



*How the NEPA Process Served as Valuable Planning Tool:
A Case Study of the Folly Road/Camp Road Intersection Improvement Project in
Charleston, SC*

By

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Introduction

The National Environmental Policy Act (NEPA) was established to make agencies think about the environmental effects that their proposed actions will have prior to making decisions. Requirements of NEPA are generally met through the production of an environmental document that analyzes the proposed action. However, NEPA is about more than just producing a document; it is about examining your choices and making a good decision. This case study will examine a voluntary environmental document (Categorical Exclusion Level C) for an intersection improvement (including new sidewalks and bike lanes) at one of the most congested areas in Charleston County, where no environmental impacts were anticipated from the proposed project.

Public involvement is not generally required for Categorical Exclusions (CE), as this is the lowest level of environmental documentation and typically involves projects that are not controversial and inherently have no significant environmental impacts. While this intersection improvement did not require a formal NEPA document, the South Carolina Department of Transportation (SCDOT) provides their own guidelines regarding preparation of environmental documents for projects of this type within the state of South Carolina and generally follows a voluntary NEPA process for locally funded projects, similar to the mandatory NEPA process for state and federally funded projects. Many state DOT agencies perform NEPA evaluations for projects that are not federally funded at the time the project begins planning and design. SCDOT does obtain a significant portion of its funds from the federal government and often will follow the federal NEPA process in the event that federal funds become available for use on a project in the future. In addition, the South Carolina General Assembly passed new regulations in 2007 (South Carolina Code of Laws Section 57-1-370 G) that required CEs at the C Level, specifically projects that involved large intersection improvements, to hold a public hearing and gather community input. These new public involvement standards were developed as part of the *2007 Statewide Transportation Plan for South Carolina*. As a result, public involvement was part of the project planning process for the Folly/Camp Road intersection improvements.

The original proposal called for designs that would require the removal of approximately 20-40 Grand Oak trees from alongside the existing roadway. Citizen input as part of the NEPA process that was followed led the agency to determine that “extraordinary or unusual circumstances” may exist and that the preservation of Grand Oak Trees along the roadway was important to the community. An additional alternative and more “context sensitive design” was developed that included reduction of the travel lanes from 12 feet to 11 feet, curving the roadway around the trees, meandering the sidewalks through the trees, placing drainage under the roadway and reducing the speed of the roadway. Design engineers were challenged to “push the envelope” and developed an alternative that would improve traffic operations at the intersection, although not as well as previous alternatives, with fewer impacts to the Grand Oak Trees. The final design that was approved only required the removal of 3-5 Grand Oak trees for the proposed project.

Purpose of Paper

The purpose of this paper is to show how the voluntary development of a CE that followed the NEPA process led to more informed decision making and a creative alternative that generally met the purpose and need of the project while having the least impact on the environment. The residents and decision makers for this community had to balance the needs of roadway safety and pedestrian/bicycle accessibility with protection of the natural resources that are valuable to the community. NEPA was an invaluable tool that guided the process and provided the information to help them make an informed and just decision.

The Relationship Between Planning and NEPA

The field of Urban and Regional Planning uses forethought and conscience design in the layout and functioning of a city or region. Planners advocate sustainable development in order to reduce consumption of natural resources and mitigate the effect of human development on the environment. Planners try to help manage the growth of cities, applying tools like zoning and growth management, to manage the uses of land and prevent the haphazard or “piecemeal” development of the land. However, Planning has developed a reputation by some as creating burachrotic hurdle or “red-tape” to the built environment.

NEPA has also developed a reputation from some as “red-tape” and a hurdle to “doing what needs to be done”. However, NEPA is a planning tool. Similar to the process of zoning and land use planning, the NEPA process requires that actions are thought through and alternatives and consequences considered before determinations are made. The specific purpose of NEPA is to include environmental consideration into Federal agency planning and action. This is done by providing decision makers and other stakeholders with the information they need to understand potential environmental impacts of proposed actions. One of the basic principles of NEPA is that people make better decisions when they have clear information about the consequences and trade-offs associated with taking any given course of action. Analyzing all reasonable alternatives is an inherent part of good decision making and leads to more efficient and effective projects.

In general, the principles elements of NEPA include:

- Assessment of the social, economic, and environmental impacts of a proposed project;
- Analysis of a range of reasonable alternatives to the proposed project, based on a defined purpose and need for the proposed project;
- Consideration of appropriate impact mitigation including avoidance, minimization and compensation;
- Interagency participation through coordination and consultation;

- Public involvement including opportunities for the public to participate and comment;
- Documentation of the NEPA process and disclosure of potential impacts.

Categorical Exclusions

The Council on Environmental Quality (CEQ) regulations (40 CFR §§ 1500-1508) addresses the basic decisionmaking framework and action forcing provisions established under NEPA and include direction for Categorical Exclusions. “Categorical exclusion” refers to an action that typically does not, individually or cumulatively, have a significant effect on the human environment (40 CFR 1508.4). They are used for actions that typically have no impact on the environment and where an Environmental Assessment (EA) or Environmental Impact Statement (EIS) would not be required. However, normally excluded actions may have a significant environmental effect if “extraordinary or unusual circumstances” exist. As a result, a CE is not an exemption from the NEPA process. Actions that normally are categorically excluded could require an EA or EIS if it can be determined that a significant environmental impact would result or “extraordinary or unusual circumstances” exist for that particular situation. Examples of “extraordinary circumstances” could include cultural sites, wetlands, and threatened or endangered species within a project area.

In addition, 23 CFR also addresses environmental impacts of highways and outlines policies and procedures for FHWA to implement NEPA. 23 CFR 771.117 specifically address CEs for FHWA projects. Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing) generally meet the requirements for a CE. Under 23 CFR 771.117, projects must meet the CE definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. These highway actions must not induce significant impacts to planned growth or land use for the area, require the relocation of significant numbers of people, and must not have a significant impact on any natural, cultural, recreational, historic or other resource. In addition, they must not involve significant air, noise, or water quality impacts or have significant impacts on travel patterns. In general, they must not either individually or cumulatively, have any significant environmental impacts.

23 CFR 771.117 also requires that “actions which normally would be classified as a CE but could involve unusual circumstances will require the Administration, in cooperation with the applicant, to conduct appropriate environmental studies to determine if the CE classification is proper”. Such unusual circumstances may include significant environmental impacts and/or substantial controversy on environmental grounds.

While removal of the Grand Oaks technically does not violate any historic and cultural protection laws, it could constitute an “extraordinary circumstance” under 40 CFR 1508.4 as well as an “unusual circumstance” under 23 CFR 771.117. As a result, the proposed project would not meet the CE guidelines from the two above mentioned Federal Codes.

