

ENVIRONMENTAL ASSESSMENT

AHTD JOB NUMBER 100412

FAP Number STP-0016(54)

Hwy. 67- Hwy. 49 P. E. (Hwy. 226)

Craighead County

Submitted Pursuant to 42 U.S.C. 4332(2)

by the

U.S. Department of Transportation

Federal Highway Administration

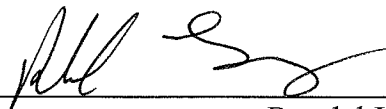
and the

Arkansas State Highway and Transportation Department

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Date of Approval



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TABLE OF CONTENTS

PROJECT DESCRIPTION 1

PURPOSE AND NEED 4

 PURPOSE OF PROPOSED PROJECT 4

 NEEDS ANALYSIS 4

 EXISTING CONDITIONS 4

 AVERAGE DAILY TRAFFIC 5

 LEVEL OF SERVICE 9

 SAFETY ANALYSIS 9

ALTERNATIVES 11

 NO-ACTION ALTERNATIVE 11

 IMPROVEMENT ON EXISTING ALTERNATIVE 13

 ALTERNATIVE 1 13

 ALTERNATIVE 2 13

 ALTERNATIVE 3 13

 ALTERNATIVE 4 14

IMPACTS 15

 LAND USE 15

 SOCIAL AND COMMUNITY IMPACTS 15

 RELOCATIONS 15

 ENVIRONMENTAL JUSTICE AND TITLE VI 15

 PUBLIC LAND/SECTION 4(F) 16

 PRIME FARMLAND 16

 HAZARDOUS WASTE 17

 ARCHEOLOGICAL /HISTORICAL 18

 WETLANDS AND WATERS OF THE US 20

 Wetland Findings 28

Wetlands Conclusion.....	28
WILD AND SCENIC RIVERS.....	28
FLOODPLAINS.....	28
ENDANGERED AND THREATENED SPECIES	29
WATER QUALITY	30
PUBLIC/PRIVATE WATER SUPPLIES	30
NOISE ASSESSMENT	30
AIR QUALITY	32
NATURAL AND VISUAL	32
COMMENTS AND COORDINATION	35
COMMITMENTS	35
RECOMMENDED PREFERRED ALTERNATIVE	37
REFERENCES CITED	40

LIST OF FIGURES

<u>Figure</u>	<u>Description</u>	<u>Page</u>
1	Project Location Map	2
2	Typical Cross-Section	3
3	Location of Bridges	7
4	Average Daily Traffic	8
5	Alternatives	12
6	Typical View of Cache River in Craighead County	20
7	Typical View of Agricultural Ditch in the Project Area	21
8	Typical View of Channelized Ditch in the Project Area	21
9	Waters of the U.S. Crossings	22
10	Forested Wetland One Adjacent To the Cache River	23
11	Forested Wetland Two Adjacent To Steep Cut Creek	24
12	Herbaceous Wetland Adjacent to the Cache River	24
13	Wetland Number One	26
14	Wetland Number Two	27

LIST OF TABLES

<u>Table</u>	<u>Description</u>	<u>Page</u>
1	Bridge Inventory List	6
2	Crash Analysis Summary	10
3	Railroad Crossing Safety Data	10
4	Estimated Relocations	16
5	Estimated Prime Farmland Impacts	17
6	Cultural Resources Summary	19
7	Wetland Impacts/Water of the U.S. Crossings	25
8	Number of Sensitive Receptors Impacted	31
9	Alternatives Comparison	38
10	Alternatives Cost Comparison	39

APPENDICES

Appendix A	Level of Service
Appendix B	Conceptual Stage Relocation Statement
Appendix C	Agency Coordination
Appendix D	Public Involvement Session Synopsis
Appendix E	Memorandum of Agreement for Historic Bridge Transfer

PROJECT DESCRIPTION

The proposed project is located in Craighead County and consists of widening Highway 226 and 226 Spur from future Highway 67 (under construction) to Highway 49 at Gibson (Figure 1). The total length of the project is 14.3 miles (23.0 kilometers). Existing Highway 226 consists of two ten-foot (3.0 meter) wide travel lanes with gravel shoulders. The existing right-of-way width along the route averages 80 feet (24 meters).

Proposed improvements to Highway 226 consist of providing four 12-foot (3.6 meter) wide travel lanes, two in each direction, with eight-foot (2.4 meter) wide outside shoulders and six-foot (1.8 meter) wide inside shoulders (Figure 2). A 60-foot (18-meter) depressed median is proposed, with crossings provided at selected roads and a turnaround provided at approximately one-half mile (0.8 kilometer) intervals. Approximately 250 feet (76 meters) of right of way will be required to construct the project.

Access control along the existing highway will be low-type partial control, with at least one access permitted for each landowner, but multiple access points only allowed 600 feet (183 meters) or more apart. High-type partial access control would be utilized on all new location sections, with access permitted only at county roads and state highways.

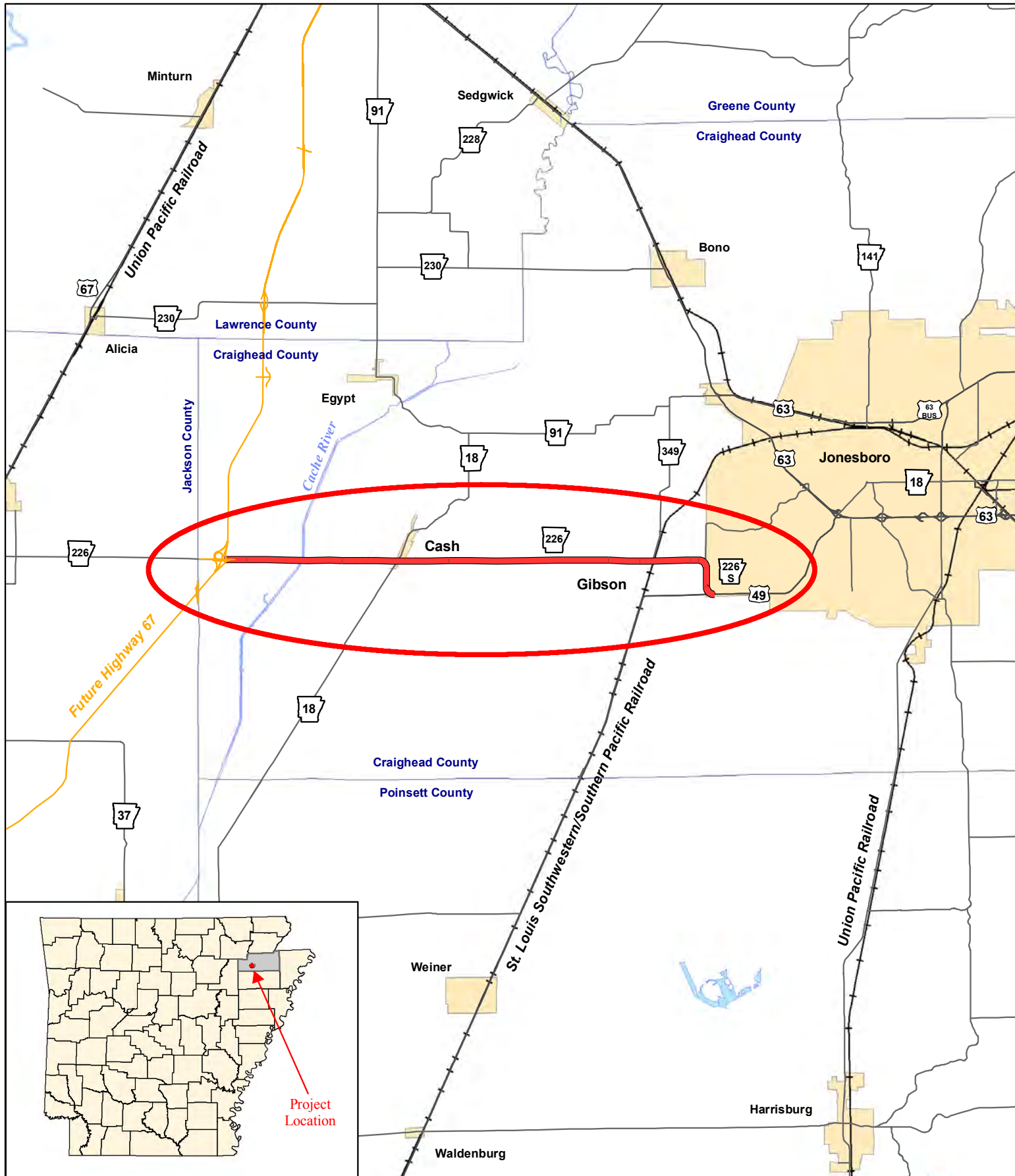
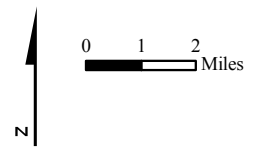


Figure 1
 Project Location Map
 Job 100412
 Highway 67 - Highway 49
 (Highway 226)
 Craighead County

 Project Area



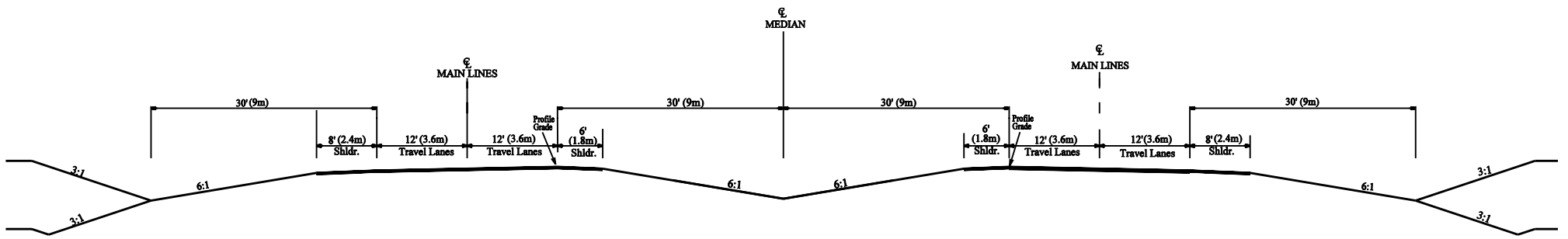


Figure 2
 Typical Section
 Job 100412

PURPOSE AND NEED

Purpose of Proposed Project

The purpose of the proposed project is to provide better regional transportation connectivity between the City of Jonesboro and the central part of the state to improve the movement of people and goods. Improvements to Highway 226 and Highway 67 are part of an overall plan to provide four-lane access to the growing Jonesboro urbanized area.

Needs Analysis

Located in northeast Arkansas, Jonesboro is the county seat of Craighead County and is about 130 miles (209 kilometers [km]) northeast of Little Rock and 70 miles (113 km) northwest of Memphis, Tennessee. Jonesboro serves nearly 500,000 people in northeast Arkansas and southeast Missouri and is an important part of northeast Arkansas' agricultural production. One of the world's largest rice mills is located there. It is also the employment, trade, cultural, and medical center for the region. In addition, Jonesboro is the home of Arkansas State University, the third largest institution for higher learning in Arkansas.

Based on the 1990 and 2000 Census results, Jonesboro grew by 19.3 percent, from a population of 46,535 in 1990 to a population of 55,515 in 2000; the population of Craighead County increased by 19.1 percent. The statewide population growth for the same ten-year period was 13.7 percent. Population growth and industrial, commercial and residential developments have heightened the need for a regional connector to link Jonesboro to the rest of the state.

Existing Conditions

Highway 226 is a two-lane highway that connects existing Highway 67 in northern Jackson County with Jonesboro in Craighead County. This route is functionally classified as a minor arterial and carries mostly local traffic with posted speed limits of

45 miles per hour (mph) [70 kmh] to 55 mph (90 kmh). The study segment of Highway 226 passes primarily through farmland and flat floodplains with a typical cross-section of two 10-foot (3.0 meter) wide travel lanes and gravel shoulders. Cash, a town with 294 people, is located on Highway 226 at the intersection of Highways 226 and 18.

The Union Pacific Railroad (UPRR) has a north-south main line track crossing Highway 226 near Highways 349 and 49. One at-grade railroad crossing equipped with flashing lights is located on Highway 226. About 30 trains per day travel on the main line through this area with speeds ranging from 50 to 60 mph.

Inventory data for the nine bridges within the 14.3 miles (23.0 kilometers) study segment is found in Table 1. Figure 3 shows the location of these bridges across the Cache River and various ditches. Based on the National Bridge Inspection System (NBIS) criteria, six bridges are rated structurally deficient (SD) and one is functionally obsolete (FO). The existing bridges over the Cache River (M2403) and Big Creek Ditch (M2407) have been determined eligible for the National Register of Historic Places (NRHP).

Currently, motorists traveling from central Arkansas to Jonesboro are directed to exit Highway 67 at Highway 14 south of Newport, follow Highway 14 east to Waldenburg, then use Highway 49 north to Jonesboro. Several highway improvement projects are currently under construction to extend Highway 67 as a four-lane freeway type facility from its current terminus at Highway 18 (near Newport), northward to Highway 226. Upon the completion of this portion of Highway 67, Highway 226 will be used extensively by motorists traveling between central Arkansas and Jonesboro. In addition, multiple transportation projects have been programmed to upgrade Highway 67 to an Interstate-quality route from Highway 226 to Highway 63 at Hoxie.

