 intersection
- Overpass Bridge for Highway 17 North at the intersection of Highway 17/Winnowing Way/Porchers Bluff Road
- Extension/widening of Winnowing Way to Highway 41
- Roundabouts at Hamlin Road and Brickyard Parkway



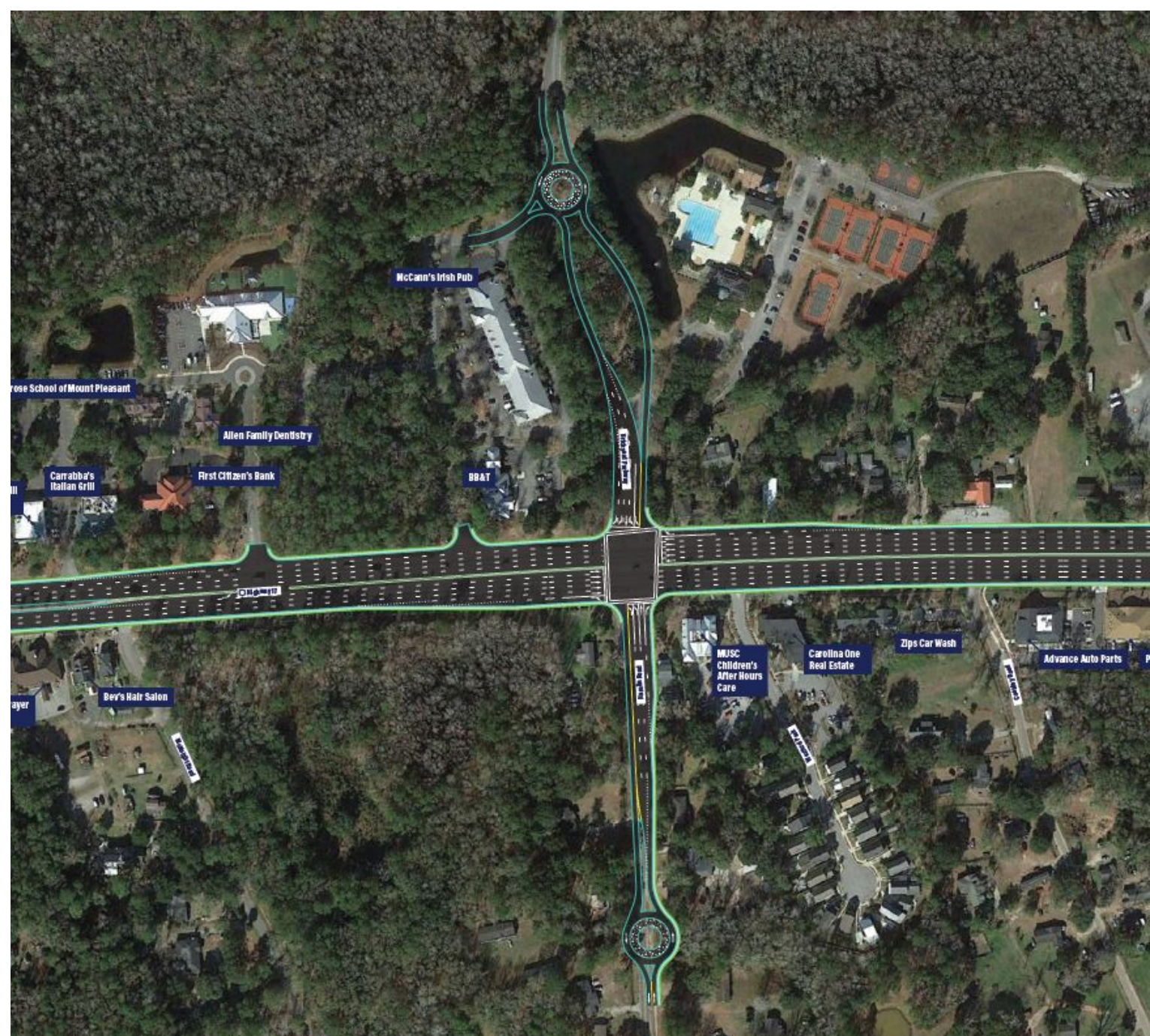


**4**  
**HIGHWAY**  
**CORRIDOR**  
**IMPROVEMENTS**

*Driveways within this corridor will not be removed.*

# Brickyard Parkway and Hamlin Road Intersection

- The **removal of left hand turns** off of Highway 17 onto Hamlin Road and Brickyard Parkway is needed to accommodate projected traffic volumes, prevent traffic backups and minimize delays to neighborhoods.



