COSSATOT RIVER - DE QUEEN (S)

ARDOT Job 030026

Environmental Assessment





Arkansas Department of Transportation



May 2020

Cossatot River – De Queen (S)

ARDOT Job Number 030026 F.A.P. Number NHPP-RPEF-0066(35) Environmental Assessment

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Submitted by:

FEDERAL HIGHWAY ADMINISTRATION and

ARKANSAS DEPARTMENT OF TRANSPORTATION

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Date of Approval



In compliance with the *National Environmental Policy Act*, this Environmental Assessment (EA) describes the project to widen Highway 71 from the Cossatot River to the city limits of De Queen, Arkansas. The analysis did not identify any significant adverse environmental impacts and identifies Alternative 1 as the Preferred Alternative.

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Chapter 1 – Purpose & Need

What's in Chapter 1?

Chapter 1 explains the purpose of the project, why improvements to Highway 71 are needed, and who is leading the project.

1.1 What is the Highway 71 widening project?

The Arkansas Department of Transportation (ARDOT) is proposing to widen Highway 71 from the City of De Queen east to the Cossatot River. The project (ARDOT Job 030026) will include highway widening and two bridge replacements, and is programmed in the Department's 2019-2022 Statewide Transportation Improvement Program (STIP) for 2020. See Figure 1 for the Study Area.

1.2 What are the existing conditions on Highway 71?

Highway 71 is on a National Highway System route through western Arkansas that begins near Fouke, in the southwestern part of the state, and concludes at Bella Vista, in the northwestern part of the state. East of De Queen, Highway 71 has two 11-foot travel lanes with eight-foot shoulders and a posted speed limit of 55 miles per hour (mph). Approximately 6,700 vehicles per day now use the route with a 23 percent heavy vehicle usage including numerous trucks carrying timber, poultry, or other freight.

1.3 What is the purpose of this project?

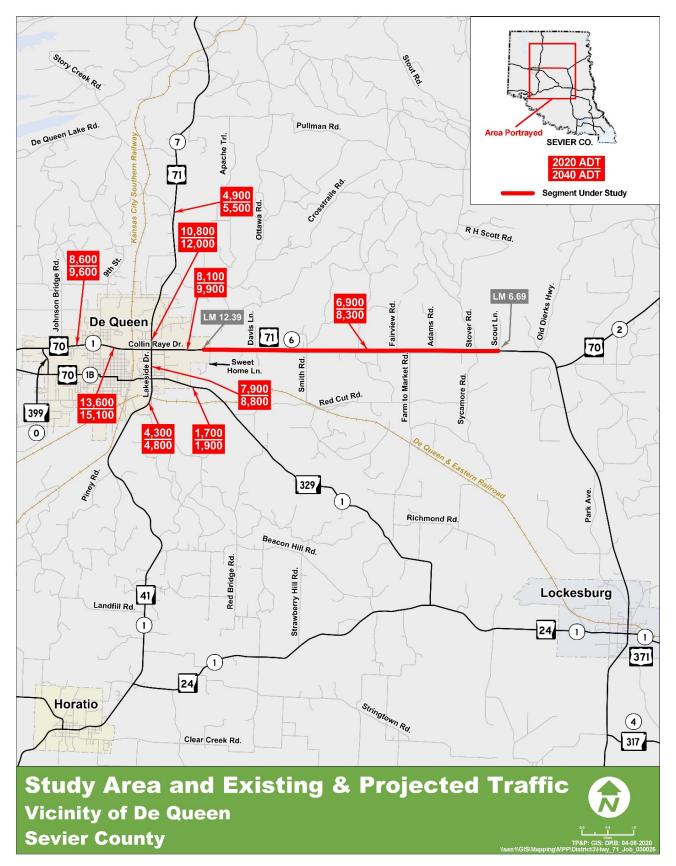
The purpose of the proposed project is to provide safer and efficient intrastate and interstate movement of people and goods for greater mobility.

1.4 Why does Highway 71 need to be widened?

Economic Competitiveness

The Sevier County economy is largely dominated by manufacturing and related industries. Trucks frequently use Highway 71 to carry timber to area sawmills, such as those in Dierks, Ashdown, and Broken Bow, Oklahoma. This section of Highway 71 is particularly important because it overlaps with Highway 70, another arterial highway leading. What does it mean when a highway is on the National Highway System?

The National Highway System (NHS) consists of roadways important to the nation's defense, economy, and mobility. The NHS was developed by the Department of Transportation in cooperation with the states, local officials, and metropolitan planning organizations. Placement upon the NHS gives the highway priority in federal funding, maintenance and safety improvements.



east towards Glenwood, Hot Springs, and Little Rock, Arkansas and west towards Oklahoma Likewise, numerous commuters and students use Highway 71 to commute to De Queen from points to the east and southeast. De Queen is a regional employment, retail, and educational hub; therefore, residents of communities to the southeast, such as Lockesburg, use Highway 71 to reach jobs and schools. These users are impeded when they encounter slower traffic on Highway 71.

This variety of vehicles sometimes struggle to co-exist on Highway 71. Loaded trucks are often slowed on several of the rolling hills, in turn delaying other trucks or passenger vehicles. No passing lanes exist anywhere within the study segment.

Traffic Operations

Traffic volumes were forecasted for the future year (2040). Existing and projected traffic volumes are shown in Figure 1.

Traffic operations were analyzed using the <u>Highway Capacity Manual</u>, <u>6th Edition</u>. Results are shown in Tables 1 and 2. For rural highways, such as Highway 71 east of De Queen, Level of Service (LOS) C is considered acceptable. As Table 1 and 2 indicate, traffic operations are currently marginally acceptable, but future traffic growth will reduce traffic operations below desirable levels. Percent Time Spent Following (PTSF) and Average Travel Speed (ATS) were used to determine Level of Service (LOS) on the two lane highway. Level of Service descriptions can be found in Appendix A:

LOS	Ratings	take	into
accou	nt road	and t	raffic
condit	tions that	affect t	raffic
flow, s	such as:		

• Traffic volume and speed

• Shoulder and lane width

• Percent of the daily traffic that consists of trucks, buses, or recreational vehicles

- Passing opportunities
- Number of traffic signals

• Terrain

Table 1 Operational Analysi	s Results for 20)20					
	Segment	PTSF (%)		ATS (mph)		LOS	
Location	Туре	AM	PM	AM	PM	AM	PM
Highway 71,	Two-Lane	F0 1	() 7	54.0		0	C
LM 6.69 - 12.39	Highway	59.1	63.7	54.0	54.7	С	С
Source: HCS Two-Lane, 7.5							

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Ta	b	e	2
		-	-

La catta a	Segment	PTSF (%)		ATS (mph)		LOS	
Location	Туре	AM	PM	AM	PM	AM	PM
Highway 71,	Two-Lane	63.5	66.2	53.1	53.8	C	D
LM 6.69 – 12.39	Highway	00.0	00.2	00.1	00.0	0	D

Safety Analysis

A safety analysis of the study area was conducted using 2013-2017 crash data, the latest five years available. Crash rates are shown in Table 3 and were computed as the number of crashes per million vehicle miles (MVM) traveled and per 100 MVM for fatal and serious injury (KA) crashes. A review of the total crashes in the segment revealed the majority of crashes consisted of rear end, angle, and single vehicle incidents. The total and KA crash rates within the study area are lower than the statewide average for similar facilities.