Average Daily Traffic

The current (2008) average daily traffic (ADT) and 20-year traffic forecasts (2028) along selected segments of the existing roadway system within the study area are shown in Figure 4. Currently, traffic volumes range from 1,500 to 2,600 vehicles per day (vpd) on the portions of Highways 226 and 226 Spur that are under study. Traffic projections for

Table 1
Bridge Inventory List

Bridge No.	Feature	Bridge Type	Year Built	Sufficiency Rating	NBIS* Rating	Load Posted	Length Ft. (M)	Width Ft. (M)
M3183	Ditch	Concrete Channel Beam	1967	33.7	SD	No	68.98 (21.0)	24.29 (7.40)
M2402	Cache River	Multi Steel Beam	1963	7.0	SD	Yes	162.96 (49.6)	22.99 (7.0)
M2403	Cache River	Steel Truss	1963	29.5	SD	Yes	179.95 (54.8)	23.39 (7.12)
M3184	Ditch	Concrete Channel Beam	1967	49.9	NQ	No	56.99 (17.3)	24.19 (7.37)
M3185	Johnson Ditch	Continuous Steel Beam	1967	23.4	SD	Yes	60.98 (18.58)	24.39 (7.43)
M3186	Emerson Ditch	Concrete Channel Beam	1967	45.7	FO	No	68.98 (21.02)	24.29 (7.40)
M2407	Big Creek Ditch	Steel Truss	1964	7.3	SD	Yes	191.95 (58.5)	24.49 (7.46)
M2408	Big Creek Ditch	Multi Steel Beam	1964	6.0	SD	Yes	131.97 (40.22)	23.99 (7.31)
M2409	Steep Cut Creek	Concrete T Beam	1952	58.4	NQ	No	43.99 (13.40)	24.19 (7.37)



*SD – Structurally Deficient

NQ – Not Qualified for Bridge Replacement or Rehabilitation Funds



FO – Functionally Obsolete

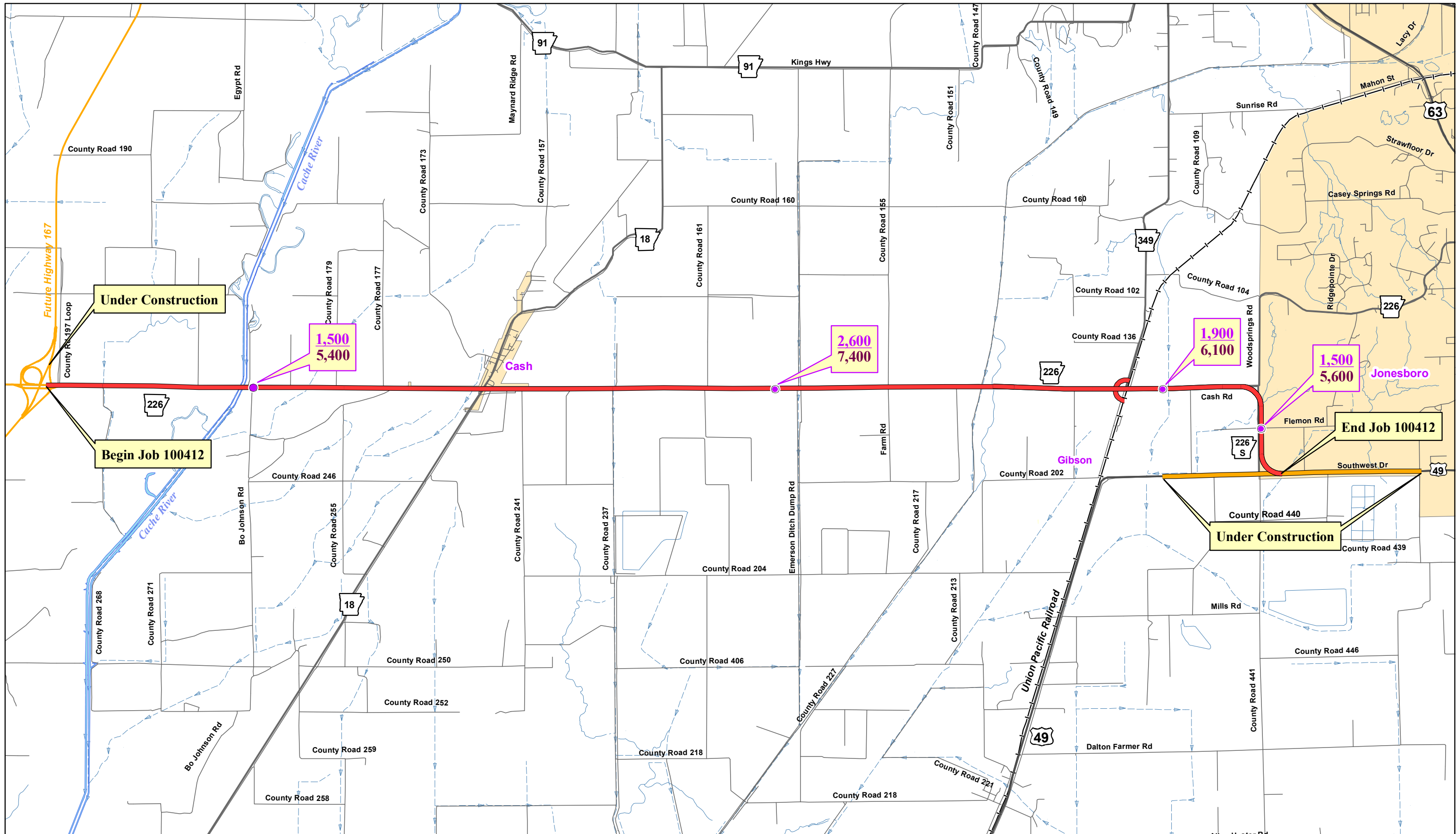


Figure 3
Location of Bridges

 0 0.5 1 2 Miles
 Approximate Scale
 Job 100412
 AHTD - Environmental GIS - Reed
 December 11, 2008


Legend
 Improvement on Existing
 Bridge Location



Legend

- Improvement on Existing
- 1,500 2008 ADT
- 5,600 2028 ADT

Figure 4
Average Daily Traffic



 0 0.5 1 2 Miles

 Approximate Scale

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 December 11, 2008

2028 include both local growth and increased traffic resulting from motorists choosing to use this highway after the completion of improvements to it and Highway 67. The traffic on Highway 226 is projected to range between 5,400 and 7,400 vpd in 2028.

Level of Service

Level of service (LOS) is a qualitative measure describing conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience. Six levels of service, A through F, are defined and described in Appendix A. For a rural highway such as Highway 226 through the study area, LOS C is considered to be acceptable. A traffic analysis conducted using the 2000 Highway Capacity Manual Software determined that traffic is currently operating at LOS A and will decline to LOS B by 2028.

Safety Analysis

The relative safety of a route can be determined by comparing the crash rate of the route to the statewide crash rates for similar routes. Crash rates are based on the number of crashes per million vehicle miles traveled. Crash data for the study segments on Highway 226 were analyzed for 2004, 2005, 2006, and 2007, the most recent years for which data is available. As shown in Table 2, one crash rate was found to be higher than the statewide average in the year 2004.

Based on the crash rates, this highway is not more dangerous than similar facilities in the state. However, the American Association of State Highway Officials guidelines recommend a 24-foot wide minimum travel lane with 8-foot shoulders on each side for a two-lane rural arterial with an ADT greater than 2,000. With the completion of the project to relocate Highway 67 from Highway 18 to Highway 226, the diversion of traffic to Highway 226 will increase the ADT well above this threshold.

Under Federal Highway Administration (FHWA) guidelines, each state maintains hazard ratings for railroad at-grade crossings. The hazard ratings for Arkansas crossings are developed according to a formula that includes the train volume, traffic volume, the

number of tracks, and the number of crashes for each crossing. The number of crashes is for the most recent 15-year period. The resulting hazard ratings are based on a scale of 0 to 100. The safety data related to the crossing on the study segment of Highway 226 is shown in Table 3.

Table 2			
Crash Analysis Summary			
Highway 226 (From Highway 67 Relocation to Highway 349)			
Year	Number of Crashes	Crash Rate	Statewide Average Crash Rate*
2005	6	0.76	1.24
2006	1	0.12	1.18
2007	4	0.46	1.15
Highway 226 (From Highway 349 to Highway 226 Spur)			
Year	Number of Crashes	Crash Rate	Statewide Average Crash Rate*
2005	0	0.00	1.24
2006	1	0.55	1.18
2007	2	1.11	1.15
Highway 226 Spur (From Highway 26 to Highway 49)			
2005	0	0	1.24
2006	0	0	1.18
2007	1	1.77	1.15

* Two-lane, two-way, rural highway with no control of access

Table 3						
Railroad Crossing Safety Data						
RR	Street Name	Trains per Day	ADT (2007)	Crashes	Hazard Rating	Warning Device
UP	Highway 226	30	2,100	1	9.40	Flashing Lights

ALTERNATIVES

Seven alternatives, including the No-Action Alternative and various combinations of four improvement options, were considered for this project. The construction alternatives that were studied include combinations of improving existing Highway 226, two bypass alignments south of Cash, and straightening the alignment of Highway 226 east of the Union Pacific railroad. All construction alternatives would include the construction of a railroad overpass at the Union Pacific Railroad crossing. Figure 5 shows the various construction alternatives.

All of the construction alternatives would provide a highway with an adequate cross-section and bridges with sufficient load capacities, include a railroad overpass, and improve the level of service. These improvements would make Jonesboro and Craighead County much more accessible to the rest of the state.

Since each of the construction alternatives generally follows the same corridor as the existing route, all of the proposed alternatives would have similar traffic volumes. The LOS was then calculated for the proposed four-lane divided highway. This highway would operate at LOS A if it was in place now and would continue to operate at LOS A through 2028.

No-Action Alternative

The No-Action Alternative would provide no improvements to Highway 226. Without improvements, only routine maintenance would be provided. No overpass would be built at the Union Pacific Railroad. Existing Highway 226 does not meet the AASHTO's arterial standards and the structurally deficient bridges and a busy at-grade railroad crossing would continue to impede the movement of people and goods. Lastly, the goal of upgrading Highway 226 to provide four-lane access from Highway 67 to the growing Jonesboro urbanized area would not be realized.

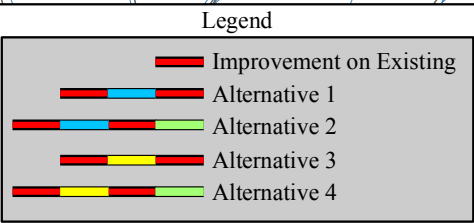
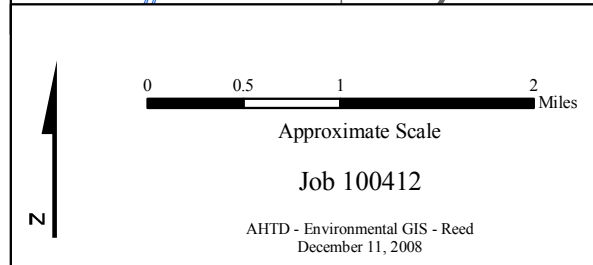
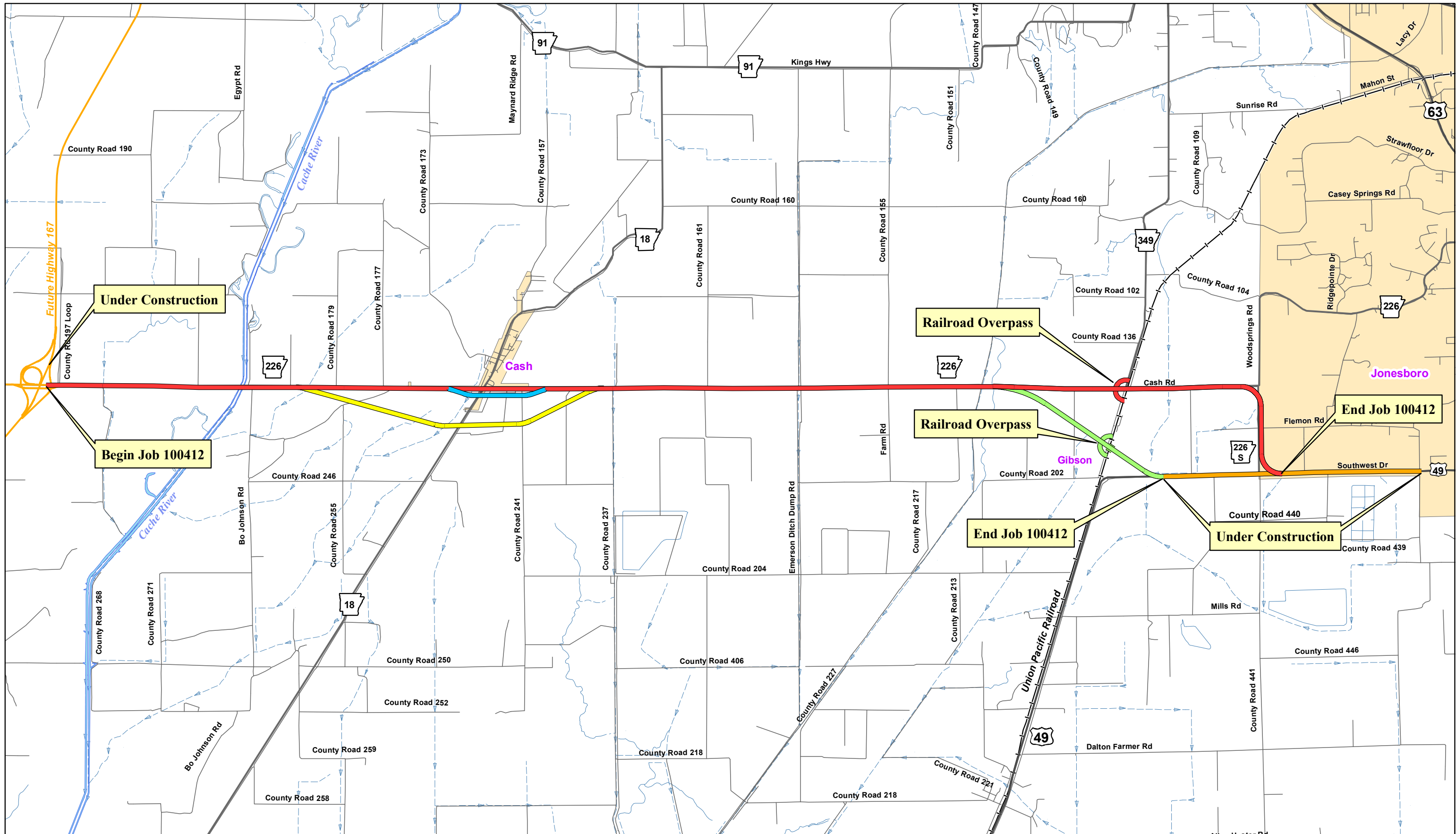


Figure 5
Alternatives

Improvement on Existing Alternative

The Improvement on Existing Alternative shown in Figure 5 would widen the existing two-lane highway to a four-lane divided facility with low-type partial access control from the new Highway 67 relocation through Cash to Highway 49, east of Gibson and construct a new railroad overpass at the existing crossing.

Alternative 1

This alternative would widen Highway 226 along the existing alignment by adding two travel lanes on the south side of the existing highway between Highway 67 and Cash. The proposed alternative then would turn southeast on new location before it reaches Cash and Highway 18, providing a 1.25 mile (2.01 km) southern bypass around Cash. It then rejoins the existing highway from just east of Cash and follows Highway 226 and 226 Spur to its intersection with Highway 49 east of Gibson.

Alternative 2

Alternative 2 shares a common alignment with Alternative 1, with a 1.25-mile (2.01 km) bypass around Cash, but diverges from the existing highway to the southeast on new location after crossing Big Creek Ditch. From this point the alternative crosses the Union Pacific Railroad before joining Highway 49 east of Gibson.