# What We Know: Roundabout Facts

- Based on traffic projections, the Brickyard Parkway and Hamlin Road roundabouts will only see **small number of vehicles** using the roundabouts for u-turns
- Large vehicles (i.e. firetrucks, buses, boat trailers) will be able to **safely and easily navigate** through the proposed roundabouts
- The proposed roundabouts will have **no direct impacts** on Brickyard's community amenities
- Along Brickyard Parkway, the **current speed limit of 25 mph** will remain the same.
- The roundabouts would act as a **traffic calming device** and would require vehicles to **reduce their speed** while approaching and navigating the roundabout.
- **Additional left and right turn lanes** will be added to Brickyard Parkway and Hamlin Road to further enhance traffic flow.



# Traffic Pattern Projections During Peak Hours for 2025

## Vehicles Using Roundabout During Peak Traffic Hours

AM	PM
40 vehicles	16 vehicles

Brickyard Parkway

## Vehicles Using Roundabout During Peak Traffic Hours

AM	PM
45 vehicles	127 vehicles

Hamlin Road

Highway 17



# 2025 Traffic for Brickyard Parkway Roundabout

## During AM Peak Hour:



Every 37 Seconds

Vehicle will turn onto  
Brickyard Parkway



Every 1 Minute  
& 30 Seconds