Cumulative Impacts

Incremental impacts over time are considered “cumulative impacts” (40 CFR 1508.7). Cumulative impacts may result from individual actions that are considered minor, but over time collectively become significant when compounded together. In this case study, the individual intersection widening that required tree removal may not appear to have a significant impact could have potential for cumulative impacts when multiple intersection improvements are occurring within the area that also require tree removal. As a result, the cumulative impacts of each individual projects must be examined.

Recent Guidance on Categorical Exclusions

Many Federal actions do not have significant effects on the environment and are processed as CEs, the most frequently applied method used to show compliance with NEPA. As a result, the projects are exempt from further NEPA review and little or no public involvement is conducted as part of the process. However, involving the public in the decision making process is a key aspect of NEPA.

CEs serve a beneficial purpose as they help to expedite the environmental review process, but they must be applied appropriately. As a result, the CEQ published final guidance on November 23, 2010 that clarifies the rules for CEs and ensures that there is a concise public record when agencies apply them. According to this recent guidance from the CEQ, “inappropriate reliance on categorical exclusions may thwart the purposes of NEPA, compromising the quality and transparency of agency decision-making as well as the opportunity for meaningful public participation and review”. The recent guidance recommends steps for establishment of a CE that includes publishing the CE in the *Federal Register* for public review and comment as well as engaging appropriate stakeholders and the public in development and justification of the CE. The guidance encourages public documentation and disclosure in applying established categorical exclusions, particularly where they may implicate extraordinary circumstances. This recent guidance shows an interest in involving the public in the NEPA process for projects where impacts are not anticipated. This guidance signifies the CEQ’s recognition that the public has a right to participate and they also may offer a great deal when it comes to making decisions, even at the CE level.

While the project was voluntary and not formally required, involvement of the public in the process was in keeping with the new guidelines on CEs. This new guidance also states that “an agency can abandon the proposed categorical exclusion or revise it to eliminate the potential for significant impacts”. The public review of a project ensures that the CE level of review is appropriate. The issue of tree preservation that was raised as part of the public involvement process for Folly Camp Road indicated that the potential impacts were greater than anticipated and as such, a CE was not appropriate.

Our options were to abandon the CE and move onto an EA level review or reduce the impacts by redesigning the project and continue as a CE.

Project History

The Folly Road/Camp Road Intersection Improvement Project was proposed as part of the RoadWise Program, funded by the Charleston County One-Half Cent Sales Tax. This program was created to manage and implement transportation improvements in Charleston County, South Carolina. Citizens of Charleston County voted to enact the sales tax in 2004 to fund transportation improvements and approved additional bonds in 2006. The Folly Road (SC-171)/ Camp Road (S-1028) Intersection Improvement was one of the proposed projects funded through this program.

Charleston County, through the RoadWise program, proposed intersection improvements along Folly Road south of its intersection with the James Island Connector (SC 30), which include the Folly Road (SC-171) / Camp Road (S-1028) intersection (see **Figure 1**). The project includes right-of-way widening to allow for the addition of turn lanes, bicycles lanes, and sidewalks. Five (5) potential alternatives were considered (including a no-build alternative) for this proposed project and presented for public review. The project also includes analyzing and developing solutions for drainage issues that have been identified within the project limits.

The agency (SCDOT) determined that a voluntary CE – Level C should be prepared for the proposed project. CEs are typically actions that do not individually or cumulatively have a significant impact on the environment. In the field of transportation, these activities typically include safety improvement projects and modification to traffic operations. Typical projects at the CE level include bridge replacements in the same location, roadway widening less than a single lane width, and intersection improvements that usually include the addition of acceleration/turning lanes.

Existing Facility

State Road SC-171 (Folly Road) is a major north-south arterial connecting Folly Beach and James Island. As a primary hurricane evacuation route, Folly Road is a five-lane urban arterial with a posted speed limit of 45 miles per hour in the study area. The roadway has curb and gutter but no sidewalk facilities. Various retail businesses are located along Folly Road in the study area and the roadway is densely developed with commercial business. The terminus of the James Island Expressway (SC-30), which connects James Island with downtown



View to the north at Folly Road/Camp Road intersection.

Charleston, is located about one (1) mile north of the intersection of Folly Road (SC-171) and Camp Road (S-1028). If this project is constructed, the extension of I-526 would be connected to the James Island Expressway at this location (see **Figure 1** for site location).



Drainage ditch along Camp Road

Camp Road (S-1028) is a two lane east-west local collector winding between Riverland Drive and Fort Johnson Road. Camp Road (S-1028) has a posted speed limit of 35 miles per hour. The roadway is rural in character with drainage ditches on either side and it was not built with curb and gutter. A portion of the roadway has broken segments of a narrow sidewalk and well-worn paths are present. A Walgreens drug store and a shopping center are located at the southwest corner of the intersection of Folly Road (SC-171) and Camp Road (S-1028).

An Amoco Gas station is located at the northwest corner of the intersection, a Kangaroo Gas station at the southeast corner, and a Subway sandwich shop and Papa John's Pizza shop at the northeast corner. The Fort Johnson Middle School is located approximately 1,000 feet west of the intersection and the James Island Middle School is located approximately 2,000 feet east of the intersection. The entrance to James Island Regional Park is on Riverland Drive just north of Camp Road (S-1028). Camp Road (S-1028) provides access to residential communities and commercial development. Most of the developments adjacent to Camp Road (S-1028) are residential subdivisions. At its intersection with Folly Road (SC-171), eastbound Camp Road (S-1028) provides a separate left turn lane and a shared through-right turn lane, while westbound Camp Road (S-1028) provides a shared left turn-through lane and a separate right turn lane. The two-lane roadway has approximately 30 Grand Oak Trees (estimated to range between 60 and 100 years in age) along both sides of the roadway, both east and west of its intersection with Folly Road (SC-171).



Grand Oak trees along Camp Road

Tree Preservation

Trees are an essential natural, economic, and aesthetic resource in every community. Particularly in cities, trees can greatly help to improve urban life by providing a more enjoyable place to live, work and play but they also lessen the impacts of the built environment by reducing storm water runoff, reducing energy consumption, and

improving air quality. In Charleston, South Carolina the moss covered trees are an iconic symbol of the low-county landscape and a priceless aesthetic and historic resource within the community. Live Oak trees are native to the area and Charleston is home to the Angel Oak tree. The Angel Oak is a Live Oak estimated to be more than 1,400 years in age and has survived war and hurricanes. The Angel Oak tree was here almost 1,000 years before Columbus. The Angel Oak has received a great deal of media attention and is a major tourist attraction in Charleston and is located approximately five miles west of the proposed project. The Charleston community is very proactive when it comes to tree preservation.