A review of the six KA crashes along the entire segment revealed the crashes equally consisted of angle, sideswipe, and rear end incidents. Crash reports revealed three motorists crossed over the centerline into oncoming traffic, initiating the incidents. The study area is two 11-foot travel lane segments with 8-foot shoulders throughout. A display of the total crashes is presented in Figure 2.

	Table 3 Highway 71 Annual Average Crash Rates (2013-2017)										
Total Crashes								5			
Route	Segment	ADT	Number of Crashes	Crash Rate (per MVM) ¹	Statewide Average (per MVM) ¹	Number of Crashes	Crash Rate (per 100 MVM) ¹	Statewide Average (per 100 MVM) ¹			
71	Section 6, LM 6.69 – 12.39	6,700	32	0.46	1.07	6	8.61	14.27			
¹ MVM – n	nillion vehicle miles										

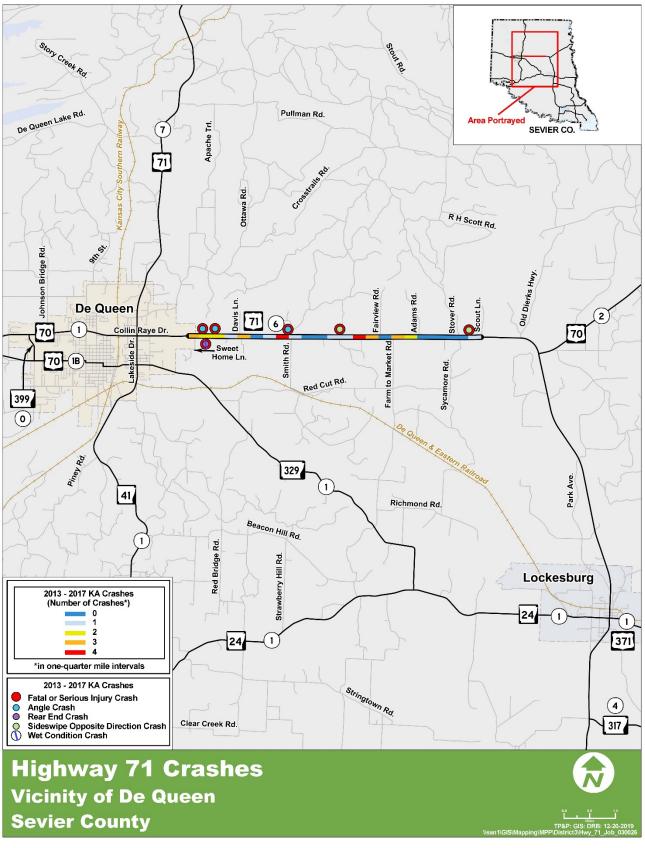


Figure 2

1.5 What is the purpose of this Environmental Assessment?

This Environmental Assessment (EA) is being prepared under the *National Environmental Policy Act* (NEPA) to:

- Explain the proposed action's purpose and need.
- Describe the alternatives considered for implementing the proposed action.
- Evaluate the social, economic, and environmental effects of the alternatives.
- Inform and receive feedback from the public and decision makers about the environmental effects of the proposed alternatives.
- Determine whether effects are significant and require an Environmental Impact Statement or if the project effects can be sufficiently documented through an EA and a Finding of No Significant Impacts (FONSI).

1.6 Who is leading the proposed project?

This project is led by a partnership between the Federal Highway Administration (FHWA) and the ARDOT. The FHWA is involved because it is funding a portion of the project and has the primary responsibility for the content and accuracy of this NEPA document.

The project is also being funded through state funds allocated by the ARDOT. The ARDOT is responsible for administering and maintaining the state highway system, which includes Highway 71 and associated structures. For this reason, the ARDOT is a co-lead agency with the FHWA.

1.7 Why is this project an Environmental Assessment?

The project was originally a Tier 2 Categorical Exclusion approved on June 10, 2005 covering originally 4.0 miles. The project was deferred in 2005 because of the City's inability to fund utility relocations. The project was funded in the 2016-2020 STIP and the length was increased to 5.7 miles. A re-evaluation was required due the large amount of new right of way required and number of relocations. The FHWA requested that an EA be completed to document the impacts.

What is NEPA?

The National Environmental Policy Act of 1969 (NEPA) requires Federal agencies to consider the potential environmental consequences for their actions, document the analysis, and provide a public involvement process project prior to implementation. Federal agencies are subject to NEPA as part of their decision making process, as part of their own projects, by providing funding to other organizations or agencies, through regulatory or permitting processes, or through the involvement of their resources or property.

A Finding of No Significant Impact (FONSI) presents the reasons why an action will significant not have environmental effects and therefore does not require preparing an Environmental Impact Statement. Based on analyses and project feedback received to date, the ArDOT anticipates preparing а FONSI for this project.

Chapter 2 – Alternative Development

What's in Chapter 2?

Chapter 2 identifies the project limits and briefly describes how the alternatives were developed for this EA.

2.1 What are the project limits and how were they chosen?

The proposed project begins at the city limits of De Queen and extends east along Highway 71 for 5.4 miles. This project will widen the existing roadway from two to four lanes to match the roadway cross section that exists at both ends of the project limits.

Phased construction will allow traffic to travel along the existing route while construction is ongoing. If Highway 71 were closed for construction, the shortest detour would be approximately 12 miles.

2.2 How has the public been involved?

A Public Involvement meeting was conducted in August 2019 and was well attended with seventy-eight (78) participants. The proposed project generated a wide range of comments and ideas. A Public Involvement Synopsis is located in Appendix B. A Location and Design Public Hearing will be held once final plans have been approved and the EA is ready for public review.