Vehicle will use  
Brickyard roundabout  
for a u-turn

## During PM Peak Hour:



Every 1 Minute  
& 15 Seconds

Vehicle will turn onto  
Brickyard Parkway

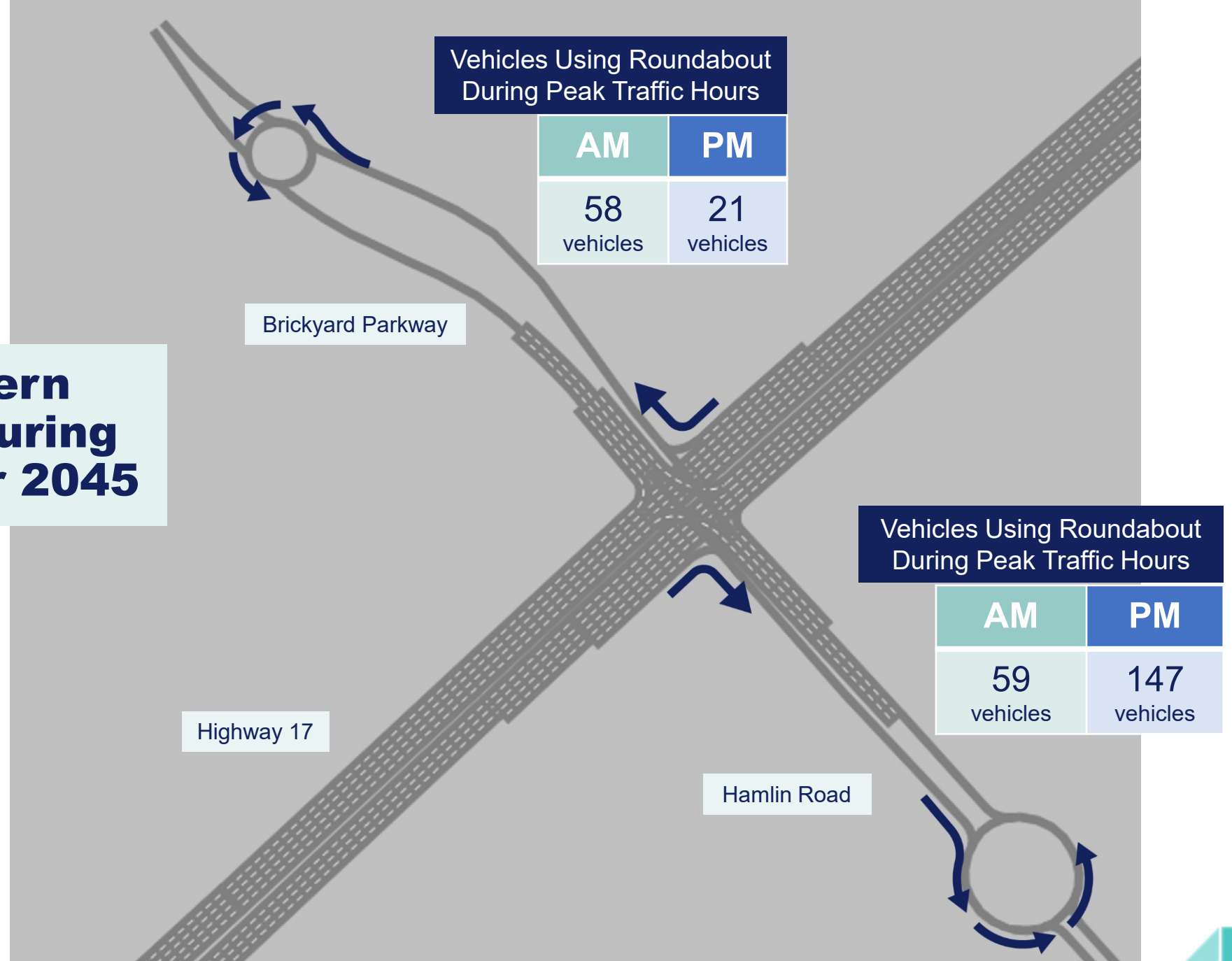


Every 3 Minutes  
& 45 Seconds

Vehicle will use  
Brickyard roundabout  
for a u-turn



# Traffic Pattern Projections During Peak Hours for 2045



# 2045 Traffic for Brickyard Parkway Roundabout

## During AM Peak Hour:



Every 25 Seconds

Vehicle will turn onto  
Brickyard Parkway



Every 1 Minute  
& 2 Seconds

Vehicle will use  
Brickyard roundabout  
for a u-turn

## During PM Peak Hour:



Every 52 Seconds

Vehicle will turn onto  
Brickyard Parkway



Every 2 Minutes  
& 51 Seconds

Vehicle will use  
Brickyard roundabout  
for a u-turn



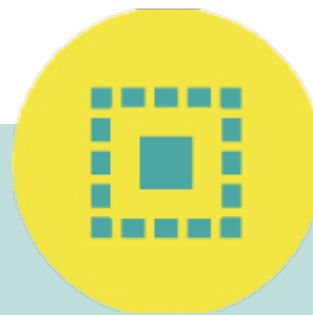
# Features of the design concept – Brickyard Parkway at Hamlin Road



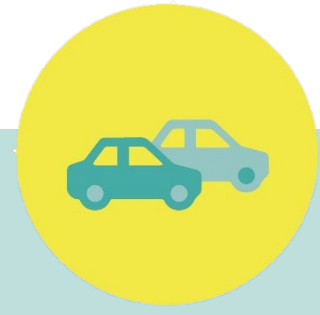
No total property impacts to homes or businesses in this area



Emergency services would be able to make lefts from Highway 17 into neighborhood areas



No impacts to the existing community center and amenities



Speed limit would remain 25 mph on Brickyard Parkway and speeds would reduce as traffic approaches the roundabout