Angel Oak

A *City of Charleston Forest Resource Analysis* that was conducted in 2006 and documented approximately 3,600 Live Oak trees in Charleston. Approximately 15 percent of those trees were greater than 24 inches in diameter (approximately 130 years in age). On average, the study determined that the average age of Live Oaks in Charleston were approximately 60 years in age. Charleston County has a Tree Protection Ordinance in place to protect the Live Oak species, specifically those that are classified as a Grand Tree (greater than 24 inches in diameter). The Tree Protection Ordinance is part of the *Charleston County Zoning and Land Development Regulations Ordinance* (2001). Article 9.4 of the ordinance requires approval for removal of Grand Trees. Grand Tree Live Oak species located within the right-of-way may be removed for roadway projects, but must receive a variance from the Charleston County Board of Zoning and must be mitigated (replaced with a similar species).

Purpose and Need

Charleston County and has seen rapid growth since 1970. The Charleston County Comprehensive Plan (2008) projects the population within the county to increase 20 percent between 2010 and 2020, adding another 75,000 residents to Charleston County. Improving traffic operations and roadway safety is a major priority to help accommodate existing and future growth in the area. Improvements to traffic operation also tend to improve air quality in some locations. Vehicular emissions are one of the biggest contributors to poor air quality. Improving traffic operation reduces vehicular idling and has a positive effect on air quality. Idling vehicles wastes time, money and natural resources.

Folly Road (SC-171) is the main throughfare on James Island and the only route leading to Folly Beach and carries a heavy amount of traffic during the day (approximately 50,000 vehicles per day). Folly Road (SC-171) is also a heavily used transit routes. The existing road network does not provide for acceptable overall levels of

service at this intersection. As growth occurs in this region, traffic will increase and the overall delay time will increase. According to the *Charleston County Comprehensive Plan* (2008), the Folly Road /Camp Road intersection is the most congested intersection on James Island and creates “negative transportation impacts throughout other roads in James Island”. The Plan also lists this intersection improvement as a “high priority” for local projects.

The Folly Road/Camp Road intersection does not currently provide acceptable overall levels of service and operates near or over capacity at morning, midday and Saturday peak hours. Based on projections in the traffic study conducted for this project, the intersection of Folly Road (SC-171) and Camp Road (S-1028) would operate near or over capacity during all peak hours by the year 2030 if no improvements are made. The improvements proposed would provide acceptable overall levels of service during the afternoon peak hour and reduce the overall delay during morning, midday and Saturday peak hours; however, the overall level of service at this intersection would still operate at LOS F during these times. The intersection at Folly Road (SC-171)/ Eugene Gibbs Street/ Rivers Point Row would also operate at LOS F during Saturday peak hours with this selected alternative.

In addition, flooding problems exist within the project area and a new drainage system is needed. These drainage improvements would be constructed along with the intersection improvements to help mitigate the existing drainage concerns.

The proposed project would also include include sidewalks and bike lanes (depending on the alternative), consistent with plans to provide for multi-modal transportation opportunities and increased safety measures for pedestrians, bicyclists and transit riders. These multi-modal improvements are also recommended on these roadways as part of the *Charleston County Comprehensive Plan* (2008).

Proposed Facility

The original improvements that were proposed as part of this project consisted of intersection improvements along Folly Road (SC-171) south of its intersection with the James Island Connector (SC-30), which include the Folly Road (SC-171)/ Camp Road (S-1028) intersection. The improvements on Folly Road (SC-171) included the addition of dual turn lanes, exclusive right turn lanes and four foot bicycle lanes on both sides of the roadway. The proposed improvements to Camp Road included instillation of dual receiving lanes, the addition of curb and gutter and sidewalks.

Charleston County originally developed three (3) alternatives to alleviate traffic congestion at the Folly Road (SC-171)/ Camp Road (S-1028) intersection. These proposed alternatives were presented at public meetings held on November 13, 2007 and May 14, 2008. Analysis of the proposed project did not find that significant environmental impacts would occur and it was determined that the project would have no effect on endangered or threatened species, wetlands, registered historic or cultural sites, land use or noise levels. However, the public was concerned about the removal of Grand

Oak trees within the project area (estimates between 20 and 40 needing removal). At the May 14, 2008 meeting, 234 members of the public provided comments and 85% of those who commented at this meeting chose the no-build alternative for the project, citing protection of the trees as their primary reason.

Extreme opposition for removal of the Grand Oak trees was evident at the public meetings for the proposed project. While these trees have historically been removed as part of roadway improvement projects and mitigated through replacement trees, it was clear in this case that it was an unacceptable option to the majority of citizens attending these meetings.

The following are samples of comments that were provided at the first two public meetings:

“There is so much damage being done to the environment. We need to save our trees! Why does the city do so much to save trees but for road projects it doesn’t seem to matter? Are there any other alternatives to chopping them down?”

“These trees cannot just be replanted. They are part of our heritage and we should protect as many as possible.”

“The oak trees on Camp Road are outstanding and God put them here a long time before you and I and no one should be thinking about cutting them down.”

“It should be a crime to cut down those live Oaks trees.”

“I am against any changes that cut down so many of those trees.”

Extraordinary or Unusual Circumstances

The FHWA NEPA process allows transportation officials to make project decisions that balance engineering and transportation needs with social, economic, and natural environmental factors. During the process, a wide range of partners including the public, businesses, interest groups, and agencies at all levels of government, provide input into project and environmental decisions. It is through this process that “extraordinary or unusual circumstances” may come to light.

According to 23 CFR 771.117(b), actions that normally could be classified as a CE but that may involve unusual circumstances may not be appropriately processed at the CE level. Such unusual circumstances may include significant environmental impacts, substantial environmental controversy, impacts on historic properties protected under 4(f) or Section 106, or any inconsistencies with federal, state or local laws relating to the action.

“Extraordinary or unusual circumstances” typically involve unique characteristics of a geographic area. They may result in inducing growth to an area, disrupting travel

patterns within a neighborhood or removal of something that, while not legally protected, has great value to the area.

The removal of Grand Oak trees in a community that regulates their protection is exactly the type of “extraordinary or unusual circumstance” that should be examined as part of the NEPA process. Citizens have valuable information about the resources in their community and we need them to tell us what is important. While these trees were not designated historic elements of the community, they were obviously an important feature to residents. For this reason, public input is vital to the NEPA process, and the public’s input was vital to the decisions that needed to be made for this project.

Public Input and Additional Alternatives

Increased public interest in the project and concern for preservation of the Grand Oak trees necessitated the development of additional alternatives and a third public meeting was held on August 27, 2008 to present two additional alternatives. Alternative 4 and Alternative 5 were more “context sensitive” designs that required reduced the lane widths to 11 feet, removed bike lanes from Camp Road, created shorter turn lanes, removed two turn lanes, meandered the sidewalk around trees and placed the drainage underground. The new design required less paving and a lesser impact on the trees.