Alternative 3

Alternative 3 begins at Highway 67 and widens Highway 226 by adding two travel lanes on the south side of the existing highway. The alternative crosses the Cache River, turning southeast on new location just west of County Road 179. This new alignment would provide a 3.5-mile (5.6 km) bypass around Cash, then rejoins the existing highway from just east of Cash and follows Highway 226 and 226 Spur to its intersection with Highway 49 east of Gibson.

Alternative 4

Alternative 4 shares a common western terminus and alignment with Alternative 3 but diverges from Alignment 3 after crossing Big Creek Ditch, turning southeast on new location. From this point the alignment crosses the Union Pacific Railroad before joining Highway 49 east of Gibson.

IMPACTS

Land Use

Land use along the route is mostly agricultural with a sparse concentration of residences. The agriculture in the area mostly consists of row crops such as rice, soybean, and winter wheat. If constructed, a new four lane highway and bypass may attract highway oriented businesses such as service stations and convenience stores.

Social and Community Impacts

The alternatives under consideration are not likely to have any substantial impact on the density or growth rate of the area's population. Direct adverse impacts could result from traffic related noise and visual effects associated with the new facilities.

Relocations

It is estimated that the relocatees that would be impacted by this project area would not be minorities, persons with low income levels, or disabled persons, nor will the alternatives sever any subdivisions or urban neighborhoods. There are two families considered to have at least one elderly person (age of 65 or older) that would be relocated by the Improvement on Existing Alternative and Alternative 1, while Alternatives 2 and 3 would affect one family with an elderly person.

A comparison of the number of relocations for each alternative is located in Table 4. Appendix B contains a Conceptual Stage Relocation Analysis. The Conceptual Stage Relocation Analysis will provide a general listing of the characteristics of residences and businesses affected by each alternative.

Environmental Justice and Title VI

This proposed project is in compliance with Title VI. The AHTD public involvement process did not exclude any individuals due to income, race, color, religion, national origin, sex, age, or disability.

Table 4				
Estimated Relocations				
Alternative	Residences	Businesses	Non-profit Organizations	Total
No-Action	0	0	0	0
Improvement on Existing	31	1	1	33
1	26	1	0	27
2	10	0	0	10
3	18	1	0	19
4	2	0	0	2

By using the 2000 U.S. Census Data, the Health and Human Services Poverty Guidelines, (Federal Register, February, 2000), making field observations, and conducting a public involvement meeting, a determination was made that the proposed project will not have any disproportionate or adverse impacts on minorities, low-income, elderly, or disabled populations.

Public Land/Section 4(f)

There are no public parks, recreational lands, or wildlife/waterfowl refuges impacted by this project, nor any Section 4(f) or Section 6(f) issues associated with recreational facilities.

Prime Farmland

The study area is located on the Mississippi River Alluvial Plain in an area that is favorable to intense agricultural activity because of level land and fertile soil. Craighead County is basically rural in nature with agriculture being the main land use and source of employment. Agricultural activities consist of row cropping soybeans, rice, and wheat. Right-of-way acquisition for the proposed facility will reduce the amount of land held by some farmers. Splitting these farms with a new highway will not only convert farmland to highway right-of-way, but may also result in the disruption of some farm operations.

Existing irrigation patterns may be disrupted or systems altered. Equipment sheds may have to be relocated. Farm roads and haul routes may also be disrupted. Access will be temporarily restored during construction and permanently restored, as feasible, after construction.

The soil survey of Craighead County was used to determine the number of acres of prime farmland that would be converted to highway right-of-way. Form NRCS-CPA-106, The Farmland Conversion Impact Rating, is located in Appendix C. The amount of prime farmland estimated to be converted to highway right-of-way is shown in Table 5.

The highway improvement would also result in positive impacts. The proposed facility will provide easier farm-to-market access, and more efficient transportation of farm supplies.

<p style="text-align: center;">Table 5 Estimated Prime Farmland Impacts Acres (Ha)</p>	
Alternative	Prime Farmland
No-Action	None
Improvement on Existing	52.92 (21.42)
1	58.01 (23.48)
2	54.05 (21.87)
3	65.77 (26.62)
4	61.81 (25.81)

Hazardous Waste

AHTD personnel conducted a preliminary hazardous waste evaluation of the proposed project corridor. Information on possible hazardous waste sites was gathered from the Arkansas Department of Environmental Quality (ADEQ), the United States Environmental Protection Agency (EPA) Comprehensive Environmental Response,

Compensation and Liability Act (CERCLA) List, Resource Conservation and Recovery Act (RCRA) List, and the National Priorities List (NPL) for Craighead County.

The records search combined with a preliminary field survey of the project area did not identify any hazardous waste sites. During construction, if a hazardous waste site is identified or uncovered by AHTD personnel, contract company(s), or state regulatory agency, the AHTD will determine the type, size, and extent of the contamination according to the AHTD's response protocol. The AHTD, in consultation with ADEQ, will decide the type of containment, remediation, and disposal methods to be employed for the type of contamination.

Archeological /Historical

A preliminary cultural resources review of the study area has been conducted. It consisted of a review of site, structure, and property records on file at the Arkansas Historic Preservation Program and the Arkansas Archeological Survey, FHWA initiation of Native American consultation, a comparison of early maps showing historic settlement in the area, a standing structures survey, and a field visit to all public access points along each alternative. It was conducted in order to identify any known archeological sites or obvious historic properties that might be affected by the proposed alternatives.

The survey resulted in the identification of nine previously recorded archeological sites and one cemetery in the project vicinity. Five new archeological sites were identified during a field visit. Four standing structures along or near the existing highway are eligible to the NRHP. Two of these are bridges, one is a barn and one is a rock school house in Cash that is no longer in use. A couple of structures in Gibson have been designated a historic district.

None of the alternatives will affect the Historic District at Gibson, the rock school house in Cash, or the Johnson Cemetery. The Improvement on Existing Alternative and Alternatives 1 or 3 may impact the historic barn. All of the construction alternatives will affect the historic bridges.

The existing bridges over the Cache River (M2403) and Bayou DeView (M2407) on Highway 226 were determined eligible to the NRHP. Marketing for the bridges has been completed and the bridges will be transferred to the City of Jonesboro; they will be relocated and preserved for use on a walking trail. The Memorandum of Agreement for the transfer can be found in Appendix E.

Table 6 contains a summary of information related to potential cultural resource impacts. All construction alternatives will impact 3CG1059, which is a significant archeological site that is eligible for the NRHP. Improvement on Existing and Alternatives 1 and 2 will have the least impact of the construction alternatives on the site. If either Improvement on Existing or Alternatives 1 or 2 are constructed, then monitoring during construction will be recommended. If Alternatives 3 or 4 are chosen, then data recovery will likely be required as mitigation.

Table 6				
Cultural Resources Summary				
Alternative	Archeological Sites			Eligible Historic Structures**
	Eligible*	Ineligible	Unevaluated	
No-Action	0	0	0	0
Improvement on Existing	1	6	5	3
1	1	6	5	3
2	1	6	6	2
3	1	4	4	3
4	1	4	5	2

* Alternatives 3 and 4 would impact this site at an area that would require data recovery.

** These totals include the two bridges eligible to the NRHP will be affected by all the construction alternatives.

Once a preferred alternative has been identified, an intensive cultural resources survey will be conducted by AHTD staff archeologists to determine if unknown archeological sites or features are present. A full report documenting the results of the survey and stating the AHTD's recommendations will be prepared and submitted to the State Historic Preservation Officer (SHPO) for review. Should any sites or properties within the project area be determined eligible or potentially eligible for nomination to the NRHP and avoidance is not possible, then resource specific treatment plans will be prepared, approved and carried out at the earliest practicable time.

Wetlands and Waters of the US

Preliminary surveys of the study area were conducted to assess wetland and stream crossing impacts. The Cache River flows through the project on the west end of the project (Figure 6). There are numerous unnamed agricultural ditch crossings along with several channelized stream crossings (Figures 7 and 8). Figure 9 shows the location of the waters of the United States stream crossings.



Figure 6

Typical View of the Cache River in Craighead County



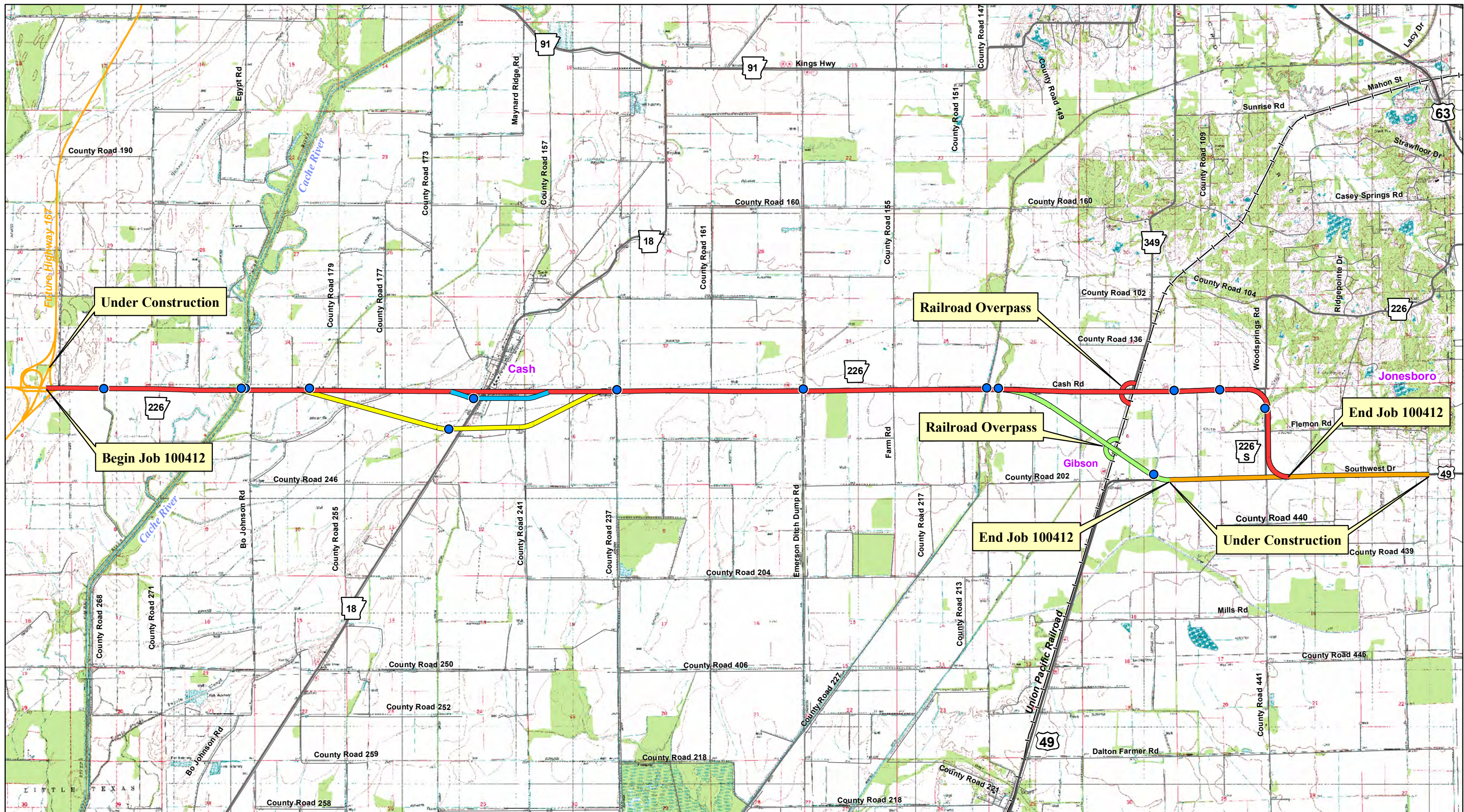
Figure 7

Typical View of Agricultural Ditch in the Project Area



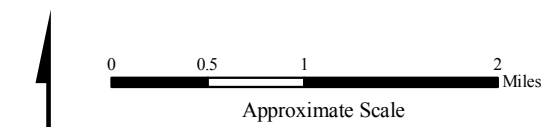
Figure 8

Typical View of Channelized Ditch in the Project Area



Legend

	Improvement on Existing		Waters of the U.S. Crossing
	Alternative 1		
	Alternative 2		
	Alternative 3		
	Alternative 4		



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Cash 1980 USGS Topographic Map
Grubbs 1980 USGS Topographic Map
Herman 1980 USGS Topographic Map
Otwell 1980 USGS Topographic Map
Risher 1980 USGS Topographic Map
Swifton East 1980 USGS Topographic Map

Figure 9
Waters of the United States

There are two forested wetlands and an herbaceous wetland located along the alternatives.

Forested Wetland Number One is located in an old channel scar or oxbow channel on the north side of Highway 226 adjacent to the Cache River (Figure 10). Forested Wetland One is dominated by black willow (*Salix nigra*), river birch (*Betula nigra*), bald cypress (*Taxodium distichum*), and American elm (*Ulmus americana*). Forested Wetland Two is located on the east end of the project adjacent to Highway 226 Spur and Steep Cut Creek (Figure 11). Forest Wetland Number Two is a depression adjacent to the creek that is dominated by sycamore (*Platanus occidentalis*) and American elm (*Ulmus americana*).

The herbaceous wetland is located on the south side of Highway 226 adjacent to the Cache River directly across Highway 226 from Forested Wetland Number One. The wetland is a vegetated depression dominated by buttonbush (*Cephalanthus occidentalis*), smartweed (*Polygonum spp.*), and goldenrod (*Solidago spp.*). Figure 12 shows typical views of the herbaceous wetland.



Figure 10

Forested Wetland One Adjacent to the Cache River



Figure 11
Forested Wetland Two Adjacent to Steep Cut Creek



Figure 12
Herbaceous Wetland Adjacent to the Cache River

All five construction alternatives will impact approximately 1.8 acres (0.7 ha) of the wetland complex adjacent to the Cache River. There will be approximately 1.2 acres (0.5 ha) of herbaceous wetland impacts and 0.6 acre (0.2 ha) of forested wetland impacts. The Improvement on Existing Alternative and Alternatives 1 and 3 will also impact approximately 0.2 acre (0.08 ha) of Forested Wetland Two. Refer to Figures 13 and 14 for a map of the wetland locations.

Table 7 illustrates the wetland impacts and waters of the U.S. crossings for each alternative.