2.3 How have tribal governments been involved?

Section 106 of the *National Historic Preservation Act* requires federal agencies to consult with tribes where projects could affect tribal areas with historical or cultural significance. The FHWA initiated coordination with The United Keetoowah Band of Cherokee Indians in Oklahoma, Quapaw Nation, Choctaw Nation, Caddo Nation, and the Osage nation since these tribes have an active cultural interest in the area. The Tribal Historic Preservation Officer for each tribe was given the opportunity to comment on the proposed project. The Choctaw Nation, the Quapaw Nation, and The Osage Nation determined that the project would not adversely impact any cultural resources or human remains for the proposed project. To date, the United Keetoowah Band of Cherokee Indians in Oklahoma responded to the outreach with their

Section 106 Consultation Procedures. Additional correspondence with this tribe is under consideration at this time. Correspondence related to Section 106 can be found in Appendix C: Section 106 Correspondence.

2.4 What alternatives were evaluated for this project?

Two alternatives were considered for this project: The No Action Alternative and one build alternative, Alternative 1. Alternative 1 would widen along the existing roadway. A new location alternative was not considered feasible and prudent due to the population density, cost considerations, and driver indirection that would result.

No Action Alternative

The No Action Alternative would not provide changes to the existing roadway network and would still require routine maintenance to be completed. Traffic congestion would remain unacceptable for westbound traffic. The No Action Alternative does not meet the project's purpose and need of improving current and forecasted traffic flow and correcting safety concerns; however, the No Action Alternative will be considered in this Environmental Assessment as a baseline comparison of impacts against Alternative 1.

Alternative 1

Alternative 1 would provide two types of cross-sections (Figure 3). The urban section would consist of four 11-foot travel lanes, a 12-foot two-way, left turn lane (painted median), curb and gutter shoulders, 3-foot grass berms, and 5-foot sidewalks on both sides of the highway for 1.2 miles. Design speed for the urban section is 45 mph. The rural section will consist of four 12-foot travel lanes with an 11-foot two-way, left turn lane (painted median) and 8-foot shoulders for 4.5 miles at a design speed of 60 mph. Within this rural section for a distance of 1,155 feet, there will be a Type B-1 curb and gutter section to avoid discharging runoff directly towards structures that remain. Curb may also be retained in between these areas for corridor continuity. The painted median could be utilized as a continuous, two-way, left-turn lane. Left-turning vehicles would be in the painted median and outside the traveled way, reducing delay and chances for crashes. It would include minor realignment at several locations to improve both horizontal and vertical geometrics, and minor realignments along the route to reduce construction impacts to the businesses located along the route. Alternative 1 would increase highway capacity, improve safety, reduce delays, and provide greater regional connectivity to and for the state's existing four-lane grid system.

What does it mean for an alternative to be feasible and prudent?

defines NEPA feasible alternatives as those that can built using current be construction practices, while a prudent alternative is one that is reasonable, or makes For example, sense. alternatives that are not prudent may not meet the project's purpose and need, have severe operational or safety problems, unacceptable impacts, or cause severe community disruption.

Why would you consider a No Action Alternative?

The National Environmental Policy Act (NEPA) requires decision makers to consider a "no action" alternative in all NEPA studies. This alternative usually does not meet the project's purpose and need, but is used to compare the beneficial and adverse impacts of "action" alternatives and determine their significance. Alternative 1 is considered feasible, prudent, and able to be constructed. Alternative 1 would improve safety with the addition of a painted median and wider travel lanes, thus improving the forecasted LOS C to LOS A for all of Highway 71 in the project area. A summary of the alternatives are shown in Table 4.

The alignment and design developed for Alternative 1 meets the project's purpose and need while lowering impacts to the community; therefore, the No Action and Alternative 1 will be the only alternatives considered in the remainder of this EA.

Alternative	Construction (\$ millions) ¹	Total (\$ millions) ²	Volume (2020 vpd)	LOS (2020)	Volume (2036 vpd)	LOS (2036)		
No Action ³	0	0	6,900	D	7,000	D		
Alternative 1	\$30.5	\$42.6	6,900	А	8,300	А		
Alternative 1\$30.5\$42.66,900A8,300A ¹ Costs are in 2018 dollars. ² Total cost includes ROW (Acquisition, Relocation, and Utility Costs) plus Construction (Roadway and Bridge costs). ³ Rehabilitation and/or Preventative Maintenance was not considered as a viable option due to the short serviceable life of the existing roadway and bridge structures.								

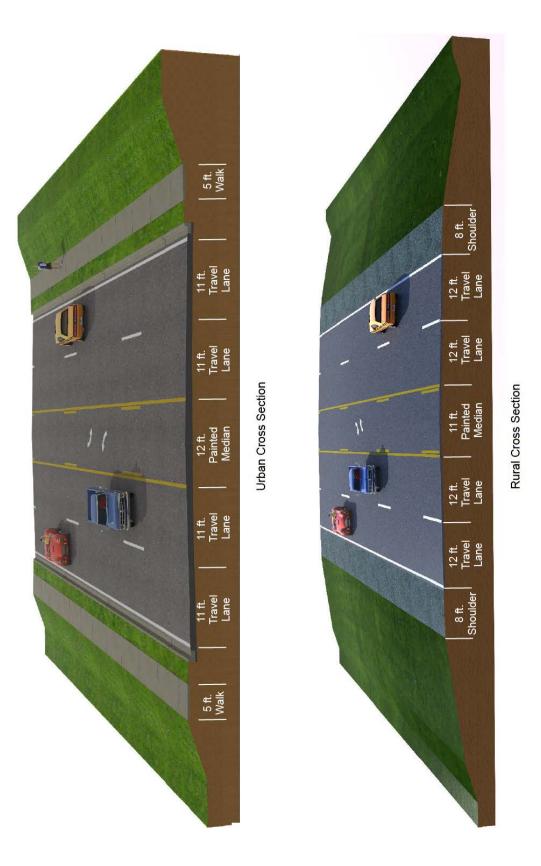


Figure 3 Typical Cross Sections

Chapter 3 – Project Impacts

What's in Chapter 3?

Chapter 3 identifies impacts that are expected as a result of the proposed project. Only elements that would be affected by the project are discussed. The impact areas discussed in Chapter 3 are summarized in Table 6 at the end of the Chapter 4.

3.1 How would the project affect traffic and safety?

How would traffic patterns and volumes on Highway 71 and intersecting roads change with the project?

Normal traffic patterns would not change with the No Action Alternative or the construction of Alternative 1. Widening Highway 71 with Alternative 1 may result in land use changes as development extends east, but forecasted traffic growth considers future growth in the project area. Crash rates would be reduced with the additional travel lanes and continuous two-way left-turn lane, lessening the likelihood of traffic disruptions due to collisions. The LOS for Alternative 1 would increase to a Level A with the proposed construction. The No Action Alternative would result in increasingly congested traffic flows and higher crash rates as traffic volumes increase over the 20-year study period, and the LOS would remain at unacceptable levels.

How would the project affect safety?

Alternative 1 would result in improved safety with the introduction of additional travel lanes and a painted median. Bicyclist and pedestrian safety would be improved with the addition of wider shoulders on both sides of Highway 71.