A traffic analysis was performed on the proposed project with the new proposed design. The only aspect to effect the functioning of traffic from a level of service standpoint was the shortening of some turn lanes and the removal of two turn lanes (the exclusive right turn lane on southbound Folly and the exclusive right turn lane on eastbound Camp). Analysis of the traffic for the proposed improvements for the intersection of Folly Road and Camp Road, with and without these two lanes, is detailed in **Table 1**.

**Table 1
Traffic Analysis of Alternative 5**

Folly/Camp Design	Morning (LOS/Delay in Seconds)	Midday (LOS/Delay in Seconds)	Afternoon (LOS/Delay In Seconds)	Saturday (LOS/Delay In Seconds)
With Both Rights	D/52.8	F/102.2	C/26.0	F/329.3
W/O SB Right	D/52.9	F/102.5	C/26.8	F/332.1
W/O EB Right	D/53.3	F/104.9	C/27.8	F/332.0
W/O Both Rights	D/53.4	F/105.2	C/28.7	F/338.4

During the morning peak hour, the average delay changes 0.6 seconds with both existing and 2030 traffic with both turn lanes eliminated. During the afternoon peak hour, the average delay changes 2.7 seconds with existing traffic. With 2030 traffic in the afternoon, the LOS changes from LOS C to LOS D with an increase in average delay of 10.1 seconds.

The presentation of the traffic information to the public detailed the traffic improvements that would result from the proposed project. Traffic engineers and environmental planners understand that seconds do count and that increased idling and congestion can also have consequences for the environment. However, the public in general felt that the loss of trees was too great a sacrifice to move through a light a few seconds quicker. In addition, SCDOT was willing to concede that the new design would improve traffic slightly. As a result, SCDOT was willing to accept a design that provided a level of service that was not acceptable in current or future projections. However, the new design would result in slight reduction in delay time over existing conditions and met that purpose and need of the project by improving traffic at the intersection and having the least impact on the environment.

The following (**Table 2**) is a summary of impacts for the five alternatives proposed.

Table 2
Summary of Alternatives

Alternative	Cost Estimate	ROW Needed	Grand Tree Impacts	Bike/Ped Improvements	Traffic Improvements
Alternative 1	\$3,100,000	2.03 Acres	39	Sidewalks and bike lanes on both Folly Road and Camp Road	Level of service would remain the same with a slight reduction in delay time.
Alternative 2	\$2,500,000	1.88 Acres	21	Sidewalks and bike lanes on both Folly Road and Camp Road	Level of service would be acceptable level for current and future projections.
Alternative 3 No-Build	0	0	0	No bike/ped improvements	Level of service not acceptable in current or future projections.
Alternative 4	\$2,800,000	1.80 Acres	30	Sidewalks on both Folly Road and Camp Road, bike lanes on Folly Road only	Level of service would be acceptable for current and future projections.
Alternative 5	\$2,700,000	1.87 Acres	3-5	Sidewalks on both Folly Road and Camp Road, bike lanes on Folly Road only	Level of service not acceptable in current or future projections. However, slight reduction in delay time over existing conditions.

At the final public meeting, a total 156 residents voted and 87% were in favor of Alternative 5. In addition, the design team also recommended Alternative 5 as the preferred alternative as it would meet the project budget, provide for some traffic improvements and create the least impact to the Grand Oak trees in the project area (removal of 3-5 trees).

All five (5) alternatives that were developed for this project can be found in **Appendix A**. Based on project evaluation and input from the community, Alternative 5 has been recommended as the preferred alternative for the Folly Road (SC-171)/Camp Road (S-1028) intersection improvements. Alternative 5 appears to meet the project budget and also adheres to the *Charleston County Comprehensive Plan* (2008), by providing a safe facility for vehicles, pedestrians, and bicyclists. This alternative provides the least impacts (with the exception of the no-build alternative) to the Grand Oak Trees within the project area while still providing some reduction in delay time and slight traffic improvements over existing conditions. In addition, the proposed project is consistent with the *Charleston County Comprehensive Plan* (2008) which states that the purpose of the Plan is to “present information and strategies that respect the scenic beauty, community character, natural resources, and cultural heritage of Charleston County in the provision and use of any transportation system” and “improve efficiency of the existing and planned transportation system by managing its supply and demand and encourage the provision of safe, convenient, pedestrian and bicycle systems”.

Conclusion

The Folly Road/Camp Road intersection project was a lesson on how the NEPA process can work as a decision-making tool. This project shows that NEPA is not a “thing” or a “document”, it is a useful process. A formal NEPA document was not required for the project, but the process was followed and public input was sought. The “document” itself was not the focus of the work; the “process” was the focus. Most involved were actually unaware that we were doing a voluntary NEPA document and following their standard process. As a result, there seemed to be less pressure to “get the NEPA approval” and staff and citizens were able to focus on the project and truly evaluating all of the alternatives. The voluntary “process” forced the agency and the public to examine all reasonable alternatives and balance the needs of an urban, progressive community with environmental protection. Trade-offs are often required in these situations and the NEPA process. The analysis of alternatives and development of an impacts matrix forced all parties involved to evaluate what was important and what could be sacrificed. Residents were generally in support of making slight traffic improvements rather than significant traffic improvements in an effort to save the trees. They basically decided that they would rather sit in traffic a little longer at that intersection in exchange for saving the Grand Oak Trees. SCDOT and Charleston County listened to what the community had to say on this issue and used that information to design a project that balanced the needs of transportation and environmental protection.

The community sentiment after development of Alternative 5 was one of general satisfaction and support of the project. There were still a few citizens that were opposed

to cutting down even one tree. However, the majority (87%) were in favor of making the improvements and sacrificing a total of three to five trees that would be replaced as part of the project. The following are samples of comments that were submitted at the last public meeting:

"The new alternative is a big improvement over the others! Thank you!"

"I am surprised that the committee listened to the citizens. Thank you!"

"Thank you so much for saving the trees and giving us a workable intersection."

"This is a massive and very creative solution. Thank you!"

"Alternative 5 is proof that solutions can be found in responsible ways that respect the community's wishes!"

"Thank you for listening and going 'outside' the box!"

"I think I am still in shock. I could not believe it when I saw Alternative five. I commend you all. It was very well done".

Current Status

The proposed project received the needed zoning variance for the removal of three (3) to five (5) trees on October 7, 2008 from the Charleston County Council. The Council encouraged engineers to focus on removal of just three (3) trees, if possible. The project is currently in the final stage of design and ready to begin right-of-way acquisition. Construction is planned to begin in May of 2011 and be completed by September of 2011.