Table 7				
Wetland Impacts /Waters of the U.S. Crossings				
Alternative	Forested Wetland Impacts Acres (ha)	Herbaceous Wetland Impacts Acres (ha)	Total Wetland Impacts Acres (ha)	Waters of the U.S. Crossings
No-Action	0	0	0	0
Improvement on Existing	0.8 (0.3)	1.2 (0.5)	2.0 (0.8)	12
1	0.8 (0.3)	1.2 (0.5)	2.0 (0.8)	12
2	0.6 (0.2)	1.2 (0.5)	1.8 (0.7)	10
3	0.8 (0.3)	1.2 (0.5)	2.0 (0.8)	12
4	0.6 (0.2)	1.2 (0.5)	1.8 (0.7)	10

Wetland and stream impacts will be minimized as much as possible during the design of the selected alternative. The wetland complex adjacent to the Cache River cannot be avoided since it is on both sides of existing Highway 226. Temporary and permanent erosion control measures will minimize adverse impacts to streams and adjacent wetlands.

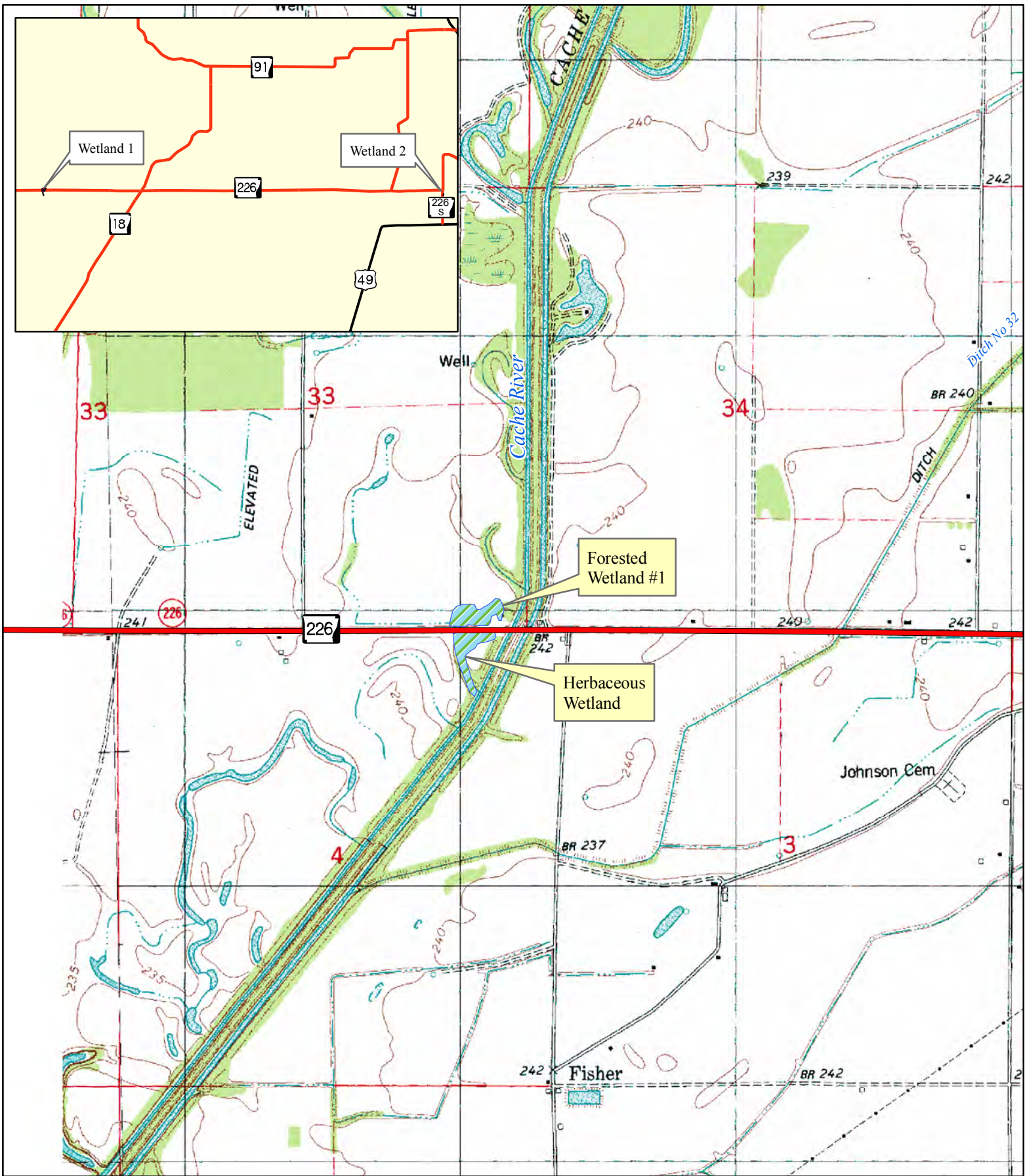
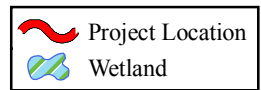


Figure 13
Wetlands Number One



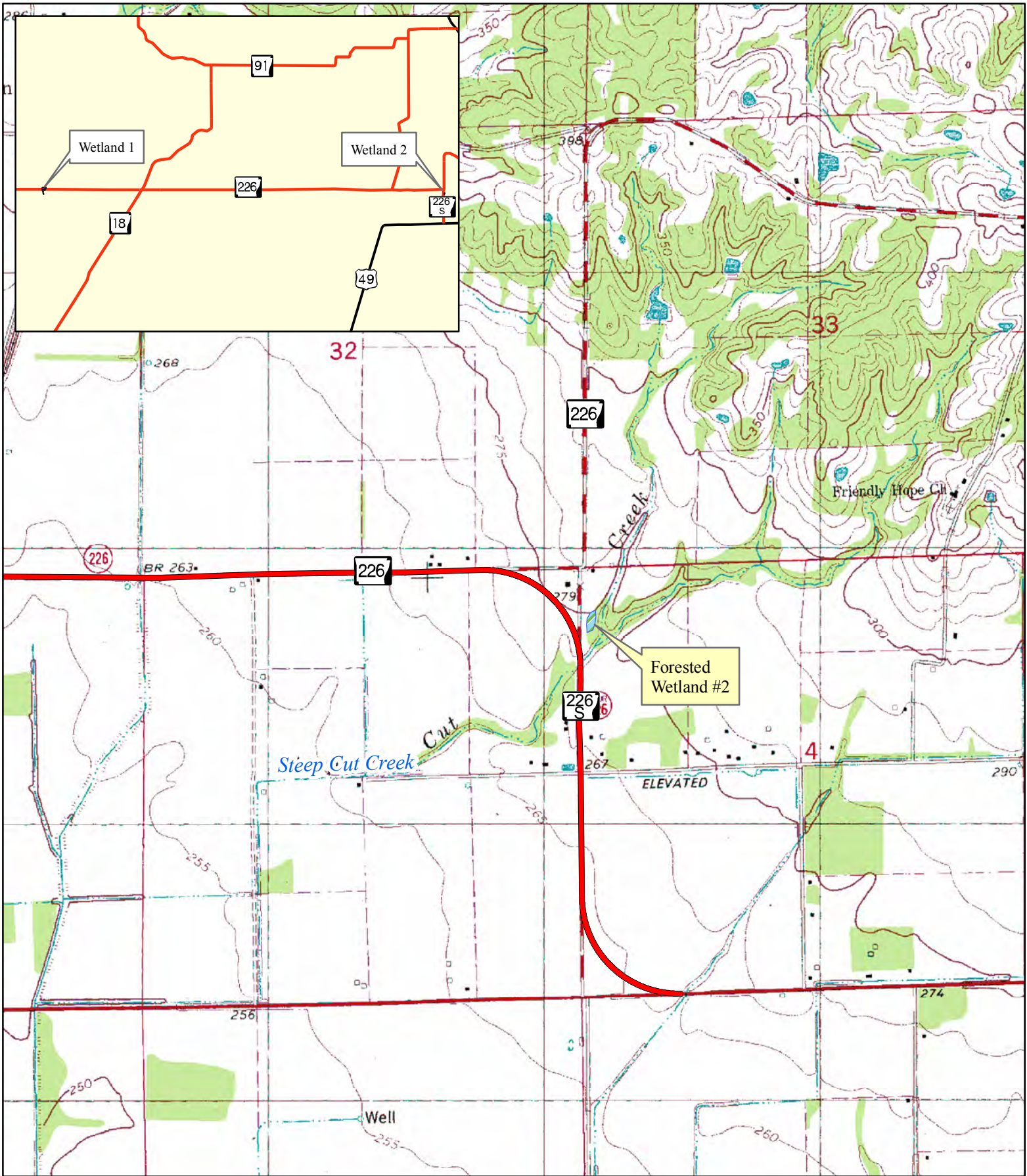


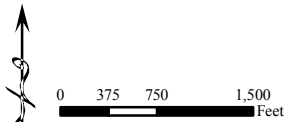


Figure 14
Wetland Number Two

	Project Location
	Wetland



Job 100412
March 5, 2008
AHTD - Environmental GIS - Strawn

Herman 1980 USGS Topographic Map

Wetland Findings

The wetland findings are pursuant to Executive Order 11990 and DOT Order 5660.1A on the Protection of Wetlands. There will be no practicable alternative to construction in the streams and adjacent wetlands of the selected alternative. All practicable measures to minimize impacts to wetlands will be implemented during design of the selected alternative.

Wetlands Conclusion

Construction in the streams and adjacent wetlands is unavoidable. Impacts should be minimal and the functional integrity of the remaining wetlands will be maintained. Wetland mitigation has been offered at the Village Creek Wetland Mitigation Area at a ratio of 2:1 for the herbaceous wetland and 3:1 for the forested wetland impacts. Construction will be allowed under the terms of an Individual Section 404 permit (Permit Number 10857).

Wild and Scenic Rivers

There are no wild and scenic rivers in the project area; therefore there will be no impacts.

Floodplains

All of the alternatives include significant crossings over identified Zone A Special Flood Hazard Areas (SFHA). In fact, all of the included roadway alternatives, except for some relatively short reaches near the community of Cash, another short reach 2 miles (3.2 km) east of Cash, and a small area near the proposed UPRR crossing near the Gibson Community, are within areas of Special Flood Hazard. No detailed studies were made on the streams to determine the actual 100-year water surface elevations or areal extent of the streams floodplain, so the SFHA boundaries are approximate.

This project will serve as a minor arterial and, as such, will serve emergency vehicles in time of disaster. This project will be designed to avoid roadway overtopping by the 50-

year flood and, therefore, will not have a significant potential for vehicular traffic interruption or termination due to flooding.

Bridges and/or drainage structures will be sized sufficiently to minimize impacts on natural and beneficial floodplain values. These values include, but are not limited to fish, wildlife, plants, open space, natural beauty, scientific study, outdoor recreation, agriculture, aquaculture, forestry, natural moderation of floods, water quality, maintenance, and groundwater recharge.

The design measures to minimize floodplain impacts include (1) avoiding longitudinal encroachments, (2) sufficient bridging and/or drainage structures to minimize adverse effects from backwater, (3) sufficient bridging and/or drainage structures to minimize increases in water velocity, (4) minimizing channel alterations, (5) adequate and timely erosion control to minimize erosion and sedimentation, and (6) utilizing standard specifications for controlling work in and around streams to minimize adverse water quality impacts.

The final project design will be reviewed to confirm that the design is adequate and that the potential risk to life and property are minimized. The project will not increase incompatible use or development of the floodplain. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project. None of the floodplain crossings will constitute a significant floodplain encroachment or a significant risk to property or life.

Endangered and Threatened Species

A records check of the Arkansas Natural Heritage Commission (ANHC) database of sensitive species indicated that no tracked species are known to occur within the project area. The ANHC tracks federally designated threatened or endangered species, as well as those that are considered sensitive species within Arkansas. A copy of this document was provided to the U.S. Fish and Wildlife Service for their review and concurrence. A copy of their comments can be found in Appendix C.

Water Quality

The project area lies within the Delta Ecoregion where the turbidity standard set by the ADEQ for least-altered streams is 45 Nephelometric Turbidity Units (NTUs), 75 NTUs for channel-altered streams and 25 NTUs for lakes and reservoirs (Regulation 2). Given the existing water quality within the region, additional sediments contributed during construction should not result in adverse water quality impacts. Temporary exceedances of state water quality standards for turbidity may occur. Other potential sources of water quality impacts include petroleum products from construction equipment, highway pollutants from the operations of the facility, and toxic and hazardous material spills.

The AHTD will comply with all requirements of The Clean Water Act, as Amended, for the construction of this project. This includes Section 401; Water Quality Certification, Section 402; National Pollutant Discharge Elimination Permit (NPDES), and Section 404; Permits for Dredged or Fill Material. The NPDES Permit requires the preparation and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP will include all specifications and best management practices (BMPs) needed for control of erosion and sedimentation. This will be prepared when the roadway design work has been completed in order to best integrate the BMPs with the project design.

Public/Private Water Supplies

The project area is not within a public drinking water system's Wellhead Protection Area. No impacts to public drinking water supplies are anticipated due to this project. If any permanent impacts to private drinking water sources occur due to this project, the AHTD will take appropriate action to mitigate these impacts. Impacts to private water sources due to contractor neglect or misconduct are the responsibility of the contractor.

Noise Assessment

Noise predictions have been made for this project utilizing the FHWA's Traffic Noise Model procedures, existing and proposed roadway information, existing traffic data and the traffic projections for the design year of 2028. The noise investigation reveals that

the 67 dBA Leq design year noise abatement criteria (NAC) will occur at 126 feet (38 meters) from the centerline of the proposed roadways.

This project includes a roadway cross-section of four 12-foot (3.6-meter) wide travel lanes with a 60-foot (30-meter) grass median.

Impact is determined by noise levels which will approach or exceed 67 dBA during the design year. The term "approach" is considered to be 1 dBA less than the NAC. Specific alternative noise receptor information is provided in Table 8.

<p style="text-align: center;">Table 8 Number of Sensitive Receptors Impacted by Increased Noise Levels</p>	
Alternative	Receptors within the 66 dBA contour
Improvement on Existing	10
1	9
2	4
3	8
4	3

Noise abatement efforts using barrier walls or berms are not warranted for this project. This is due to the relatively low density of development and to the need to provide direct access to adjacent properties. In order to provide direct access to adjacent properties, breaks in the barrier walls or berms would be required. These necessary highway access breaks would render any noise barrier ineffective.

To avoid noise levels in excess of design levels, any future receptors along the proposed project location should be located a minimum of 136 feet (41.5 meters) from the centerline of Highway 226. This distance should be used as a general guide and not a

specific rule, since the noise will vary depending upon the roadway grades and other noise contributions.