The No Action Alternative would not address any of the safety hazards or reduce the crash rates. Bicyclists and pedestrians would have no improvements in safety, and safety would decrease as traffic volumes and speed increases on Highway 71 over the 20-year study period.

How much traffic congestion would be caused by construction?

While Highway 71 traffic would likely experience minor delays during the construction of Alternative 1. Traffic would be maintained in both directions during construction. Because Alternative 1 involves constructing additional lanes, traffic can be shifted to either side of the highway throughout construction. The No Action Alternative would only involve periodic highway maintenance and not result in any major traffic delays.

3.2 How much would the proposed project cost?

The total project cost is estimated at \$42.6 million. Of this total, construction cost is \$30.5 million, \$3.5 million in acquisition and relocation costs, and \$8.5 million in utility relocation. The No Action Alternative would not result in any construction and would only involve routine maintenance. No cost estimates were considered by ARDOT as projections to rehabilitate the roadway were not considered.

3.3 How would economic and social conditions in the surrounding areas be affected?

The geographic area considered for analysis of existing social and economic conditions consist of a one-county region (Sevier County) along with the City of De Queen. The project study area consists of commercial, agricultural, and residential development but is generally rural in nature. Alternative 1 would require the relocation of 2 residential owners, 1 residential tenant, 5 businesses, 1 landlord business, and 17 personal properties. The relocation of these businesses would negatively affect the local economy due to permanent and/or temporary loss of jobs and income, but wouldn't negatively affect the overall economic conditions of the City of De Queen or Sevier County.

According to the 2010 U.S. Census Data, there has been a 0.2% population increase in De Queen from 2010 to July 1, 2018. While this population growth is below the state average of 3.4%, there is still a need for better highway connections to facilitate accessibility of businesses, communities, and services. Alternative 1 would have direct positive impacts to the social environment by providing the community with enhanced circulation and accessibility for local citizens and travelers alike by widening Highway 71. There are a total of 2 low-income households, 1 minority family, 1 elderly household, and 1 household with individuals that have disabilities that would be relocated as a result of this project. A Demographics and Economic Analysis can be

What is a relocation?

Relocations occur when a residence, business, or nonprofit is impacted severely enough by a proposed project that they cannot continue to live or do business at their current location. This is usually due to the proposed right of way limits requiring acquisition of a structure (house or business), taking most of a business's parking, or severing access to the property. found in Appendix D: Social, Environmental Justice, Community Impacts, and Economics.

Cost estimates, a conceptual stage relocation study, a housing inventory, and a general statement of relocation procedures are provided in Appendix E. The study determined that suitable locations could be found to relocate all 3 residents and six businesses. The No Action Alternative would not have any direct negative impacts on local businesses or economic conditions.

3.4 How would the project affect how land is used in the area?

Land cover in the immediate project area was historically oak-hickory and oak-hickory-pine upland hardwood forest. Current land use consists of scattered homes, businesses, and pastureland. Residential and commercial development along the Highway 71 corridor has been slow. The land uses affected by Alternative 1 can be found in Table 5.

Development is anticipated to occur throughout the proposed project corridor and surrounding areas, regardless of the implementation of this project. Several utilities including cable television, natural gas, electricity, sewer, telephone, and water, would need to be relocated to accommodate a widened Highway 71. Direct impacts as a result of the proposed project include the additional utility right of way required for existing utilities that have to be relocated.

The No Action Alternative would not result in any land use impacts and would not encourage any additional development in and around the project area. The No Action Alternative would not affect any utilities. Right of way acreages and relocation counts are based on the latest design plans, and both are subject to change if design alterations occur as a result of comments received at the Location and Design Public Hearing.

3.5 How would the project affect cultural resources?

Section 106 of the *National Historic Preservation Act* requires agencies to consider the effects of federal actions to historic properties. In compliance with Section 106 requirements, ARDOT cultural resource specialists consulted with the State Historic Preservation Officer (SHPO) and Native American tribes.

Standard record/map reviews, historic structures surveys, and Phase I archeological surveys were conducted for this project by ARDOT staff archeologists in 2005 (for 3.95 miles) and 2019 (additional 1.48 miles). The State Historic Preservation Officer reviewed the cultural resources

Table 5 Alternative 1 Land Use Impacts				
Land Use Type	Acres			
Wooded	11.3			
Wetlands	0.1			
Pasture/Field	18.2			
Residential Property	18.9			
Commercial Property	1.6			
Barren Land	0.9			
Total	51.0			

What is a historic property?

Cultural resources include elements of the built environment (buildings, structures, or objects) or evidence of past human activity (archeological sites). Those that are listed on or eligible for inclusion in the National Register of Historic Places are defined as historic properties.

reports and concurred with their findings on June 8, 2005 and August 13, 2019. Prior to the archeological surveys, the FHWA initiated consultation with the appropriate Native American tribes. SHPO clearance and consultation with Native American Tribes can be found in Appendix C: Section 106 Correspondence.

From these records, field observations, and surveys, SHPO determined that Alternative 1 and the No Action Alternative would have "No Adverse Effect" on known historic properties or National Register eligible archaeological sites.

3.6 Would the project affect noise levels?

A screening level noise analysis using the FHWA's Transportation Noise Model (TNM 2.5) indicated an increase in noise levels would occur during the next 20 years. Twenty-two noise sensitive receptors would be impacted by noise, primarily due to the increase in traffic volumes and the addition of lanes. Of these receptors, 14 were predicted to currently be experiencing noise impacts under existing conditions. Future noise impacts would be minor (e.g., not exceeding a 1 to 2 decibel increase), and no substantial increases (≥ 10 dBA) were predicted. Numerous driveways and intersections provide access to Hwy. 71. For engineering reasons, it would not be possible to construct an effective noise barrier accommodating these access points.

Project construction operations typically increase noise levels. These increases would be temporary and have minimal to minor impacts on land uses and activities in the project area. A report detailing the methods and results of the noise analysis is provided in Appendix F: Noise Analysis.

The No Action Alternative would not directly impact noise sensitive receptors.

3.7 How would the project area's visual quality be affected?

Increased roadway widths would alter the appearance of the existing roadway for travelers along the road and for residents and businesses (referred to as project "neighbors"). The removal of residences, businesses, and trees and other vegetation would alter visual resources along the project corridor. Remaining residences and commercial buildings would be in closer proximity to the roadway.

Project visual resources would not detract from the area's overall existing visual character. Overall visual quality impacts are therefore likely to be beneficial, particularly for travelers. In the project's urban

What is noise?

Sound is anything we hear, while noise can be unwanted or undesirable sound. Traffic noise is a combination of the noises produced by vehicle engines, exhaust, and tires.