As a NEPA practitioner it would have been my professional recommendation to proceed to an Environmental Assessment (EA) if the Charleston County Council had denied the zoning request and more than five (5) trees needed removal. I would have suggested that a more detailed analysis, specifically air quality analysis, should be performed to weigh the true environmental consequences of the alternatives. Attempting to move forward with the original 3 alternatives proposed would have been a mistake and misuse of the CE process as it would have failed to recognize "extraordinary circumstances" and would have attempted to simply mitigate the impacts at the CE level. However, a compromise alternative that the majority of the public could support avoided the need for an EA.

The voluntary CE for the Folly/Camp Intersection Improvement sits in a large binder in my office. It is not signed by the Federal Highway Administration like the other formal EA's in our offices. But of all the projects I have worked on, it is my favorite example to point to when people ask me why we have to do NEPA. It is not about the

signed document on my shelf, it is about the process and how that process resulted in a better project.

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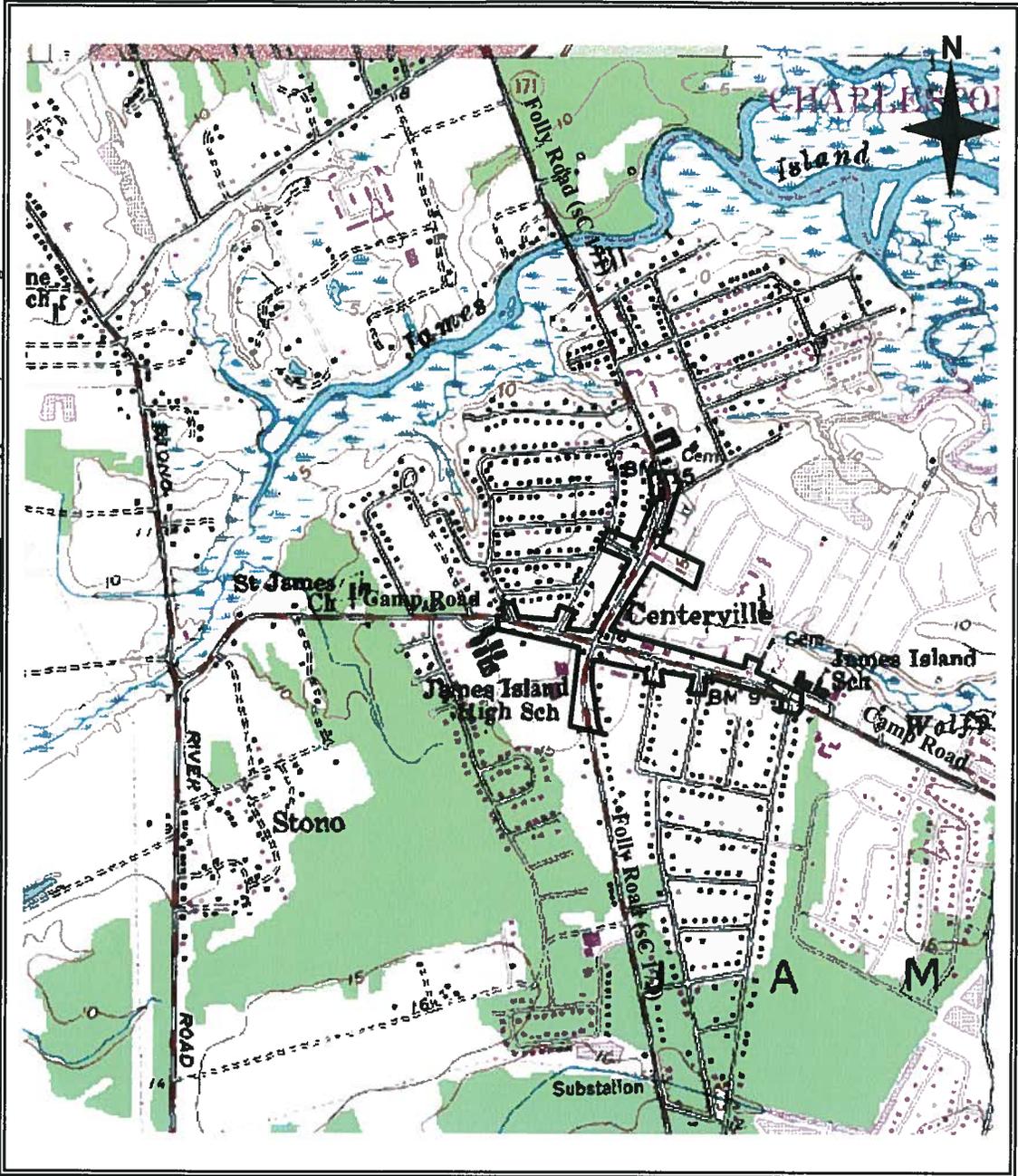
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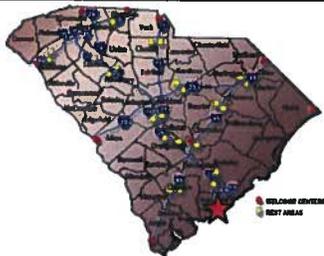
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Not to scale



