Spalding County Intersection Improvements
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Project Description
The client has acknowledged their concerns with the current safety and traffic flow of two intersections located along Jackson Road in Griffin, GA. In recent years, there has been a significant increase in traffic count, and this increase is expected to continue due to new developments in the area. The client contacted BMP Civil Design Solutions through the University of Georgia’s Archway Partnership, located in Griffin, GA, with the request to examine the area and provide two realignment designs to resolve the traffic and safety issues at these intersections. Upon approval by Spalding County of one concept for each intersection, a traffic analysis, recommendations, a full set of plans, permitting and checklists, and a cost estimate will be provided for each concept.

Requirements and Restrictions
The client did not have a certain idea that they were expecting or wanting for either of the intersections. Their only requirements for the intersections were that after construction there would be no upkeep. Specifically, they did not want any fancy landscaping, red lights, or crosswalks.

Beyond the client’s requirements for the improvements, there were a few site restrictions as well. On the south side of Jackson Road are gas lines that cannot be moved. This means that the edge of pavement along the south side of Jackson Road cannot be moved at either intersection. Lastly, across from the intersection of Locust Grove Road at Jackson Road is a historical landmark building whose right of way cannot be encroached upon or moved.

Existing Conditions
Jackson Road at Locust Grove Road
Problems
- Lanes of traffic crossing over each other
- No yield signs
- Two possible places to turn on and off of Jackson Road
- Gas station parking lot bordering Locust Grove Road
  - Cars enter wherever they please
  - Increases confusion and congestion
- New subdivision developments nearby
  - Increasing traffic flow
  - New residents are unsure how to travel through intersection

Jackson Road at Jenkinsburg Road
Problems
- Too many roads intersecting in one area
- Jenkinsburg Road intersects Jackson Road at a very shallow angle
- Cannot accommodate church traffic

Site Design
Jackson Road at Locust Grove Road

The intersection realignment for Jackson Road at Locust Grove Road incorporates the use of left and right turn lanes on both Jackson Road and Locust Grove Road. The roads now intersect at an approximate 90 degree angle, improving perceived sight distance for drivers. There is proper signage to indicate which drivers have the right of way and when drivers should yield to oncoming or turning traffic.

The intersection of the church access road and Locust Grove Road has also been made to intersect at an approximate 90 degree angle. The church access road will be lengthened considerably, using the existing paving and right of way of Locust Grove Road. This will decrease the amount of cars that will have to turn onto Jackson Road, making the intersection safer. It will also help to accommodate church traffic, decreasing the amount of congestion.

Site Design
Jackson Road at Jenkinsburg Road

The intersection realignment for Jackson Road at Jenkinsburg Road incorporates the use of a left turn lane on Jackson Road as well as left and right turn lanes on Jenkinsburg Road. No lanes are crossing over one another, and there is proper signage to indicate which drivers have the right of way and when drivers should yield to oncoming or turning traffic.

The gas station will not have two accesses, the existing access on Jackson Road, and an additional access on Jenkinsburg Road. The rest of the parking lot will be curbed to prevent drivers from entering and exiting the parking lot wherever they please.

Site Design

Cost Estimates

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<tr>
<th>Item</th>
<th>Locust Grove Road Price</th>
<th>Jenkinsburg Road Price</th>
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<td>Excavation</td>
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Sponsor/Client: Spalding County – Griffin, Georgia