What are sensitive noise receptors?

Residences are considered sensitive noise receptors along with businesses that have a special sensitivity to noise, such as schools, churches, libraries, and parks.

What is a Visual Resource?

A visual resource includes features such as land and vegetation; buildings and other manmade structures; and roadway elements such as cross sections and construction materials.

Project viewers include travelers (drivers, bicyclists, and pedestrians) with views from the road and neighbors with views to the road. segment, the addition of curb and gutter, 3-foot grass berms, and 5-foot sidewalks would likely be regarded as a beneficial impact. Impacts may also be beneficial for business neighbors resulting from increased visibility to travelers, however impacts may be adverse for residential neighbors for whom views of the roadway would become more prominent.

Project construction will result in vegetation clearing and the short-term presence of construction vehicles and equipment, temporarily altering the area's visual character. Impacts in roadside cleared areas would be minor and short-term until new vegetation becomes established.

Adverse impacts to overall visual quality are not expected as a result of the project. A Visual Impact Assessment Scoping Questionnaire and technical memorandum (including visual impact definitions) are provided in Appendix G: Visual Impact Assessment.

3.8 Would any hazardous materials be created or affected?

A visual assessment and database search was performed to determine if any hazardous materials were located in the project area.

Visual assessment of the project found one underground storage tank and two waste sites. One underground storage tank (UST) was located just past Stover Road on the north side of Highway 71 (Station 165+00, 45 feet right of centerline, see Inset 5 of Figure 4). This UST is located underneath the canopy between the gas island and the building. At this time, only one UST has been identified at this location. There are three other sites located along the route that exhibit characteristics of old gas stations. These are: the old flea market site (Station 183+50, 45 feet right of centerline, see Inset 5 of Figure 4); the Surplus Sales Building (Station 252+75, left, see Inset 4 of Figure 4); and a commercial building (Station 255+75, left, see Inset 4 of Figure 4). Each possible UST site will be evaluated on a case by case basis during the acquisition phase of the project to determine if any additional UST's are present on each site.

Two waste sites were identified along the route. At the Surplus Sales Building (Station 251+80, 40 feet left of centerline, see Inset 4 of Figure 4) there are nineteen 55-gallon drums filled with used oil. These steel drums are in poor condition and the threat of an oil release is possible. These oil drums could be removed by the property owner and taken to an oil recycling facility. Negotiations with the property owner will be necessary. What are hazardous materials?

A hazardous material is any item or chemical that can cause harm to people, plants, or animals when released into the environment.

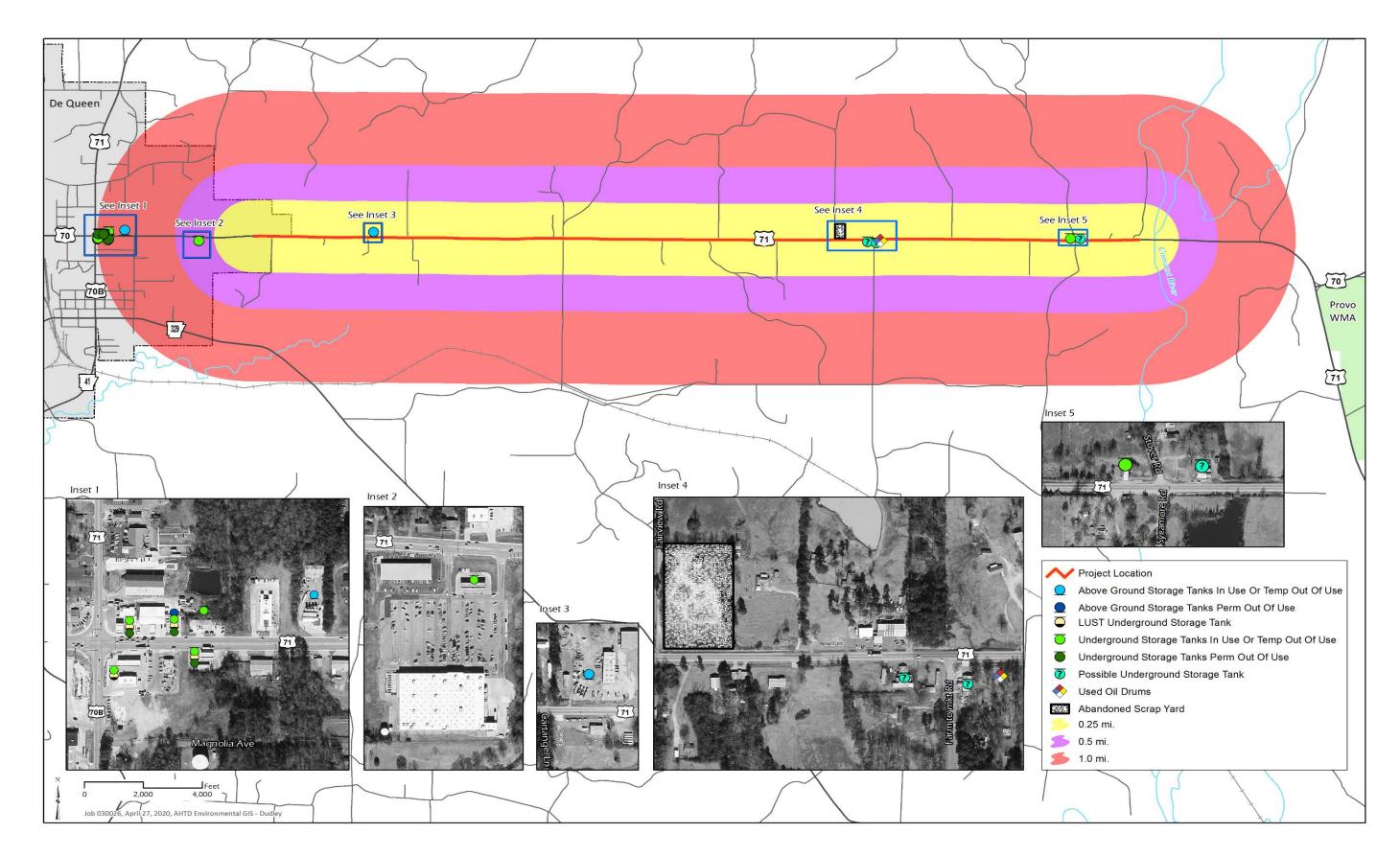


Figure 4 Hazardous Materials

There is an unknown number of tractor tires, and debris located within the proposed acquisition area east of Fairview Road (Station 263+50 - 266+75, 80 feet right of centerline, see Inset 4 of Figure 4). The actual number of tires could not be determined, due to heavy vegetation above the tires and the intermingling of the tires with the waste piles. The debris area is approximately 320 feet long, 33 feet wide and approximately 3-foot tall, calculating to approximately 1,200 cubic yards of debris. A Special Provision will accompany the contract to safely dispose of the large tires. The other debris can be properly disposed of at a Class 1 Landfill either by the property owner, our contractor, or state forces. Negotiations with the property owner will be required for this site.