South Carolina Vicinity Map



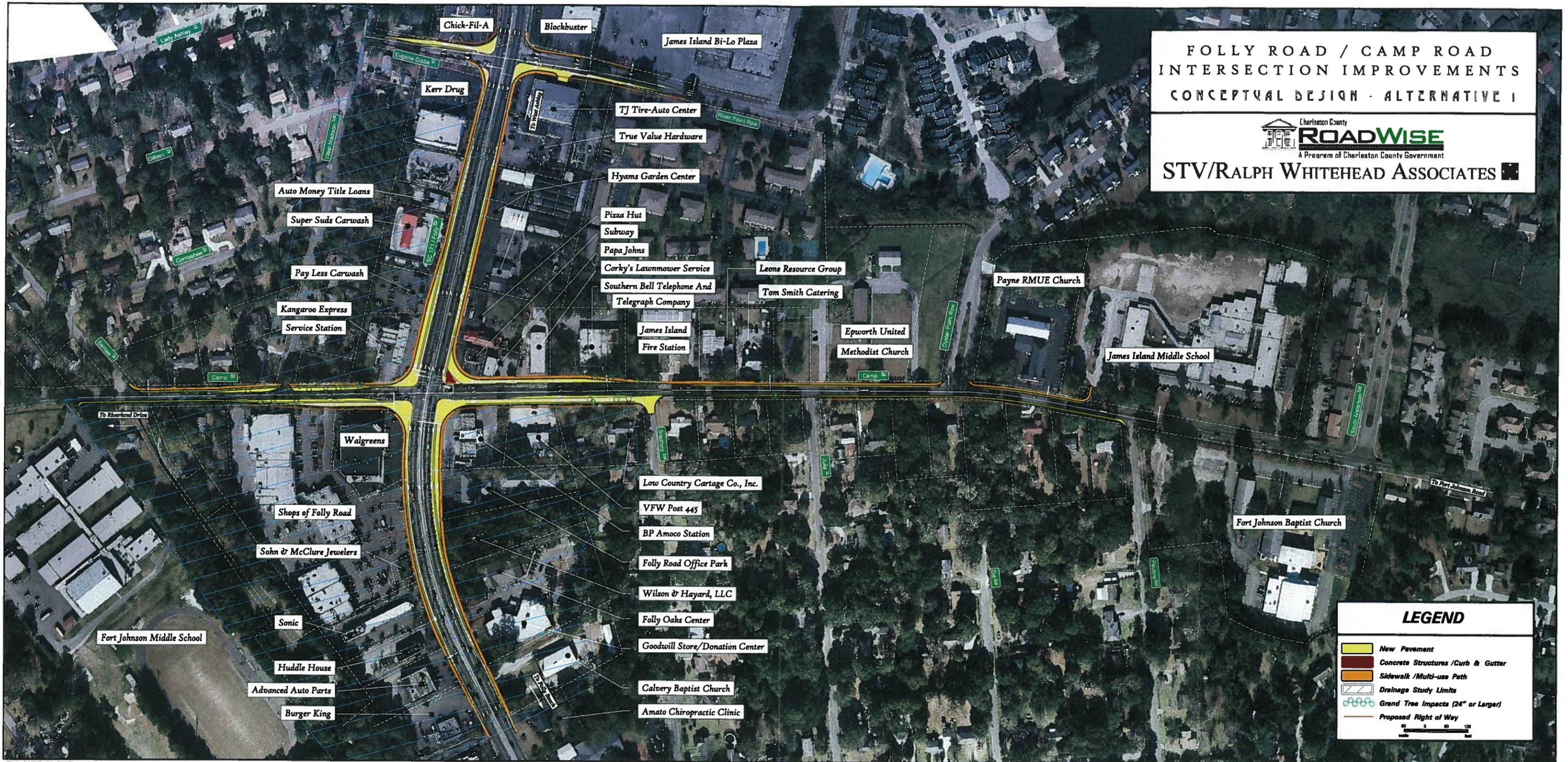
STV/Ralph Whitehead Associates

<p align="center">Folly Road / Camp Road Intersection Improvements Charleston County, SC</p>	<p align="center">Site Location FIGURE 1</p>
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FOLLY ROAD / CAMP ROAD
 INTERSECTION IMPROVEMENTS
 CONCEPTUAL DESIGN - ALTERNATIVE 1