Any excessive project noise, due to construction operations, should be of short duration and have a minimum adverse effect on land uses or activities associated with this project area.

In compliance with Federal guidelines, a copy of this analysis will be transmitted to the East Arkansas Planning and Development District for possible use in present and future land use planning.

Air Quality

Utilizing the Mobile 5.0a Model (Mobile Source Emission Factor Model) and CALINE 3 dispersion model, air quality analyses have been conducted for carbon monoxide on previous projects of this type. These analyses incorporated information relating to traffic volumes, weather conditions, vehicle mix, and vehicle operating speeds to estimate carbon monoxide levels for the design year.

These computer analyses indicate that carbon monoxide concentrations of less than one part per million (ppm) will be generated in the mixing cell for a project of this type. This computer estimate, when combined with an estimated ambient level of 1.0 ppm, would be less than 2.0 ppm, and well below the national standards of 8.0 ppm for carbon monoxide.

This project is located in an area that is designated as in attainment for all transportation pollutants. Therefore, the conformity procedures of The Clean Air Act, as Amended, do not apply.

Natural and Visual

The project is located within the Mississippi Alluvial Plain Natural Division, commonly referred to as the Delta (Arkansas Department of Planning 1974). Surface geology in the project area consists of Quaternary alluvial terrace deposits, with some Holocene

alluvium surrounding the Cache River and dune sand terrace deposits west of the community of Cash (Arkansas Geological Commission and US Geological Survey 1993).

The landform in the project area is largely flat. Crowley's Ridge is just to the east of the project area and becomes a more distinctive feature of the landscape as the project approaches it from the west. Elevations vary from approximately 240 feet (73 meters) above mean sea level (msl) at the Cache River to 280 feet (85 meters) msl at the eastern terminus of the project, where Crowley's Ridge grades up to approximately 400 feet (122 meters) msl.

Water resources in the project area include the Cache River, Big Creek, and numerous large artificial channels. Both the Cache River and Big Creek have been trenched and straightened to improve drainage. Named ditches include Angle Ditch, Johnson Ditch, Emerson Ditch, and Ditch No. 32. Big Creek is a headwater of Bayou DeView, which along with the Cache River, are tributaries of the White River.

The project area was historically bottomland hardwood forest. Beginning in the 1830's more settlers began settling around Cash and other higher ground in the bottomlands. Sustenance farming and hunting were important activities. Although sustenance farming would continue to be important well into the 20th century, lumbering became the principal industry in the lowlands. Mechanized farming and improved drainage enabled the conversion of nearly all of the remaining woodland in the lowlands to agricultural land. As machinery replaced the livestock, corn and other feed crops declined in importance. Currently, rice, soybeans, cotton, and winter wheat are grown almost exclusively.

Current land use outside of the communities of Cash, Gibson, and development on Highway 226 near Jonesboro, is almost entirely agricultural. Farm-related industrial enterprises in the project area include storage silos, grain and soybean elevators, rice mills, and farm equipment sales and supply.

Expected impacts to local biodiversity are negligible due to the intensive human impacts that have already occurred, primarily the conversion of native bottomland forest to

agricultural production. Non-native species noted in the project area are primarily common agricultural and roadside weeds.

There are no designated scenic areas or visually sensitive resources. Users of the existing road include commercial, commuter, and local traffic. Highway 226 is the most direct route to Highway 67 from Jonesboro. Because of the openness and flatness of the landscape, none of the proposed alternatives differ considerably from the existing visual environment, aside from their proximity to Cash, Gibson, and development on Highway 226 near Jonesboro.

COMMENTS AND COORDINATION

The AHTD provided the opportunity for early public input into the development of the proposed project on December 11, 2007, at Cash City Hall in Cash, Arkansas. Preliminary plans were available for public viewing and visitors were given the opportunity to discuss the project with AHTD staff. The overall response by the public was positive. A copy of the Public Involvement Synopsis is located in Appendix D.

COMMITMENTS

The Arkansas State Highway and Transportation Department's standard commitments associated with relocation procedures, hazardous waste abatement, and control of water quality impacts have been made in association with this project. They are as follows:

- See relocation procedures located in Appendix B.
- The project will require the acquisition and demolition of standing structures. An asbestos survey will be conducted on each building prior to the development of demolition plans. If the survey detects the presence of any asbestos containing materials, plans will be developed to accomplish the safe removal of these materials prior to demolition. All asbestos abatement work will be conducted in conformance with the ADEQ, the EPA, and the Occupational Safety and Health Administration (OSHA) asbestos abatement regulations.
- Once a preferred alternative has been identified, an intensive cultural resources survey will be conducted. If sites are identified, a full report documenting the results of the survey and stating the AHTD's recommendations will be prepared and submitted to the SHPO for review. If prehistoric sites are identified, consultation with the appropriate Native American Tribes will be initiated and the site or sites will be evaluated to determine if Phase II testing, is necessary. Should any of the sites be found to be eligible or potentially eligible for nomination to the NNRHP and avoidance is not possible, then site specific data recovery plans will be prepared and approved. Data recovery

will be conducted at the earliest practicable time. All borrow pits, waste areas and work roads will be surveyed for cultural resources as locations become available.

- The AHTD will comply with all requirements of the Clean Water Act, as Amended, for the construction of this project. This includes Section 401; Water Quality Certification, Section 402; National Pollutant Discharge Elimination Permit (NPDES); and Section 404; Permit for Dredged or Fill Material.
- If any permanent impacts to private drinking water sources occur due to this project, the AHTD will take appropriate action to mitigate these impacts.

RECOMMENDED PREFERRED ALTERNATIVE

After consideration of the information developed and presented in this Environmental Assessment, Alternative 2 has been identified as Preferred Alternative because it:

- 1) would have fewer overall impacts,
- 2) avoids a significant area of an NHRP eligible archeological site,
- 3) has lower estimated costs,
- 4) has a more direct alignment crossing the railroad,
- 5) would not require a detour to be built at the railroad, and
- 6) would better utilize the newly widened section of Highway 49.

The environmental analysis of the proposed project did not identify any significant impact to the natural and social environment. Table 9 is a comparison of the alternative impacts.

Table 9 Alternatives Comparison						
Alternative	No-Action	Improvement on Existing	1	2	3	4
Length Miles (km)	14.29 (22.9)	14.29 (22.9)	14.31 (23.902)	12.93 (20.80)	14.54 (23.39)	13.16 (21.17)
Prime Farmland Acres (Hectares)	0.0	52.92 (21.42)	58.01 (23.48)	54.05 (21.87)	65.77 (26.62)	61.81 (25.81)
Relocations	0	31 Residential, 1 Business, 1 NPO	26 Residential, 1 Business	10 Residential	18 Residential, 1 Business	2 Residential
Wetland Acres (Hectares)	0.0	2.0 (0.8)	2.0 (0.8)	1.8 (0.72)	2.0 (0.8)	1.8 (0.72)
Water of US Crossings	0	12	12	10	12	10
Cultural Resource Sites	0.0	Archeological, 2 Historic Bridges, 1 Historic	Archeological, 2 Historic Bridges, 1 Historic	*10 Archeological, 2 Historic Bridges	Archeological, 2 Historic Bridges, 1 Historic	**11 Archeological, 2 Historic Bridges

*Affects insignificant portion of one National Register of Historic Places eligible site.

**Affects significant portion of one National Register of Historic Places eligible site.

<p style="text-align: center;">Table 10 Alternative Cost Comparison (Millions \$)</p>					
Alternative	Construction	Right of Way & Utilities	PESCENS	Total	
Improvements to Existing	71.85	11.31	10.78	93.94	
1	72.47	11.41	10.87	94.75	
2	65.77	10.34	9.87	85.98	
3	73.60	11.59	11.04	96.23	
4	66.90	10.52	10.03	87.45	

REFERENCES CITED

- Arkansas Department of Planning. *Arkansas Natural Area Plan*. Little Rock, Arkansas: State of Arkansas. 1974.
- Arkansas Geological Commission and US Geological Survey. *Geological Map of Arkansas*. Little Rock, Arkansas: Arkansas Geological Commission. 1993.
- United States Department of Agriculture. *Soil Survey of Craighead County, Arkansas*. USDA: Soil Conservation Service. 1979.

Appendix A

Level of Service

DESCRIPTIONS OF LEVEL OF SERVICE

Two-Lane Highway

Level of Service (LOS) A – LOS A represents traffic flow where motorists are able to travel at their desired speed. Passing is rarely affected and drivers are delayed no more than 35% of the time by slower drivers.

LOS B - Traffic speeds in LOS B drop and drivers are delayed up to 50% of the time by other drivers.

LOS C – At LOS C, speeds are slower than at LOS B. Although traffic flow is stable, it is susceptible to congestion due to turning traffic and slow-moving vehicles. Drivers may be delayed up to 65% of the time by slower drivers.

LOS D – LOS D describes unstable flow and passing becomes extremely difficult. Motorists are delayed nearly 80% of the time by slower drivers.

LOS E – At LOS E passing becomes nearly impossible and speeds can drop dramatically.

LOS F – LOS F represents heavily congested flow where traffic demand exceeds capacity and speeds are highly variable.

Multi-Lane Highway

LOS A – LOS A represents free flow conditions where individual users are unaffected by the presence of others in the traffic stream.

LOS B - Traffic flow in LOS B is stable, but other users in the traffic stream are noticeable.

LOS C – At LOS C, maneuverability begins to be significantly affected by other vehicles.

LOS D – LOS D represents dense but stable flow where speed and maneuverability are severely restricted.

LOS E – Traffic volumes approach peak capacity for given operating conditions at LOS E; speeds are low and operation at this level is unstable.

LOS F – Minor interruptions in the traffic stream will cause breakdown in the flow and deterioration to LOS F, which is characterized by forced flow operation at low speeds and an unstable stop-and-go traffic stream.

Appendix B

Conceptual Stage Relocation Study

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

INTEROFFICE MEMORANDUM

May 2, 2008

TO: Lynn P. Malbrough, Division Head, Environmental Division

FROM: Perry M. Johnston, Division Head, Right of Way Division



SUBJECT: Job 100412
Hwy. 67 – Hwy. 49
Highway 226
Craighead County
Revised Cost Estimates

Per your request, revised cost estimates for acquiring right of way and providing relocation assistance for the various alignments identified for this project are summarized:

Existing = Red
Alternate 1 = Red/Blue/Red
Alternate 2 = Red/Blue/Red/Green
Alternate 3 = Red/Yellow/Red
Alternate 4 = Red/Yellow/Red/Green

<u>Alignment</u>	<u>Property Acquisition</u>	<u>Relocation</u>	<u>Total</u>
Existing	\$4,312,000	\$873,950	\$5,185,950
Alternate 1	3,543,000	722,700	4,265,700
Alternate 2	2,227,400	302,500	2,529,900
Alternate 3	3,503,800	508,200	4,012,000
Alternate 4	1,894,200	82,500	1,976,700

Copies of the cost estimates and a conceptual stage relocation study are attached. Please note the premises under which the estimates were provided.

If you need additional information, please contact Kay Crutchfield at 2311.

Attachments

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
RIGHT OF WAY DIVISION RELOCATION SECTION

INTER OFFICE MEMORANDUM

TO: Lynn Malbrough, Environmental Division Head
FROM: Perry M. Johnston, Right of Way Division Head
DATE: May 1, 2008
SUBJECT: Job 100412

Hwy. 67 - Hwy. 49
Craighead County

CONCEPTUAL STAGE RELOCATION STATEMENT



GENERAL STATEMENT OF RELOCATION PROCEDURE

Residents in the proposed right of way for the project will be eligible for relocation assistance in accordance with Public Law 91-646, Uniform Relocation Assistance Act of 1970. The Relocation Program provides advisory assistance and payments to help offset expenses incurred by those who are displaced. It is the Department's Policy that adequate replacement housing will be made available, built if necessary, before any person is required to move from his dwelling. All replacement housing must be fair housing and offered to all affected persons regardless of race, color, religion, sex or national origin. Construction of the project will not begin until decent, safe and sanitary replacement housing is in place and offered to all affected persons. No lawful occupant shall be required to move without receiving 90 days advance written notice.

There are two basic types of relocation payments available: (1) Replacement Housing payments and (2) Moving Expense payments. Replacement Housing payments are made to qualified owners and tenants. An owner may receive a payment of up to \$22,500.00 for the increased cost of a comparable replacement dwelling. The amount of this payment is determined by a study of the housing market. Owners may also be eligible for payments to compensate them for the increased interest cost for a new mortgage and the incidental expenses incurred in connection with the purchase of a replacement dwelling.

A qualified tenant may receive a payment of up to \$5,250.00. Tenants may elect to receive a down payment rather than a rental subsidy to enable them to purchase a replacement dwelling.

These types of payments are made in addition to moving expense payments.

All displaced persons, businesses, farms and nonprofit organizations are eligible for reimbursement for actual reasonable moving costs. Businesses, farms and nonprofit organizations may also be eligible for re-establishment cost payments or a payment in lieu of moving and/or re-establishment costs. This type of payment is not less than \$1,000.00 or more than \$20,000.00 if relocation cannot be accomplished without a substantial loss of business.

If the displacee is not satisfied with the amounts offered as relocation payments, he will be provided a form to assist in filing a formal appeal. A hearing will be arranged at a time and place convenient for the displacee, and the facts of the case will be promptly and carefully reviewed.

Relocation services will be provided until all persons are satisfactorily relocated. The Relocation Office will have listings of available replacement housing and commercial properties. Information is also maintained concerning other Federal and State Programs offering assistance to displaced persons.

Based on an aerial photograph it is estimated that the four alternates on the subject project could cause the following displacements and costs:

<u>Existing Alternative</u>	
31 residential	\$697,500.00
3 farms	\$ 50,000.00
1 business	\$ 20,000.00
1 nonprofit organization	\$ 20,000.00
5 personal property	<u>\$ 7,000.00</u>
	\$794,500.00
Services	<u>\$ 79,450.00</u>
Total	\$873,950.00

<u>Alternative #1</u>	
26 residential owners	\$585,000.00
3 farms	\$ 50,000.00
1 business	\$ 20,000.00
2 personal properties	<u>\$ 2,000.00</u>
	\$657,000.00
Services	<u>\$ 65,700.00</u>
Total	\$722,700.00

<u>Alternative #2</u>	
10 residential owners	\$225,000.00
3 farms	<u>\$ 50,000.00</u>
	\$275,000.00
Services	<u>\$ 27,500.00</u>
Total	\$302,500.00

Alternative #3

18 residential owners	\$405,000.00
2 farms	\$ 35,000.00
1 business	\$ 20,000.00
2 personal properties	<u>\$ 2,000.00</u>
	\$462,000.00
Services	<u>\$ 46,200.00</u>
Total	\$508,200.00

Alternative #4

2 residential owners	\$ 45,000.00
2 farms	<u>\$ 30,000.00</u>
	\$ 75,000.00
Services	<u>\$ 7,500.00</u>
Total	\$ 82,500.00

The general characteristics of the displacees to be relocated are listed on the Conceptual Stage Inventory Record forms in the back of this report. The general characteristics have been determined by a visual inspection of the potential displacees by a Relocation Coordinator. The Relocation Coordinator utilizes past experiences and knowledge in making this determination.