Environmental database searches revealed one above ground storage tank (AST) located at the Sevier County Maintenance Facility (Station 423+40, 175 feet right of centerline, see Inset 3 on Figure 4). This AST will not be impacted by the project. In the ½ mile database search, three registered UST's were located at the gas station in front of the Wal-Mart Store (see Inset 2, Figure 4). The 1-mile query revealed 13 UST's and one AST located at or near the intersection of Highways 71, 70 and 70B (see Insets 1 and 2 of Figure 4). All of the UST's and AST's in the ¼, ½ and 1-mile query will not be impacted by the project. Only the one UST mentioned above and any additional tanks found in the suspect areas will be directly impacted.

The No Action Alternative would not impact any hazardous materials sites or involve the creation of hazardous materials.

If hazardous materials are identified, observed or accidentally uncovered by any ARDOT personnel, contracting company(s), or state regulating agency, it would be the ARDOT's responsibility to determine the type, size and extent of contamination. The ARDOT would identify the type of contaminant, develop a remediation plan, and coordinate disposal methods to be employed for the particular type of contamination. All remediation work would be conducted in conformance with the Arkansas Department of Environmental Quality (ADEQ), Environmental Protection Agency (EPA), and Occupational Safety and Health Administration (OSHA) regulations.

An asbestos survey by a certified asbestos inspector will be conducted on each building identified for demolition. If the survey detects the presence of any asbestos-containing materials, plans will be developed for the safe removal of these materials prior to demolition. All asbestos abatement work will be conducted in accordance with ADEQ, EPA, and OSHA asbestos abatement regulations.

3.9 Would any prime farmland be impacted by the project?

Alternative 1 would acquire approximately 12.98 acres of prime farmland. See Appendix H: NRCS-CPA-106 Form.

The No Action Alternative would not impact any prime farmland.

3.10 How would water resources, such as streams, be affected?

Surface water resources in the project area occur in rivers, streams and man-made lakes. Lake De Queen, built in the northwestern part of Sevier County, serves as the water supply for the City of De Queen, Arkansas. The Cossatot River to the east also serves as an additional water source for the city.

The project will directly impact five intermittent streams that are tributaries to Pepper, Bear and Buck Creek within the Cossatot River drainage. All jurisdictional Waters of the United States impacted by this project are located in the adjacent roadside ditches and associated cross drainage structures of Highway 71 (Figures 5 and 6). During construction, culverts will be extended and/or replaced and ditches relocated to the new roadside edge. Stream impacts are estimated at less than 0.1 acre of waters of the US at each crossing, resulting in a total of 0.2 acre of impacts.

The No Action Alternative would not affect any water resources

3.11 Would any wetlands be impacted by the project?

Total wetland impacts are estimated at 0.15 acre. The ARDOT proposes the use of 1.03 wetland credits as compensatory mitigation to offset the wetland impacts associated with this project. The wetland credits will be debited from ARDOT's Red Chute Mitigation Bank. Construction should be allowed under the terms of a Section 404 Nationwide Permit 14 for Linear Transportation Projects as defined in Federal Register 82 (4): 1860-2008 and Section 402-National Pollutant Discharge Elimination System (NPDES) permit. A pre-construction notification is required.

Wetland impacts will be included in the Section 404 permit application. The wetlands impacted by this project were formed as a result of the construction of the present highway. Drainage patterns changed by the introduction of the highway created small wetland pockets along roadside ditches

What is prime farmland?

Prime Farmland is defined by the USDepartment of Agriculture as land that has combination the best of physical and chemical characteristics for the production of crops. Impacts to prime farmland occur when it is converted to highway right of way.

What is an intermittent stream?

Intermittent streams are those that flow for at least three months out of the year, but experience annual drying, usually during the hot dry summer months.

What is a wetland?

Wetlands are areas typically inundated or saturated by surface water or groundwater to the extent that they can support vegetation adapted for life in wet soil conditions.

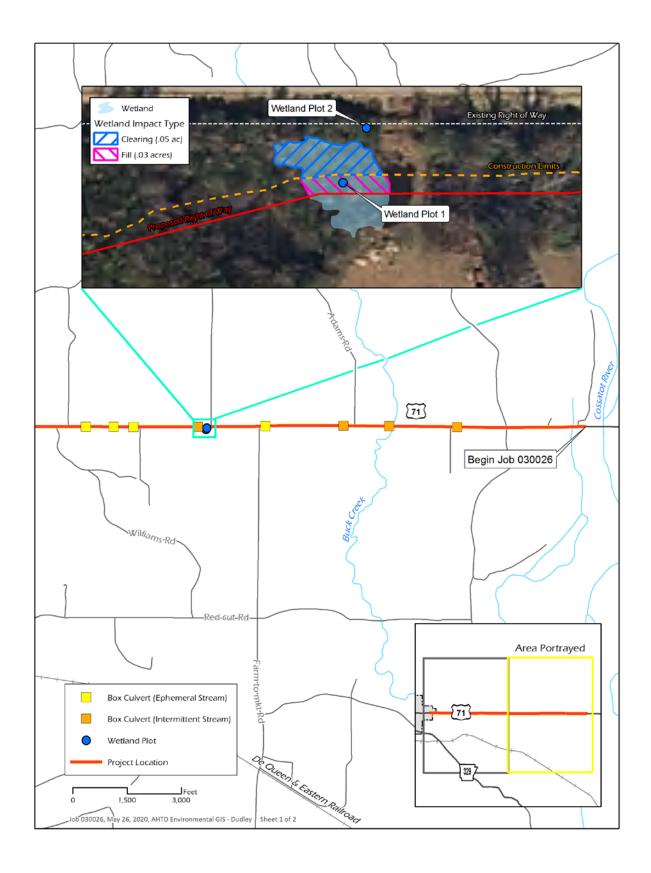


Figure 5 Streams and Wetlands (1 of 2)