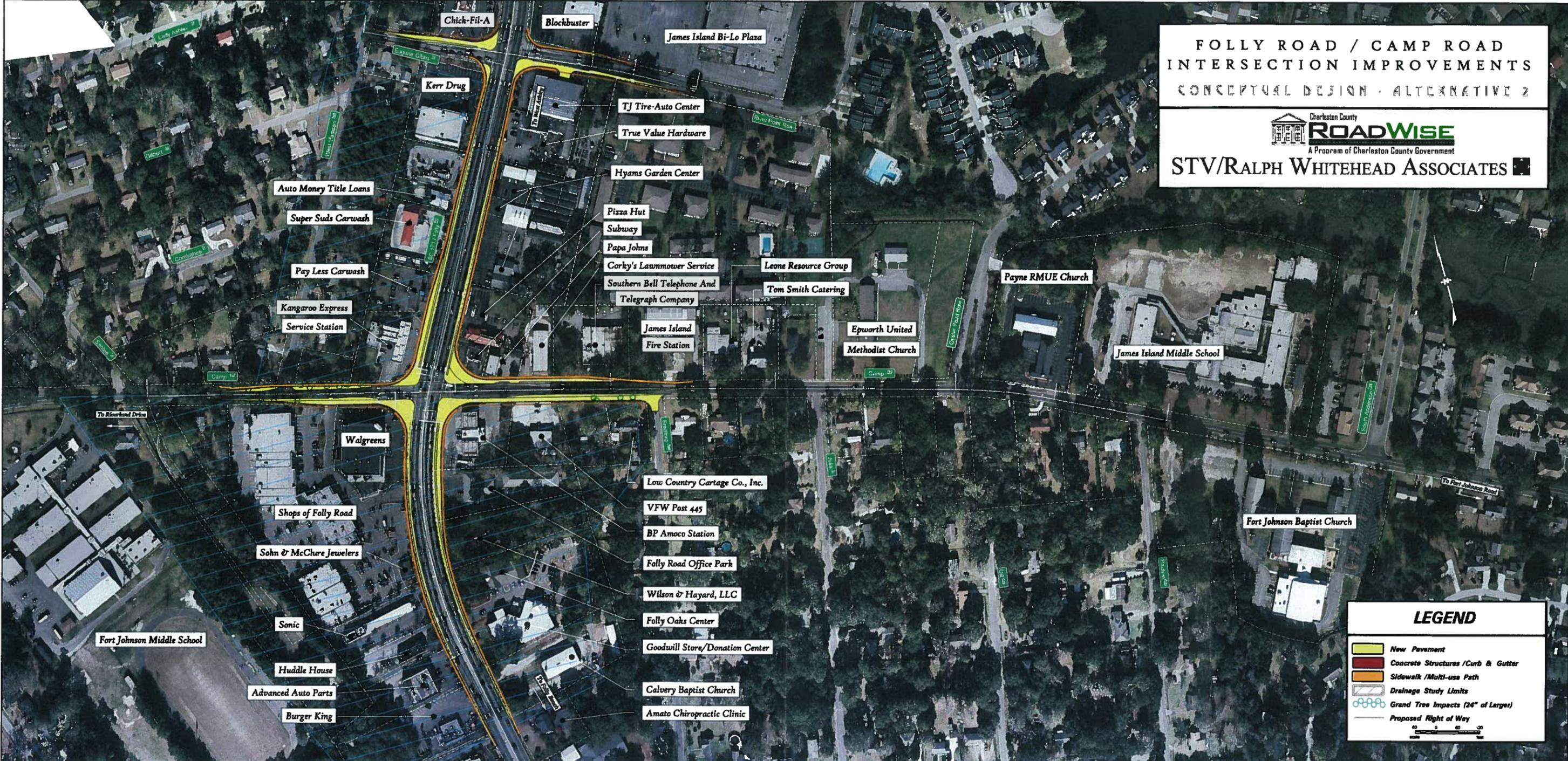
STV/RALPH WHITEHEAD ASSOCIATES



FOLLY ROAD / CAMP ROAD
 INTERSECTION IMPROVEMENTS
 CONCEPTUAL DESIGN - ALTERNATIVE 2



STV/RALPH WHITEHEAD ASSOCIATES

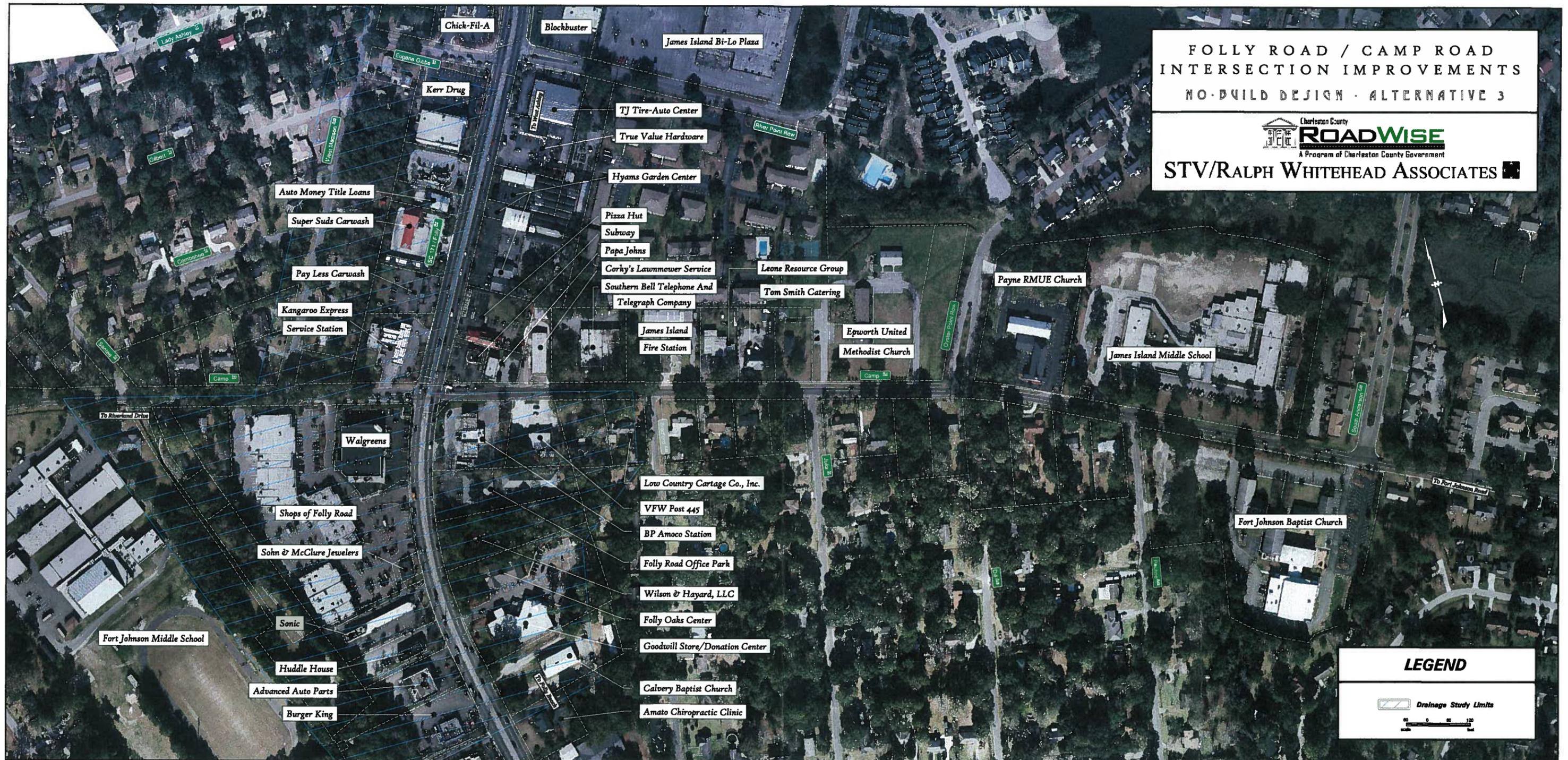


- Chick-Fil-A
- Blockbuster
- James Island Bi-Lo Plaza
- Kerr Drug
- TJ Tire-Auto Center
- True Value Hardware
- Hyams Garden Center
- Pizza Hut
- Subway
- Papa John's
- Corky's Lawnmower Service
- Southern Bell Telephone And Telegraph Company
- James Island Fire Station
- Leone Resource Group
- Tom Smith Catering
- Epworth United Methodist Church
- Payne RMUE Church
- James Island Middle School
- Walgreens
- Shops of Folly Road
- Sohn & McClure Jewelers
- Sonic
- Huddle House
- Advanced Auto Parts
- Burger King
- Low Country Cartage Co., Inc.
- VFW Post 445
- BP Amoco Station
- Folly Road Office Park
- Wilson & Hayard, LLC
- Folly Oaks Center
- Goodwill Store/Donation Center
- Calvary Baptist Church
- Amato Chiropractic Clinic