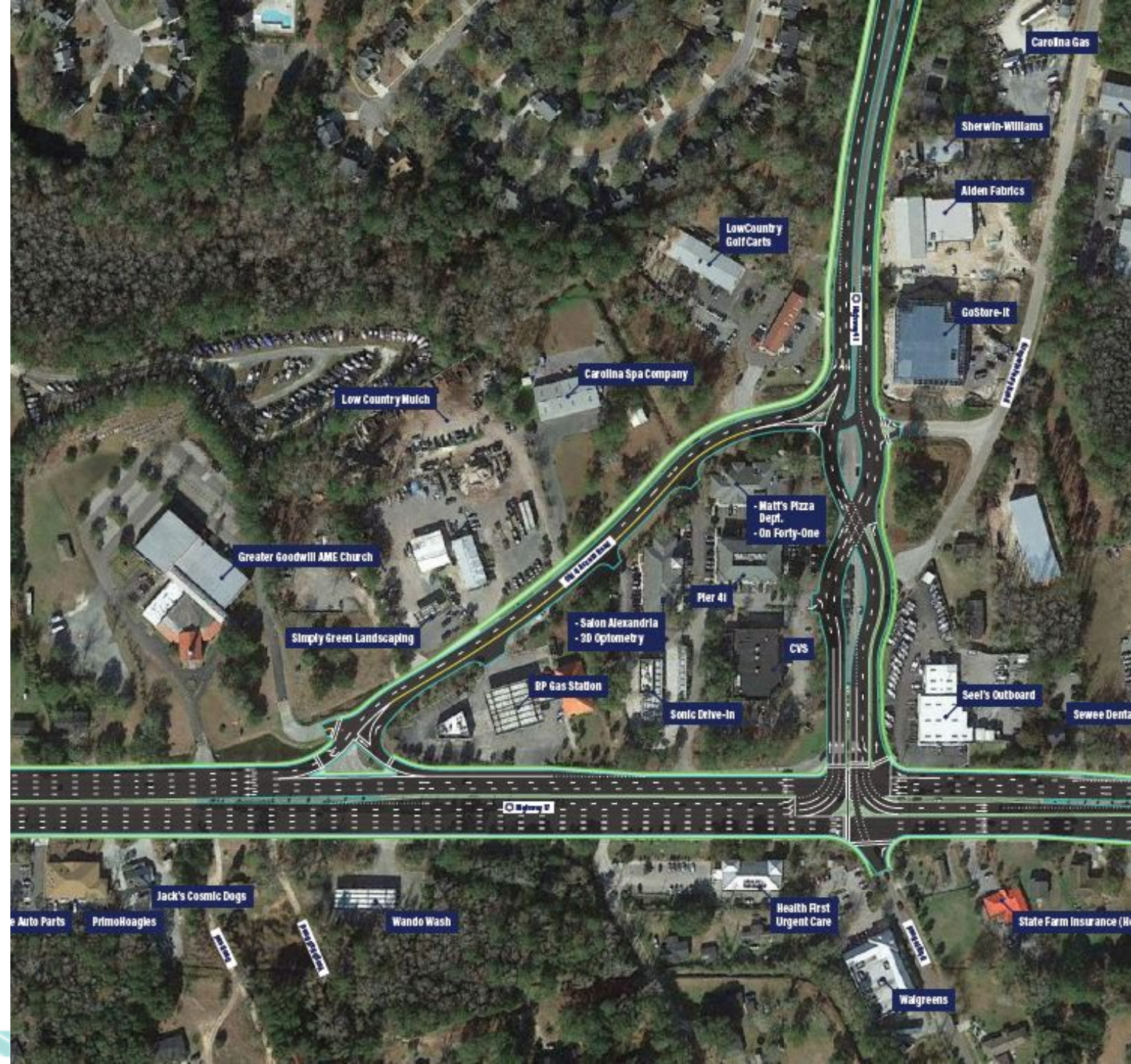
# What If Scenarios: Future Traffic Realities

*What if no intersection improvements are made at the Brickyard Parkway & Hamlin Road intersection?*