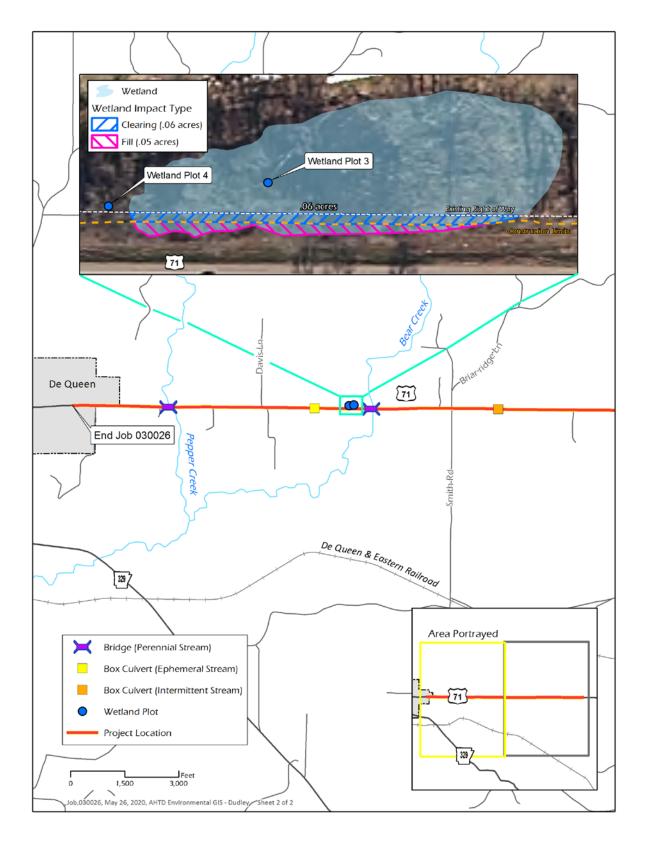


Figure 6 Streams and Wetlands (2 of 2)

3.12 Would any protected species be impacted by the project?

The official species list obtained from the US Fish and Wildlife Service's Information for Planning and Consultation website identified the northern long-eared bat (*Myotis septentrionalis*), leopard darter (*Percina pantherina*), Rabbitsfoot (*Theliderma cylindrica*) and Scaleshell (*Leptodea leptodon*) as federally listed species potentially occurring within the project area. A "may effect, but not likely to adversely affect" determination was made for the northern long-eared bat. Due to a lack of habitat and distance to known occurrences, it has been determined that the proposed project will have "no effect" on the remaining federally listed species. The Species List and Verification Letter can be found in Appendix I: Additional Correspondence.

The No Action Alternative would not affect endangered species.

3.13 Will public/private wellheads be impacted?

The project will require a Drinking Water Protection-Special Provision to lessen impacts to a public drinking water system's wellhead protection area. This source within the project area is the Cossatot River, which is also a water supply for the City of De Queen waterworks.

If any permanent impacts to private drinking water sources occur due to this project, the ARDOT 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.

The No Action Alternative would not affect any public or private wellheads.

3.14 How would the project affect the natural environment?

The project lies within the southern portion of Sevier County and is within the Cretaceous Western Coastal Plain Major Land Resource Area, which is characterized by heavily dissected areas of deep marine sediments that were deposited during the Cretaceous age. These sediments are unconsolidated and range from clayey to loamy in texture. Antoine, De Queen, Peanutrock, and Pikecity soils dominate the upper portion of these sediments. The DeAnn, Japany, and Sumter soils dominate the clay, marl, and chalk areas.

Drainage in the project area is generally toward the south and east. In the southern half of the county, the natural drainage system consists mainly of a series of intermittent and perennial streams that flow into the Little, Cossatot, and Saline Rivers that form Lake Millwood. What is the difference between threatened and endangered species?

An endangered species is one that is in danger of extinction throughout all or a significant portion of its range. Endangered species receive the highest level of protection. A threatened species is one that is likely to become endangered in the near future. Natural vegetation historically was oak-hickory-pine forest. In the upland forests, shortleaf pine is present, while loblolly pine is native only to wet lowland sites such as riparian areas. Current vegetation is a combination of oak-hickory-pine forest, oak-pine forest, oak forest, loblolly-shortleaf pine forest or pine-oak forest. In wetlands, sweetgum (*Liquidambar styraciflua*), willow oak (*Quercus phellos*) and water oak (*Quercus nigra*) are the common tree species.

Alternative 1 would clear approximately 11.3 acres of oak-hickory and oak-hickory-pine upland forests

The No Action Alternative would not affect the existing vegetation adjacent to Highway 71.

3.15 Will floodplain impacts be affected by the project?

The project was reviewed to identify any encroachments into special flood hazard areas (SFHA's), also known as the 100-year floodplain, as shown on the Flood Insurance Rate Maps issued by the Federal Emergency Management Agency. The City of De Queen and Sevier County both participate in the National Flood Insurance Program. Four SFHA areas were identified within the project area, these were the related floodplain areas of Pepper Creek and Bear Creek. All areas are within Zone A, SFHA's.

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. Adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project. None of the encroachments will constitute a substantial floodplain encroachment or risk to property or life.

The No Action Alternative would not affect any floodplains.

3.16 What other resources were examined but not found to be present or impacted?

Air Quality

This project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special mobile source air toxic (MSAT) concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause a meaningful increase in MSAT impacts of the project from that of the no-build alternative.

What is a floodplain?

Floodplains are land areas that become covered by water in a flood event. 100-year floodplains are areas that would be covered by a flood event that has a 1% chance of occurring (or being exceeded) each year, also known as a 100vear flood. This is the floodplain commonly used for regulatory insurance and purposes.

What is air quality attainment?

Areas are considered in attainment for air pollutants when measured levels are below the National Ambient Air Quality Standards set by the U.S. Environmental Protection Agency.

Wild and Scenic Rivers

There is no federal or state regulated waterbodies impacted by this project.

Environmental Justice

Environmental Justice refers to social equity in bearing the burden of adverse environmental impacts. In the past, minorities and low-income populations have experienced disproportionate impacts. The No-Action Alternative consists of no improvements being made to the existing Highway 71 while sustaining routine maintenance. Due to increased truck traffic, traffic delays and congestion would remain without widening Hwy. 71. There would be no impacts to residents, tenants and business owners.

Alternative 1 follows along existing Highway 71, passing through areas that are primarily business, commercial, and residential properties. This alignment will not sever any subdivisions and will not disrupt community services and facilities located along Highway 71.

While some impacts may be borne by those populations, the level of adverse impacts would not be disproportionately high. Based on the above discussion and analysis (U.S. Census Bureau, field observations, and door to door outreach), the proposed project will not cause disproportionately high and adverse effects on any minority or lowincome populations in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23. No further EJ analysis is required.

3.17 What are indirect and cumulative effects, and does the project have any?

Indirect Effects

An indirect effect is any reasonably foreseeable effect that may be caused by the project that would occur in the future or outside of the project area. Widening Highway 71 could induce additional development east of the City of De Queen, but this area is currently experiencing minimal growth which is likely to continue under either Alternative 1 or the No Action Alternative. The No Action Alternative involves no work other than regular maintenance and would not result in any indirect effects other than worsening traffic flow and safety concerns as traffic volumes increase over the 20-year planning period.