FOLLY ROAD / CAMP ROAD
 INTERSECTION IMPROVEMENTS
 NO-BUILD DESIGN - ALTERNATIVE 3



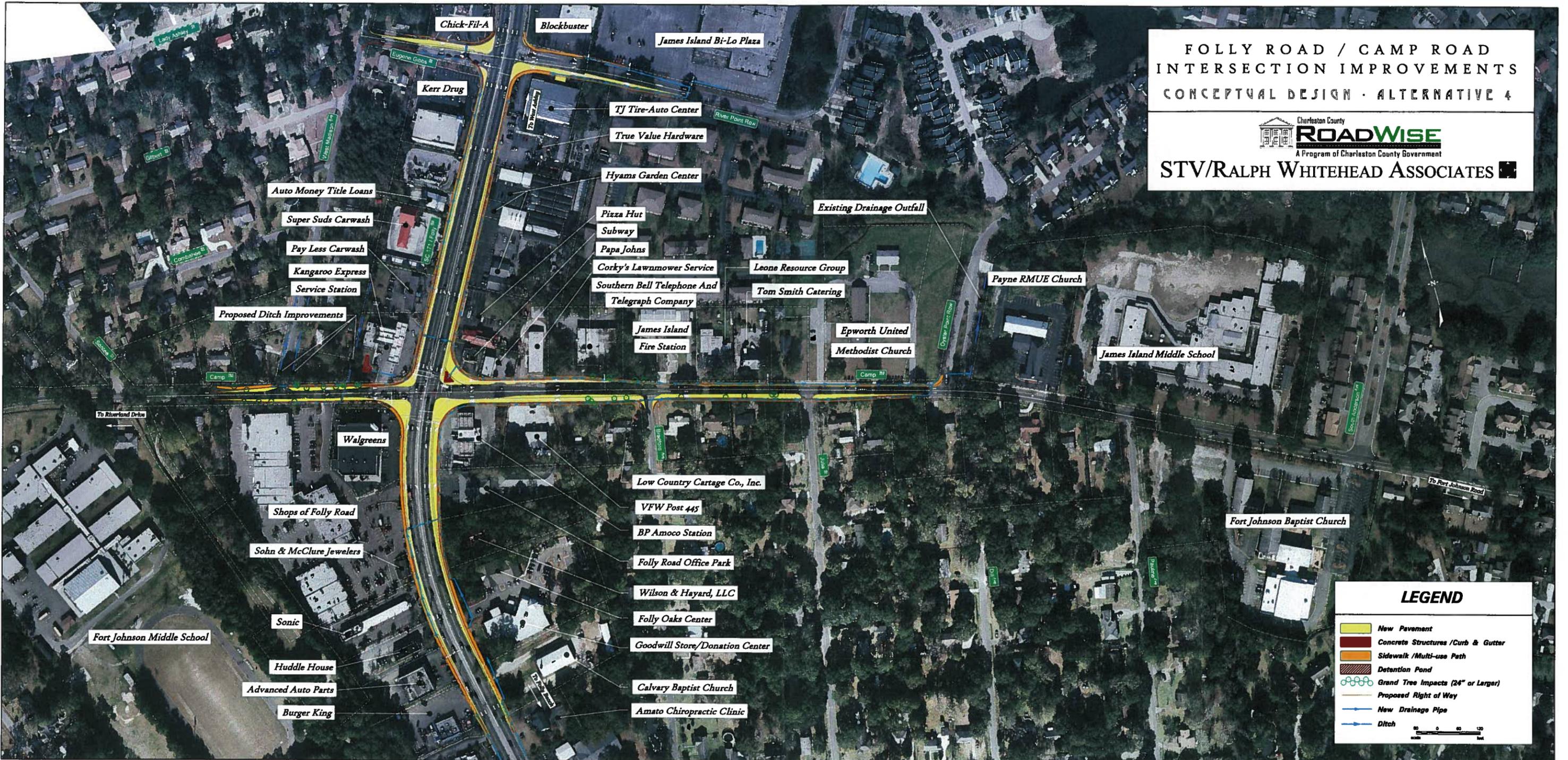
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FOLLY ROAD / CAMP ROAD
 INTERSECTION IMPROVEMENTS
 CONCEPTUAL DESIGN · ALTERNATIVE 4



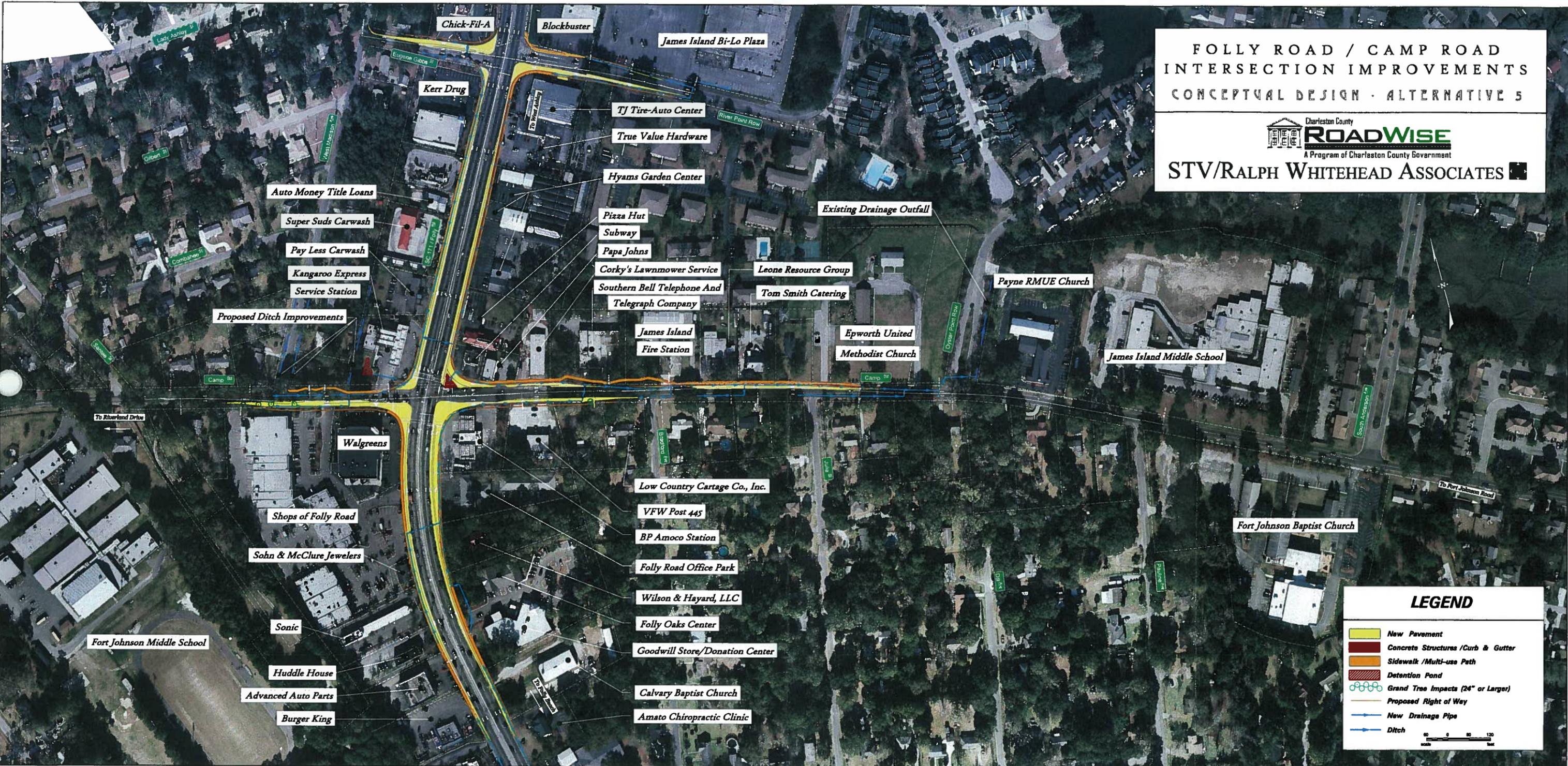
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FOLLY ROAD / CAMP ROAD
 INTERSECTION IMPROVEMENTS
 CONCEPTUAL DESIGN - ALTERNATIVE 5



STV/RALPH WHITEHEAD ASSOCIATES



LEGEND

- New Pavement
- Concrete Structures /Curb & Gutter
- Sidewalk /Multi-use Path
- Detention Pond
- Grand Tree Impacts (24" or Larger)
- Proposed Right of Way
- New Drainage Pipe
- Ditch

0 60 120
feet