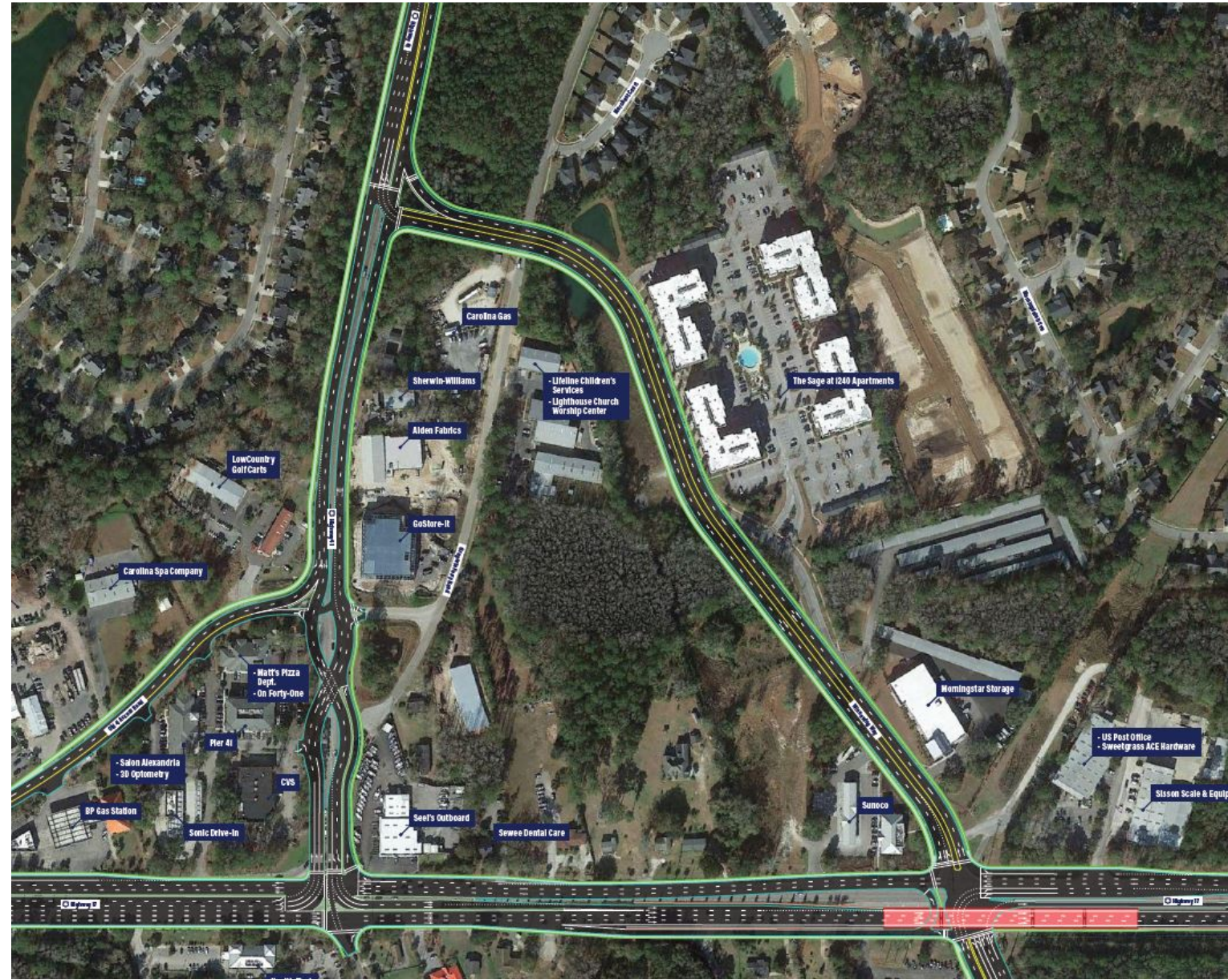
- The Brickyard Parkway and Hamlin Road intersection will **NOT be able to accommodate** future projected traffic volumes
- There will be **traffic gridlock** and backups surrounding this intersection
- It will become **nearly impossible** to turn left into Brickyard Plantation
  - At peak traffic times, the left hand turning lane into Brickyard Plantation is estimated to have over **60 cars** waiting to turn left (1/4 mile of waiting cars)
- It will be **very unsafe and therefore prohibited** to turn left into Brickyard Plantation without the signalized green light, because a vehicle will be attempting to cross freeway level traffic