An available housing inventory has been compiled and it indicates there are at least seventy-five (75) dwellings available for sale at this time. A breakdown of the price range is as follows:

<u>PRICE RANGE (FOR SALE)</u>	<u>NUMBER OF UNITS</u>
Under – 35,000	0
35,001 – 45,000	3
45,001 – 55,000	3
55,001 – 65,000	0
65,001 – 75,000	2
75,001 – 85,000	8
85,001 – 95,000	8
95,001 – 105,000	3
105,001 – 115,000	5
115,001 – 125,000	9
125,001 – 145,000	6
145,001 – 165,000	4
165,001 – 185,000	7
185,001 – 205,000	2
205,001 – 230,000	5
230,001 – 250,000	7
250,001 – 285,000	<u>3</u>
Total	75

This is a widening project with the existing alternative and four new alternatives from Highway 67 to Highway 49 on Highway 226 West of Jonesboro. The units contained in the housing inventory are in the Jonesboro, Brookland, and Bono areas. The dwellings and number of dwellings are comparable and adequate to provide replacement housing for the families displaced on each alternate. The housing market should not be detrimentally affected and there are no apparent problems with insufficient housing at this time. In the event housing cannot be found or can be found but not within the displacees economic means at the time of displacement, Section 206 of Public Law 91-646 (Housing of Last Resort) will be utilized to its fullest and practical extent.

The housing inventory was compiled with the cooperation of real estate companies in the subject area. The dwellings contained in the inventory have been determined to be comparable and decent, safe and sanitary. The locations of the comparable dwellings are not less desirable in regard to public utilities and public and commercial facilities. They are reasonably accessible to the displacees' places of employment, adequate to accommodate the displacees, and in a neighborhood that is not subject to unreasonably adverse environment factors. It has also been determined that the available housing is within the financial means of the displacees and is fair housing open to all persons regardless of race, color, sex, religion or national origin and consistent with the requirements of Title VIII of the Civil Rights Act of 1968.

A commercial/farm property inventory indicates there are eight (8) properties available in the subject area at this time. The business and church affected on the respective alternates may not be able to relocate in the immediate area of their displacement resulting in termination of operations. However, in order to assist the displaced business and church in relocating the State will explore all possible sources of funding or other resources, which may be available to businesses and nonprofit organizations. Sources that will be considered include: State and Local entities, the Department of Housing and Urban Development, the Economic Development Administration, the Farmers Home Administration, the Small Business Administration and other Federal Agencies. Emphasis will be given to providing relocation advisory services to the business and church. Appropriate measures will be taken to ensure the business and church to be displaced are fully aware of their benefits and entitlements (in-lieu payments, etc.), courses of action which are open to them and any special provisions designed to encourage businesses and nonprofit organizations to relocate within the same community.

It is estimated that there will be one low-income family on the existing alternative and alternative #1 and #3. Special attention will be given to this displacee to ensure that replacement housing will be obtained that is within their economic means. This same family will be offered maximum assistance under provisions in the applicable FHWA regulations. At the time of displacement another inventory of available dwelling units in the area will be obtained and an analysis of the market made to ensure that there are dwellings adequate to meet the needs of this displacee. Also, special relocation advisory services and assistance will be administered commensurate with the displacees' needs. Examples of these include, but are not limited to, Housing of Last Resort, as previously mentioned, and consultation with local officials, social and federal agencies and community groups. There are no other identified unusual conditions involved with this project.

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate Existing

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	12935 Hwy. 226, Cash, AR	40,000.00- 50,000.00	15-20	W	N/A	0	2	40-45
Residential/Owner	12909 Hwy. 226, Cash, AR	45,000.00- 55,000.00	20-25	W	N/A	0	4	50-55
Residential/Owner	12881 Hwy. 226, Cash, AR	35,000.00- 45,000.00	20-25	W	N/A	0	2	55-60
Residential/Owner	12855 Hwy. 226, Cash, AR	40,000.00- 50,000.00	15-20	W	N/A	0	2	50-55
Residential/Owner	12833 Hwy. 226, Cash, AR	45,000.00- 55,000.00	25-30	W	N/A	0	2	55-60
Residential/Owner	12809 Hwy. 226, Cash, AR	35,000.00- 45,000.00	15-20	W	N/A	0	2	45-50
Residential/Owner	12777 Hwy. 226, Cash, AR	30,000.00- 40,000.00	10-15	W	N/A	0	1	40-45
P. P. (Duck Camp)	Jct. 226 & Co. 241, Cash, AR	N/A	N/A	W	N/A	0	N/A	N/A
P. P. (Old House)	12915 Hwy. 226, Cash, AR	N/A	N/A	W	N/A	0	N/A	N/A
NPO	(Assembly of God) 12922 Hwy. 226, Cash, AR	N/A	N/A	W	N/A	0	N/A	N/A
P. P. (Closed Business)	4583 Hwy. 18, Cash, AR	N/A	N/A	W	N/A	0	N/A	N/A

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate Existing

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Partial Farm	(1 Silo/Grain Bin) Highway 226	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	14772 Hwy. 226, Cash, AR	40-50,000	10-20 yrs.	W	N/A	0	2	40-45
Residential/Owner	13943 Hwy. 226, Cash, AR	50-60,000	25-35 yrs.	W	N/A	0	2	45-50
Residential/Owner	13594 Hwy. 226, Cash, AR	25-35,000	5-15 yrs.	W	N/A	0	1	60-65
Residential/Owner	13587 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	2	50-60
Residential/Owner	13581 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	3	50-60
Residential/Owner	12141 Hwy. 226, Cash, AR	70-80,000	25-30 yrs.	W	N/A	0	3	45-50
Farm	12141 Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Partial Farm	Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Residential/Owner	8549 Hwy. 226, Jonesboro, AR	40-50,000	30-35 yrs.	W	N/A	0	2	50-55
Residential/Owner	7945 Hwy. 226, Jonesboro, AR	40-50,000	20-25 yrs.	W	N/A	0	2	55-60
Residential/Owner	5682 Hwy. 226, Jonesboro, AR	40-50,000	25-30 yrs.	W	N/A	0	2	40-45

Ark. RAS Form 1 7-3-85

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate Existing

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5979 Hwy. 226 Jonesboro, AR	50-60,000	30-35 yrs.	W	N/A	0	3	50-55
Residential/Owner	5875 Hwy. 226, Jonesboro, AR	45-55,000	25-30 yrs.	W	N/A	0	2	50-55
Residential/Owner	5845 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5829 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5388 Hwy. 226, Jonesboro, AR "M.H"	30-40,000	5-10 yrs.	W	N/A	0	4	35-40
Residential/Owner	5378 Hwy. 226, Jonesboro, AR "M.H."	30-40,000	5-10 yrs.	W	N/A	0	2	40-45
Personal Property	5274 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Personal Property	5273 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	4840 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Residential/Owner	4830 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Business	4641 Hwy. 226, Jonesboro, AR	N/A	N/A	W	Retail/2	N/A	N/A	N/A
Residential/Owner	4597 Hwy. 226, Jonesboro, AR	30-40,000	15-20 yrs.	W	N/A	0	2	35-40
Residential/Owner	4597 Hwy. 226, Jonesboro, AR "M. H."	20-30,000	15-20 yrs.	W	N/A	0	2	60-65
Residential/Owner	4500 Hwy. 226, Jonesboro, AR "Doublewide"	40-50,000	5-10 yrs.	W	N/A	0	2	35-40

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate Existing

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5116 Hwy. 226 Spur Jonesboro, AR	80-90,000	10-15 yrs.	W	N/A	0	2	45-50
Residential/Owner	5124 Hwy. 226 Spur, Jonesboro, AR	75-80,000	10-20 yrs.	W	N/A	0	2	55-60
Residential/Owner	5200 Hwy. 226 Spur, Jonesboro, AR	90-100,000	5-10 yrs.	W	N/A	0	2	50-55
Residential/Owner	5202 Hwy. 226 Spur, Jonesboro, AR	100-110,000	5-10 yrs.	W	N/A	0	2	50-55

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 1

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Partial Farm	(1 Silo/Grain Bin) Highway 226	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	14772 Hwy. 226, Cash, AR	40-50,000	10-20 yrs.	W	N/A	0	2	40-45
Residential/Owner	13943 Hwy. 226, Cash, AR	50-60,000	25-35 yrs.	W	N/A	0	2	45-50
Residential/Owner	13594 Hwy. 226, Cash, AR	25-35,000	5-15 yrs.	W	N/A	0	1	60-65
Residential/Owner	13587 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	2	50-60
Residential/Owner	13581 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	3	50-60
Residential/Owner	4673 Hwy. 18, Cash, AR	20-30,000	10-15 yrs.	W	N/A	0	1	40-45
Residential/Owner	4695 Hwy. 18, Cash, AR	40-50,000	25-30 yrs.	W	N/A	0	2	30-35
Residential/Owner	12141 Hwy. 226, Cash, AR	70-80,000	25-30 yrs.	W	N/A	0	3	45-50
Farm	12141 Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Partial Farm	Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Residential/Owner	8549 Hwy. 226, Jonesboro, AR	40-50,000	30-35 yrs.	W	N/A	0	2	50-55
Residential/Owner	7945 Hwy. 226, Jonesboro, AR	40-50,000	20-25 yrs.	W	N/A	0	2	55-60
Residential/Owner	5682 Hwy. 226, Jonesboro, AR	40-50,000	25-30 yrs.	W	N/A	0	2	40-45

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate #1

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5979 Hwy. 226 Jonesboro, AR	50-60,000	30-35 yrs.	W	N/A	0	3	50-55
Residential/Owner	5875 Hwy. 226, Jonesboro, AR	45-55,000	25-30 yrs.	W	N/A	0	2	50-55
Residential/Owner	5845 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5829 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5388 Hwy. 226, Jonesboro, AR "M.H"	30-40,000	5-10 yrs.	W	N/A	0	4	35-40
Residential/Owner	5378 Hwy. 226, Jonesboro, AR "M.H."	30-40,000	5-10 yrs.	W	N/A	0	2	40-45
Personal Property	5274 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Personal Property	5273 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	4840 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Residential/Owner	4830 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Business	4641 Hwy. 226, Jonesboro, AR	N/A	N/A	W	Retail/2	N/A	N/A	N/A
Residential/Owner	4597 Hwy. 226, Jonesboro, AR	30-40,000	15-20 yrs.	W	N/A	0	2	35-40
Residential/Owner	4597 Hwy. 226, Jonesboro, AR "M. H."	20-30,000	15-20 yrs.	W	N/A	0	2	60-65
Residential/Owner	4500 Hwy. 226, Jonesboro, AR "Doublewide"	40-50,000	5-10 yrs.	W	N/A	0	2	35-40

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 1

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5116 Hwy. 226 Spur Jonesboro, AR	80-90,000	10-15 yrs.	W	N/A	0	2	45-50
Residential/Owner	5124 Hwy. 226 Spur, Jonesboro, AR	75-80,000	10-20 yrs.	W	N/A	0	2	55-60
Residential/Owner	5200 Hwy. 226 Spur, Jonesboro, AR	90-100,000	5-10 yrs.	W	N/A	0	2	50-55
Residential/Owner	5202 Hwy. 226 Spur, Jonesboro, AR	100-110,000	5-10 yrs.	W	N/A	0	2	50-55

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 2

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Partial Farm	(1 Silo/Grain Bin) Highway 226	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	14772 Hwy. 226, Cash, AR	40-50,000	10-20 yrs.	W	N/A	0	2	40-45
Residential/Owner	13943 Hwy. 226, Cash, AR	50-60,000	25-35 yrs.	W	N/A	0	2	45-50
Residential/Owner	13594 Hwy. 226, Cash, AR	25-35,000	5-15 yrs.	W	N/A	0	1	60-65
Residential/Owner	13587 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	2	50-60
Residential/Owner	13581 Hwy. 226, Cash, AR	50-60,000	20-30 yrs.	W	N/A	0	3	50-60
Residential/Owner	4673 Hwy. 18, Cash, AR	20-30,000	10-15 yrs.	W	N/A	0	1	40-45
Residential/Owner	4695 Hwy. 18, Cash, AR	40-50,000	25-30 yrs.	W	N/A	0	2	30-35
Residential/Owner	12141 Hwy. 226, Cash, AR	70-80,000	25-30 yrs.	W	N/A	0	3	45-50
Farm	12141 Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Partial Farm	Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Residential/Owner	8549 Hwy. 226, Jonesboro, AR	40-50,000	30-35 yrs.	W	N/A	0	2	50-55
Residential/Owner	7945 Hwy. 226, Jonesboro, AR	40-50,000	20-25 yrs.	W	N/A	0	2	55-60

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 3

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Partial Farm	(1 Silo/Grain Bin) Highway 226	N/A	N/A	W	N/A	N/A	N/A	N/A
Partial Farm	Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Residential/Owner	8549 Hwy. 226, Jonesboro, AR	40-50,000	30-35 yrs.	W	N/A	0	2	50-55
Residential/Owner	7945 Hwy. 226, Jonesboro, AR	40-50,000	20-25 yrs.	W	N/A	0	2	55-60
Residential/Owner	5682 Hwy. 226, Jonesboro, AR	40-50,000	25-30 yrs.	W	N/A	0	2	40-45