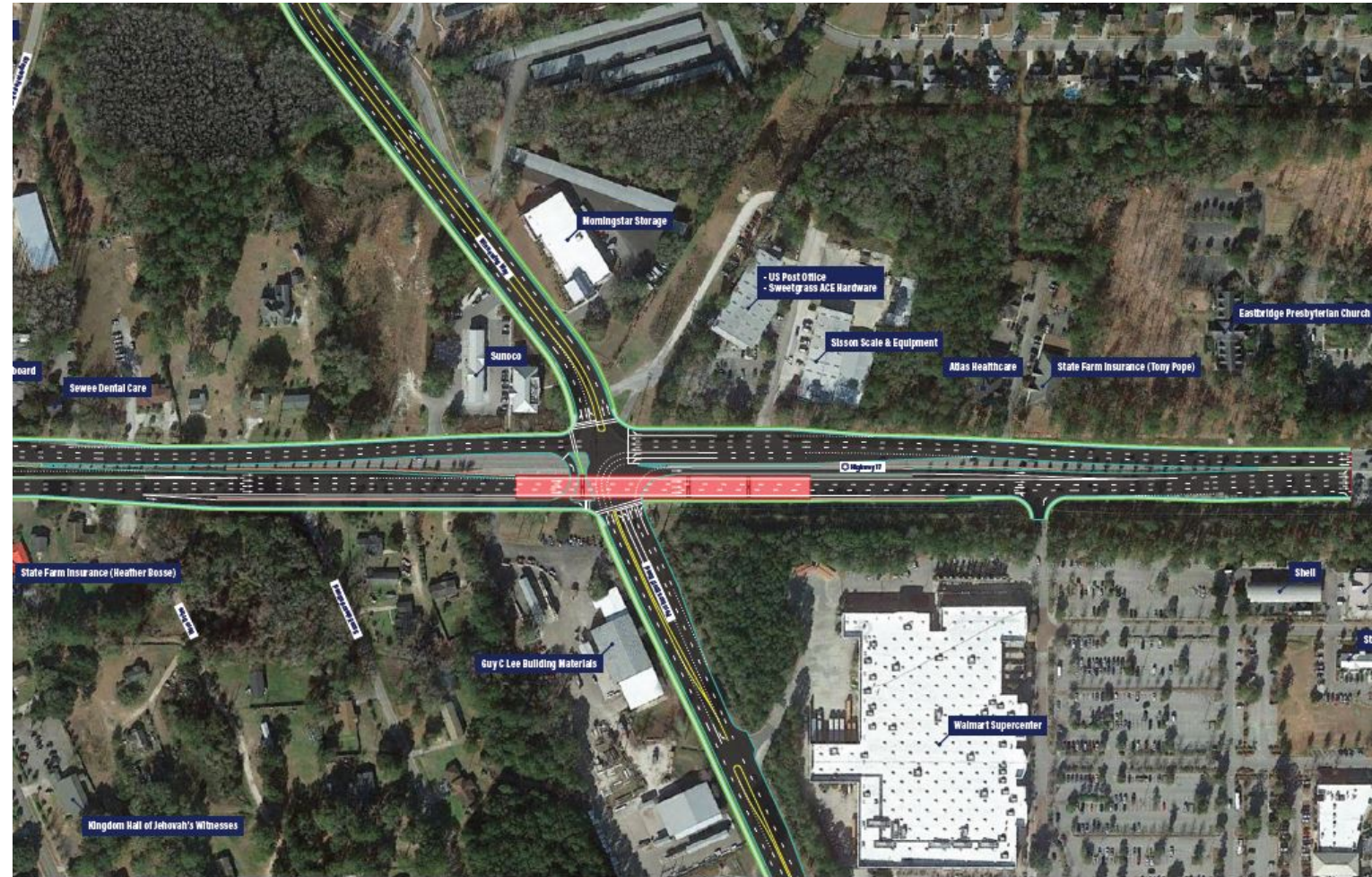
# Highway 41 and Highway 17 Intersection



# New Connections to Highway 41



# Winnowing Way and Porchers Bluff Road Intersection





**4**  
**HIGHWAY**

**CORRIDOR**  
**IMPROVEMENTS**

*Driveways within this corridor will not be removed.*