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 3

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5979 Hwy. 226 Jonesboro, AR	50-60,000	30-35 yrs.	W	N/A	0	3	50-55
Residential/Owner	5875 Hwy. 226, Jonesboro, AR	45-55,000	25-30 yrs.	W	N/A	0	2	50-55
Residential/Owner	5845 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5829 Hwy. 226, Jonesboro, AR	45-55,000	20-25 yrs.	W	N/A	0	2	50-55
Residential/Owner	5388 Hwy. 226, Jonesboro, AR "M.H."	30-40,000	5-10 yrs.	W	N/A	0	4	35-40
Residential/Owner	5378 Hwy. 226, Jonesboro, AR "M.H."	30-40,000	5-10 yrs.	W	N/A	0	2	40-45
Personal Property	5274 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Personal Property	5273 Hwy. 226, Jonesboro, AR	N/A	N/A	W	N/A	N/A	N/A	N/A
Residential/Owner	4840 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Residential/Owner	4830 Hwy. 226, Jonesboro, AR	25-35,000	30-35 yrs.	W	N/A	0	2	55-60
Business	4641 Hwy. 226, Jonesboro, AR	N/A	N/A	W	Retail/2	N/A	N/A	N/A
Residential/Owner	4597 Hwy. 226, Jonesboro, AR	30-40,000	15-20 yrs.	W	N/A	0	2	35-40
Residential/Owner	4597 Hwy. 226, Jonesboro, AR "M. H."	20-30,000	15-20 yrs.	W	N/A	0	2	60-65
Residential/Owner	4500 Hwy. 226, Jonesboro, AR "Doublewide"	40-50,000	5-10 yrs.	W	N/A	0	2	35-40

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 3

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Residential/Owner	5116 Hwy. 226 Spur Jonesboro, AR	80-90,000	10-15 yrs.	W	N/A	0	2	45-50
Residential/Owner	5124 Hwy. 226 Spur, Jonesboro, AR	75-80,000	10-20 yrs.	W	N/A	0	2	55-60
Residential/Owner	5200 Hwy. 226 Spur, Jonesboro, AR	90-100,000	5-10 yrs.	W	N/A	0	2	50-55
Residential/Owner	5202 Hwy. 226 Spur, Jonesboro, AR	100-110,000	5-10 yrs.	W	N/A	0	2	50-55

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT

CONCEPTUAL STAGE INVENTORY RECORD

JOB NO 100412

Alternate # 4

Occupant Status	Address of Structure	Income Level	Tenure of Family	Race	Business Status/ Est. No. Employees.	Vacant Structures	Number in Family	Age of Relocatee
Partial Farm	(1 Silo/Grain Bin) Highway 226	N/A	N/A	W	N/A	N/A	N/A	N/A
Partial Farm	Hwy. 226, Cash, AR	N/A	N/A	W	Farm/4	N/A	N/A	N/A
Residential/Owner	8549 Hwy. 226, Jonesboro, AR	40-50,000	30-35 yrs.	W	N/A	0	2	50-55
Residential/Owner	7945 Hwy. 226, Jonesboro, AR	40-50,000	20-25 yrs.	W	N/A	0	2	55-60

INTEROFFICE MEMORANDUM

TO: Kay Crutchfield, Assistant Division Head
Right of Way Division

FROM: Neil Palmer, Appraisal Section Head
Right of Way Division *NP*

DATE: May 1, 2008

SUBJECT: Conceptual Stage Relocation Analysis
100412
Hwy. 67 – Hwy. 49 (Hwy. 226)
Craighead County

Based on information included on maps provided by the Freeway Design Section of the Roadway Design Division, the Environmental Division, the R/W Engineering Section of the Right of Way Division and preliminary market research by personnel of the Appraisal Section and Relocation Sections of the Right of Way Division, a total estimate of right of way costs is provided for four (4) possible alternative alignments. This analysis is made subject to the premises and conditions as listed on the attached page entitled " Disclaimers, Premises and Conditions".

Considering the above factors, the estimated right of way costs from the Conceptual Stage Relocation Analysis standpoint and number of relocation tracts are presented for each alternate alignment:

Existing Alternative = (Red) =		\$4,312,000.00
Number of relocation tracts on existing alternative =	41	
Alternative # 1 = (Red/Blue/Red) =		\$3,543,000.00
Number of relocation tracts on alternative # 1 =	32	
Alternative # 2 = (Red/Blue/Red/Green)		\$2,227,400.00
Number of relocation tracts on alternative # 2 =	13	
Alternative # 3 - (Red/Yellow/Red) =		\$3,503,800.00
Number of relocation tracts on alternative # 3 =	23	
Alternative # 4 – (Red/Yellow/Red/Green) =		\$1,894,200.00
Number of relocation tracts on alternative # 4 =	4	

NP:tsg *TSG*
Cc: Gross Appraisal File
Administrative File

Appendix C

Agency Coordination

100412



United States Department of the Interior

FISH AND WILDLIFE SERVICE

110 South Amity Road, Suite 300

Conway, Arkansas 72032

Tel.: 501/513-4470 Fax: 501/513-4480

January 21, 2009

IN REPLY REFER TO:

Mr. Lynn P. Malbrough, Division Head
Arkansas Highway and Transportation Department
P.O. Box 2261
Little Rock, AR 72203-2261

Subject: Environmental Assessment for AHTD Job Number 100412, Hwy. 67-Hwy. 49 (Hwy. 226), Craighead County, Arkansas

Dear Mr. Malbrough:

This letter provides U.S. Fish and Wildlife Service (Service) comments on the above referenced project. Our comments are submitted in accordance with the Endangered Species Act of 1973 (Act; 87 stat. 884, as amended; 16 U.S.C. 1531 et seq.).

The proposed project will upgrade Highway 226 from two to four lanes divided for 11.7 miles between Hwy. 67 and Hwy. 49 near the town of Gibson in northeast Arkansas. The purpose of the project is to provide better regional transportation connectivity between the City of Jonesboro and the central part of the state to improve the movement of people and goods.

A cursory review of the proposed project area revealed that no threatened or endangered species are known to inhabit the action area. However, endangered pondberry (*Lindera melissifolia*) plant colonies are located approximately five miles west of the project area and appropriate habitat may exist for the species within the proposed alignments. Pondberry usually inhabits sandy depressions associated with various types of wetlands and such sites should be surveyed while plants are flowering or fruiting (typically March to August in Arkansas).

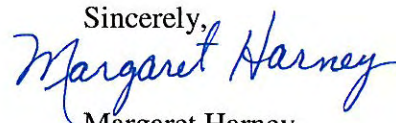
Increased traffic volumes within the project area may also lead to more frequent vehicle/wildlife collisions, thereby increasing animal mortality and presenting a public safety concern. Adequate animal passage should be a consideration during project design. Major stream crossings such as the Cache River and Big Creek are characterized by substantial riparian vegetation in an otherwise agricultural landscape and could serve as valuable corridors for wildlife movement. Bridges at these crossings could be designed in a manner that allows for appropriate animal passage safely beneath the flow of traffic. Other such crossings, along with appropriate signage and/or fencing may be appropriate in areas known to support high densities of wildlife along the proposed project.

Wetland impacts for all alternatives are less than two acres and the Service has no objections to the proposed mitigation plan at Glaise Creek Wetland Mitigation Bank Site. Alternatives two

and four have the fewest wetland impacts (1.8 ac.) and stream crossings (10) and are therefore preferable to the remaining alternatives.

Additionally, numerous species of migratory birds protected under the Migratory Bird Treaty Act are located in the area and may be nesting on bridges or other structures to be replaced. Surveys should be conducted prior to initiation of construction and special consideration given to the times and dates of construction to avoid impacts to these species. No further consultation is required for this project unless project parameters change or new information is presented prior to or during construction.

Thank you for allowing our agency the opportunity to comment on the proposed project. For future correspondence on this matter, please contact Mitch Wine of this office at (501) 513-4488.

Sincerely,

Margaret Harney
Team Leader

cc:

Randal Looney, FHWA
John Harris, AHTD
John Fleming, AHTD
Brenda Price, AHTD
Cindy Osborne, ANHC
Robert Leonard, AGFC
Wanda Boyd, EPA

FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Federal Agency) 100412		3. Date of Land Evaluation Request 10/24/08	4. Sheet 1 of _____
1. Name of Project Hwy 67 - Hwy 49 Hwy 206		5. Federal Agency Involved FHWA	
2. Type of Project Highway W. Dennis		6. County and State Craighead AR	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS	2. Person Completing Form
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form.)		4. Acres Irrigated Average Farm Size	
5. Major Crop(s)		6. Farmable Land in Government Jurisdiction	
7. Amount of Farmland As Defined in FPPA		8. Name Of Land Evaluation System Used	
9. Name of Local Site Assessment System		10. Date Land Evaluation Returned by NRCS	

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment			
	Corridor 1	Corridor 2	Corridor 3	Corridor 4
A. Total Acres To Be Converted Directly				
B. Total Acres To Be Converted Indirectly, Or To Receive Services				
C. Total Acres In Corridor	0	0	0	0

PART IV (To be completed by NRCS) Land Evaluation Information	Corridor 1	Corridor 2	Corridor 3	Corridor 4
A. Total Acres Prime And Unique Farmland	58.01	54.05	65.77	61.81
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points	Corridor 1	Corridor 2	Corridor 3	Corridor 4
1. Area in Nonurban Use	15	10	10	15	15
2. Perimeter in Nonurban Use	10	10	10	10	10
3. Percent Of Corridor Being Farmed	20	15	15	15	15
4. Protection Provided By State And Local Government	20	0	0	0	0
5. Size of Present Farm Unit Compared To Average	10	0	0	0	0
6. Creation Of Nonfarmable Farmland	25	0	0	0	0
7. Availability Of Farm Support Services	5	5	5	5	5
8. On-Farm Investments	20	0	0	0	0
9. Effects Of Conversion On Farm Support Services	25	0	0	0	0
10. Compatibility With Existing Agricultural Use	10	0	0	0	0
TOTAL CORRIDOR ASSESSMENT POINTS	160	0 40	0 40	0 45	0 45

PART VII (To be completed by Federal Agency)	Maximum Points	Corridor 1	Corridor 2	Corridor 3	Corridor 4
Relative Value Of Farmland (From Part V)	100	100	100	100	100
Total Corridor Assessment (From Part VI above or a local site assessment)	160	0 40	0 46	0 45	0 45
TOTAL POINTS (Total of above 2 lines)	260	0 140	0 146	0 145	0 145

1. Corridor Selected: New Location + Existing	2. Total Acres of Farmlands to be Converted by Project: see Part IV	3. Date Of Selection: 10/24/08	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
--	--	-----------------------------------	--

5. Reason For Selection:

Signature of Person Completing this Part: *John Baker* DATE: 10/24/08

NOTE: Complete a form for each segment with more than one Alternate Corridor

51.92
52.92
10
10
10
10
0
0
0
0
0
0
0
0
40
100
40
140

Appendix D

Public Involvement Synopsis

PUBLIC INVOLVEMENT MEETING SYNOPSIS

**Job Number 100412
Highway 67-Highway 49 (Hwy. 226)
Craighead County
December 11, 2007**

An open forum public involvement meeting for the proposed Highway 67 – Highway 49 (Hwy. 226) was held at the Cash City Hall in Cash Arkansas from 4:00-7:00 p.m. on December 11, 2007. Media news releases and flyers, and radio public service announcements were utilized to inform the general public of the meeting. Special efforts to involve minorities in the meeting included outreach to minority minister letters.

The following information was available for inspection and comments:

- Displays including aerial photographs at a scale of 1 inch equal 1,471 feet that illustrated the project limits.
- Preliminary design layout at a scale of one inch equal 200 feet for the western portion of the project that has been programmed under construction Job 100642.

Handouts for the public included a comment sheet and a small-scale map illustrating the project location. Copies of these are attached.

Table 1 describes the results of the public participation at the meeting.

TABLE 1	
Public Participation	Totals
Attendance at meeting	116
Oral statements	0
Additional comment received	0
Total comments received	42
Petitions received	0

AHTD staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person's organization making the statement. The sequencing of the comments is random and is not intended to reflect importance of numerical values. Some of the comments were combined and/or paraphrased to simplify the synopsis process.

An analysis of the responses received as a result of the public survey is shown in Table 2.

TABLE 2	
Survey Results	Totals
Widening of Highway 226 needed	30
Widening of Highway 226 not needed	12
Preferred Widening Existing Highway 226 through Cash	10
Preferred Alternative A	14
Preferred Alternative B	4
Preferred both Alternatives A & B	5
No preference	9
Total comments received	42

The following is a listing of comments concerning issues associated with the project:

- Eight individuals were concerned about the loss of homes
- Eight individuals were concerned about the loss of farmland and farm severance
- Three comments received were concerned about trucks, large tractors and farm equipment turning into Cash River Valley Seed Company and being able to turn around at the proposed intersections and turnarounds.
- Four individuals suggested that Highway 226 should be relocated one mile south of Cash on new location from the new Highway 67 interchange to Gibson.
- Two individuals wanted to use funds for other projects in the area.

Attachments: Blank comment form
Small-scale display copies

RJ ES,
BP DI

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT (AHTD)

CITIZEN COMMENT FORM

**AHTD JOB NUMBER 100412
HIGHWAY 226 IMPROVEMENTS
HWY. 67- HWY. 49 P.E (HWY. 226)
CRAIGHEAD COUNTY**

**LOCATION:
CASH CITY HALL
4391 HWY. 18 S.
CASH, AR
4:00 – 7:00 P.M.
TUESDAY, DECEMBER 11, 2007**

Make your comments on this form and leave it with AHTD personnel at the meeting or mail it within 15 days to: Arkansas State Highway and Transportation Department, Environmental Division, Post Office Box 2261, Little Rock, Arkansas 72203-2261.

Yes No

Do you feel there is a need for the proposed widening of a 11.7-mile section of Highway 226 near Cash? Comment (optional)_____

Do you know of any historical sites, family cemeteries, or archaeological sites in the project area? Please note and discuss with staff. _____

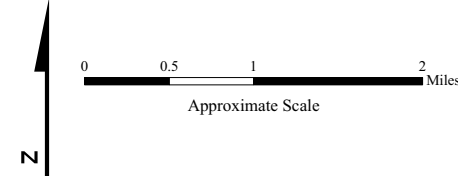
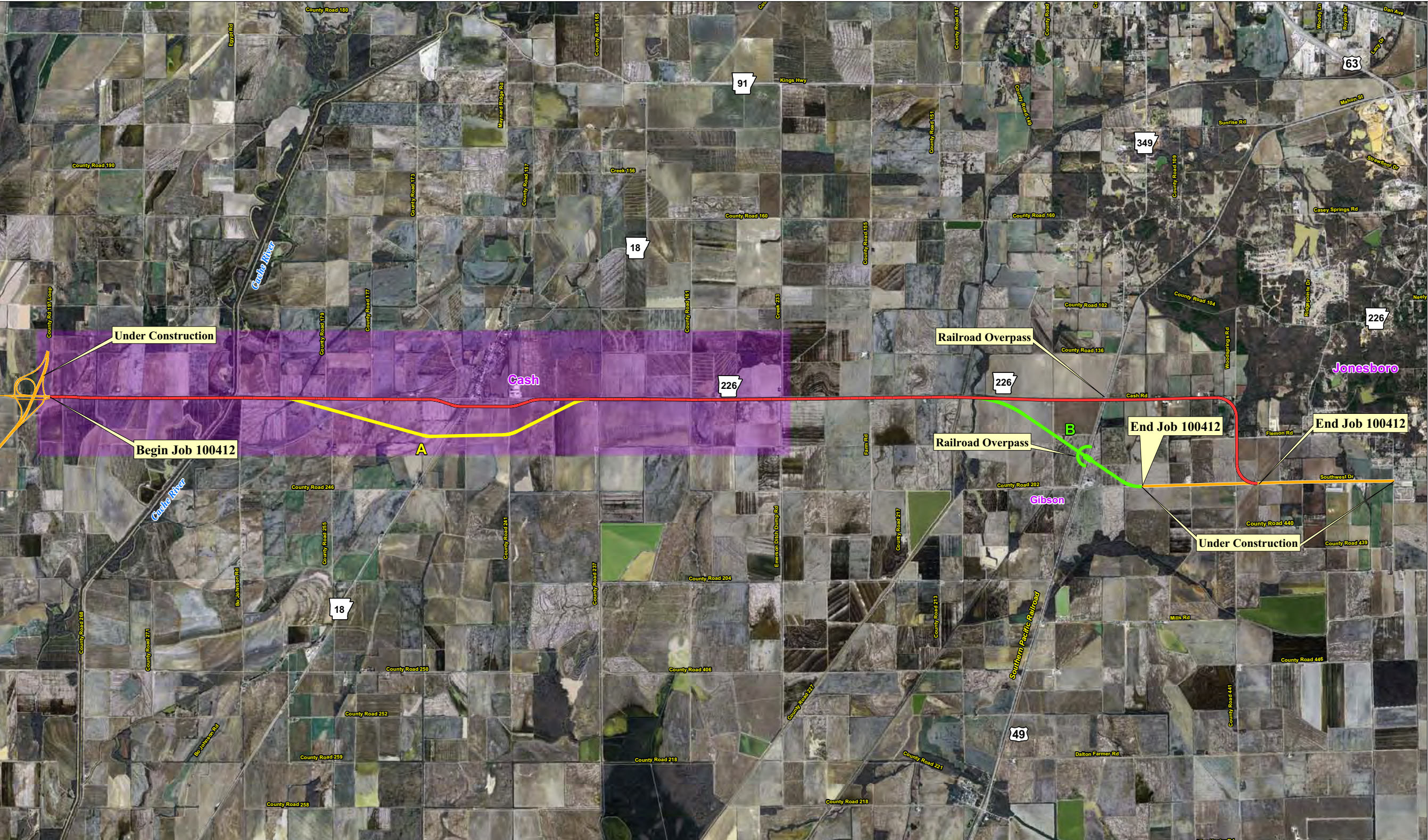
Do you know of any environmental constraints, such as endangered species, hazardous waste sites, existing or former landfills, or parks and public lands in the vicinity of the project? Please note and discuss with AHTD staff. _____

Do you feel that the proposed widening of Hwy. 226 will have any impacts (Beneficial or Adverse) on your property and/or community (economic, environmental, social, etc.)? Please explain. _____

(continued on back)

NOTES

Horizontal lines for notes.



PRELIMINARY
SUBJECT TO REVISION

Job 100412
Highway 67 - Highway 49
(Highway 226)
Craighead County



- Improvement on Existing
- Alternative A
- Alternative B
- Under Construction
- Area of Design

AHTD - Environmental GIS - Reed
Map Date: December 10, 2007
Meeting Date: December 11, 2007
Public Involvement Handout

Photography Date: January - March 2006

Appendix E

Memorandum of Agreement for Historic Bridge Transfer

MEMORANDUM OF AGREEMENT
AMONG THE
FEDERAL HIGHWAY ADMINISTRATION, CITY OF JONESBORO,
ARKANSAS, ARKANSAS STATE HIGHWAY AND TRANSPORTATION
DEPARTMENT AND THE
ARKANSAS STATE HISTORIC PRESERVATION OFFICER
REGARDING

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT
JOB NUMBER 100412
HWY. 67 – HWY. 49 P. E.
HIGHWAY 226, CRAIGHEAD COUNTY, ARKANSAS
AHTD BRIDGE NUMBERS M2403 AND M2407

WHEREAS, the Cache River Bridge (M2403) and Bayou DeView Bridge (M2407) located on Highway 226 over the Cache River and Bayou DeView in Craighead County, Arkansas are properties eligible for inclusion in the National Register of Historic Places (NRHP); and

WHEREAS, the Federal Highway Administration (FHWA) and the City of Jonesboro, Arkansas (hereafter the City), the Arkansas State Highway and Transportation Department (AHTD) and the Arkansas State Historic Preservation Officer (SHPO) all desire that the Cache River Bridge and Bayou DeView Bridge be preserved and protected for the benefit of present and future generations, retaining their historically and architecturally significant features; and

WHEREAS, the City has committed to reuse the Cache River Bridge and Bayou DeView Bridge on a greenway trail in Jonesboro; and

WHEREAS, the FHWA and SHPO have determined that the relocation of the Cache River Bridge and Bayou DeView Bridge will have an adverse effect on these historic properties; and

WHEREAS, the FHWA must fulfill its responsibilities under Section 106 of the National Historic Preservation Act of 1966, as amended and the implementing regulations of the Advisory Council on Historic Preservation set forth in 36 CFR Part 800; and

WHEREAS, the Section 106 regulations and definitions set forth in 36 CFR Part 800 shall be followed in this Memorandum of Agreement (MOA) and historic preservation covenant; and

NOW THEREFORE, the signatories agree that in order to mitigate the adverse effect on the Cache River Bridge and Bayou DeView Bridge the project shall be implemented with the following stipulations in the historic preservation covenant in order to take into account the effect of this undertaking on historic properties.

HISTORIC PRESERVATION COVENANT

The City, by acceptance of this deed, covenants and agrees, for itself, its successors and assigns, and for every successor in interest to the property herein described, or any part thereof, it shall abide by each of the following covenants, each of which will be covenants running with the property. In addition, the United States of America, or its designee, shall be deemed a beneficiary of each of the following covenants without regard to whether it remains the owner of the Cache River Bridge and the Bayou DeView Bridge hereby conveyed and shall have a right to enforce each of the following covenants in any court of competent jurisdiction; provided, however, the United States, or its designee, shall have no affirmative duty to any successor in title to this conveyance to enforce any of the following covenants herein agreed:

1. The City must remove the bridges from the storage area within a year of their delivery for storage at the site.
2. The Cache River Bridge and the Bayou DeView Bridge will be preserved and maintained in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties.
3. No structural changes or changes of color may be made to the Cache River Bridge and the Bayou DeView Bridge once the bridges are placed in their new locations, without first notifying the FHWA and the AHTD in writing and SHPO for written approval.
4. The City must provide public access to the Cache River Bridge and the Bayou DeView Bridge or upon removal of public access must notify the FHWA, the AHTD, and SHPO in writing as to the disposition of these historic properties.
5. If the City does not reassemble the Cache River Bridge and the Bayou DeView Bridge any demolition funds used to reimburse the City for relocating the Bridges will be returned to FHWA.

6. The FHWA, the AHTD and SHPO reserve the right to visit the relocation sites to confirm that the bridges have been reassembled.
7. If the City is unable to fulfill its preservation responsibilities to the Cache River Bridge and the Bayou DeView Bridge, which would dictate the abandonment or removal of the historic properties from their new location, the City must notify the FHWA, the AHTD and the SHPO in writing and produce and submit documentation on the bridges to the signatories that meets the standards put forth by the Historic American Engineering Record of the National Park Service.
8. In the event of violation of the above restriction, the FHWA, the AHTD or SHPO may institute an injunction or suit to enjoin such violation or for damages by reason of any breach thereof.
9. These restrictions shall be binding on the FHWA, SHPO and the City hereto, their successors, and assigns in perpetuity; however, the SHPO may, for good cause, and with the concurrence of FHWA, modify or cancel any or all of the foregoing restrictions upon written application of the City, its successors or assigns.
10. The acceptance of the delivery of this ratified MOA and historic preservation covenant shall constitute conclusive evidence of the agreement of the City to be bound by the obligations herein set forth.
11. Any proposed changes or modification of the Cache River Bridge and Bayou DeView Bridge shall be in compliance with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. The FHWA, the AHTD and SHPO shall provide guidance in the planning and change of the properties according to those Standards. If the signatories are unable to agree on proposed changes, the FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council) pursuant to 36 CFR Part 800. The FHWA will consider any such comments from the Council and , if necessary, take action in accordance with the terms and conditions of these covenants.

Execution and implementation of this MOA and historic preservation covenant evidences that the FHWA has afforded the Council a reasonable opportunity to comment on this undertaking pursuant to 36 CFR Part 800, and the FHWA has taken into account the effect on this project on historic properties



700 West Capital Ave.
Suite 3130
Little Rock AR 72201

Arkansas Division

June 10, 2009

IN REPLY REFER TO
AHTD Job Number 100412
FAP Number STP-0016(54)
Hwy 67-Hwy 49 P.E. (Hwy 226)
Craighead County
HDA-AR
2500

Mr. Dan Flowers, Director
Arkansas State Highway and
Transportation Department
Little Rock, Arkansas 72203-2261

Dear Mr. Flowers:

The environmental assessment (EA) for this project has been reviewed and is approved.
Enclosed is a copy of the title page of the EA, approved for public dissemination.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Looney".

Randal J. Looney
Environmental Specialist

Enclosure



2009-016

WHEREAS, IN CRAIGHEAD COUNTY, Job 100412, Hwy. 67 – Hwy. 49 on Highway 226 calls for the removal of Bridges M2403 and M2407, commonly known as the Cache River Bridge and the Bayou DeView Bridge; and

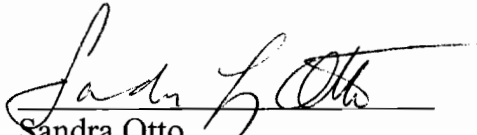
WHEREAS, the Mayor of Jonesboro has requested that the Department transfer Bridges M2403 and M2407 to the City of Jonesboro for transportation uses as pedestrian bridges; and

WHEREAS, the City of Jonesboro shall agree to adopt a release of title holding the Department, its officers, and employees harmless from any action of any kind; to prohibit vehicular traffic on the bridges in perpetuity; and to assume responsibility for maintenance and inspection of the bridges in consideration for the transfer of the bridges to the City of Jonesboro.

NOW THEREFORE, the Director is authorized to release the bridges commonly known as the Cache River Bridge and the Bayou DeView Bridge (Bridges M2403 and M2407) to the City of Jonesboro upon completion of Job 100412.

Signatories

FEDERAL HIGHWAY ADMINISTRATION


Sandra Otto
Division Administrator

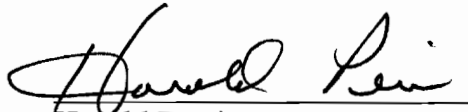
4/1/09
Date

ARKANSAS STATE HISTORIC PRESERVATION OFFICER


Cathie Matthews
Arkansas SHPO

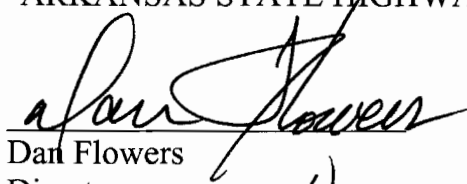
3/31/09
Date

CITY OF JONESBORO, ARKANSAS


Harold Perrin
Mayor

5-26-09
Date

ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT


Dan Flowers
Director

5-1-09
Date

RS SEP H



City of Jonesboro

515 West Washington
Jonesboro, AR 72401
RECEIVED
AHTD

Signature Copy

Resolution: R-EN-049-2009

MAY 27 2009

ENVIRONMENTAL
DIVISION

File Number: RES-09:073

Enactment Number: R-EN-049-2009

A RESOLUTION TO ENTER INTO A MEMORANDUM OF AGREEMENT WITH THE FEDERAL HIGHWAY ADMINISTRATION, ARKANSAS STATE HIGHWAY AND TRANSPORTATION DEPARTMENT AND THE ARKANSAS STATE HISTORIC PRESERVATION OFFICER REGARDING THE RELOCATION OF THE CACHE RIVER BRIDGE AND THE BAYOU DE VIEW BRIDGE

WHEREAS, the Cache River Bridge (M2403) and Bayou DeView Bridge (M2407) located on Highway 226 over the Cache River and Bayou DeView in Craighead County, Arkansas are properties eligible for inclusion in the National Register of Historic Places (HRHP); and

WHEREAS, the Federal Highway Administration (FHWA) and the City of Jonesboro, Arkansas (hereafter the City, the Arkansas State Highway and Transportation Department (AHTD) and the Arkansas State Historic Preservation Officer (SHPO) all desire that the Cache River Bridge and Bayou DeView Bridge be preserved and protected for the benefit of present and future generations, retaining their historically and architecturally significant features; and

WHEREAS, the City has committed to reuse the Cache River Bridge and Bayou DeView Bridge on a greenway trail in Jonesboro; and

WHEREAS, the FHWA and SHPO have determined that the relocation of the Cache River Bridge and Bayou DeView Bridge will have an adverse effect on these historic properties; and

WHEREAS, FHWA must fulfill its responsibilities under Section 106 of the National Historic Preservation Act of 1966, as amended and the implementing regulations of the Advisory Council on Historic Preservation set forth in 36 CFR Part 800; and

WHEREAS, the Section 106 regulations and definitions set forth in 36 CFR Part 800 shall be followed in this Memorandum of Agreement and historic preservation covenant; and

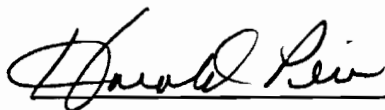
NOW THEREFORE BE IT RESOLVED BY THE CITY COUNCIL FOR THE CITY OF JONESBORO, ARKANSAS THAT:

Section 1: The signatories agree that in order to mitigate the adverse effect on the Cache River Bridge and the Bayou DeView Bridge the project shall be implemented as describe in the attached memorandum of agreement with the stipulations in the historic preservation covenant in order to take into account the effect of this undertaking on historic properties.

Section 2: The Mayor, Harold Perrin and the City Clerk, Donna Jackson are hereby authorized by the City Council of the City of Jonesboro to sign all documents necessary to effectuate this

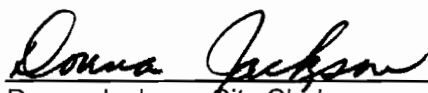
agreement.

PASSED AND ADOPTED this 19th day of May, 2009.



Harold Perrin, Mayor

Date 5-26-09



Donna Jackson, City Clerk

Date 5/26/09