Potential indirect impacts to streams outside the construction limits include increased turbidity from sediments leaving the construction site.

What is Environmental Justice and Title VI?

An Environmental Justice evaluation determines whether low-income minority or populations would suffer disproportionately high and adverse effects from an action. Title VI of the Civil Rights Act of 1964 (Title VI) prohibits discrimination on the basis of race, color, sex, national origin, religion or disability under any program or activity receiving Federal financial assistance

Cumulative Effects

Cumulative effects result from the total effects of a proposed project, when added to other past, present, and reasonably foreseeable future projects or actions. Cumulative effects are studied so that the public, decision-makers, and project proponents take time to consider the "big picture" effects a project could have on the community and environment.

The ARDOT does have two other scheduled jobs in the area. One would improve Highway 71 west of De Queen, and the other would improve Highway 41 south of De Queen. No other reasonably foreseeable public or private projects are known to be in development in the project area. With additional right of way needed for these projects, impacts to additional property owners and businesses will occur. These two additional projects should improve traffic flow, LOS and increased safety for the motoring public. Neither Alternative 1 nor the No Action Alternative is expected to contribute to any significant cumulative impacts on any natural, cultural, social, or economic resources in the area.

Chapter 4 – Recommendations

What's in Chapter 4?

Chapter 4 contains the results and conclusions of this Environmental Assessment.

4.1 What are the results of this EA?

The environmental analysis of the proposed project did not identify any significant impacts to the natural and social environment as a result of the No Action Alternative or Alternative 1. A summary of the impacts of these alternatives can be found in Table 6. Alternative 1 has been identified as the Preferred Alternative, because it meets the project's purpose and need and minimizes impacts.

The ARDOT's standard commitments associated with relocation procedures, hazardous waste abatement, cultural resources discovery, and control of water quality impacts have been made in association with this project. They are as follows:

- Relocation procedures are located in Appendix E: Conceptual Stage Relocation Study.
- If hazardous materials, unknown illegal dumps, or underground storage tanks are identified or accidentally uncovered by ARDOT personnel or its contractors, the ARDOT will determine the type, size, and extent of the contamination according to the ARDOT's response protocol. The ARDOT in cooperation with the ADEQ will determine the remediation and disposal methods suited for that particular type of contamination. The proposed project will comply with local, state, and federal laws and regulations.
- An asbestos survey will be conducted by a certified asbestos inspector on each building slated for acquisition and demolition. 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 ADEQ, EPA, and OSHA asbestos abatement regulations.
- If prehistoric sites are impacted, consultation led by FHWA with the appropriate Native American Tribe will be conducted and the site(s) 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 NHRP and avoidance is not possible, then site-specific treatment plans will be prepared, and data

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

- The ARDOT 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-NPDES, and Section 404-Permit for Dredged or Fill Material.
- A Water Pollution Control Special Provision will be incorporated into the contract to minimize potential water quality impacts.
- If any permanent impacts to private drinking water sources occur due to this project, the ARDOT will take appropriate action to mitigate these impacts.
- A wildflower seed mix will be included in the permanent seeding for the project.

4.2 Is the NEPA process finished?

After this EA is signed by the FHWA and approved for public dissemination, a Location and Design Public Hearing will be held.

After a review of comments received from citizens, public officials, and public agencies, a FONSI document will be prepared by the ARDOT and submitted to the FHWA. Approval of the FONSI by the FHWA will identify the Selected Alternative and conclude the NEPA process.

Table 6 Alternative Impact Comparisons								
Alternative	Total Project Cost (2018 dollars)	Construction Cost (2018 dollars)	Other Cost ¹ (2018 dollars)	Right of Way (acres)	Relocations	Noise Receptors Impacted	Wetland Impacts (acres)	Stream Impacts (linear feet)
No Action	0	0	0	0	0	0	0	0
Alternative 1	42.6 million	30.5 million	12.1 million	51.0	2 residential owners 1 residential tenant, 5 businesses, 1 landlord business	22	0.15	<0.1 acre per crossing

¹Other cost includes right of way acquisition costs, business, non-profit, landlord relocation costs, and utility relocation costs.

Reference Pages

Acronyms

ADEQ	Arkansas Department of Environmental Quality
ADT	Average Daily Traffic
AHPP	Arkansas Historic Preservation Program
ARDOT	Arkansas Department of Transportation
AST	Aboveground Storage Tank
BMP	Best Management Practices
EA	Environmental Assessment
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
KA	Killed in Accident
LOS	Level of Service
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration
PE	Preliminary Engineering
ROW	Right of Way
SHPO	State Historic Preservation Officer
US	United States
UST	Underground Storage Tank
USFWS	United States Fish and Wildlife Service
vpd	Vehicles per Day

References

- Arkansas Department of Transportation / ArcGIS Online. Esri Geospatial Cloud, Accessed 7 April 2020. <u>http://ardot.maps.arcgis.com/home/webscene/viewer.html?webscene=2c1b936c8e7241f4acb</u> 0b450c575fa1d
- Arkansas Geological Survey. Stratigraphic Descriptions and Geologic Web Map of Arkansas. Accessed 6 April 2020. <u>https://www.geology.arkansas.gov/maps-and-data/geologic-maps.html</u>
- DHHS. Department of Health and Human Services 2019 Poverty Guidelines. <u>https://aspe.hhs.gov/2019-poverty-guidelines</u>
- DOT, Department of Transportation, Federal Highway Administration, Office of Planning, Environment, & Realty (HEP) http://www.fhwa.dot.gov/planning/national_highway_system/
- EPA. Environmental Protection Agency, Memorandum of Understanding on Environmental Justice and Executive Order 12898. <u>https://www.epa.gov/sites/production/files/2015-02/documents/ej-mou-2011-08.pdf</u>
- Miser, H.D., and Purdue, A.H., 1929, Geology of the De Queen and Caddo Valley Quadrangles, Arkansas, U.S. Geological Survey Bulletin 808, 195p.
- TRB. Transportation Research Board. Highway Capacity Manual 6th Edition: A Guide for Multimodal Mobility Analysis (HCM 6)
- U.S. Census Bureau. Arkansas Quick Facts. U.S. Department of Commerce. Sevier County. <u>http://www.census.gov/quickfact/table/PST045215/05141,05</u>. Accessed 7 April 2020.
- U.S. Census Bureau. American FactFinder City of De Queen, Arkansas. <u>https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF</u> <u>https://www.census.gov/quickfacts/fact/table/De Queencityarkansas/PST045218</u>

Appendix A: Level of Service Descriptions

APPENDIX A

DESCRIPTIONS OF LEVEL OF SERVICE

Two-Lane Highway

LOS A - At LOS A, motorists experience high operating speeds and little difficulty in passing. A small amount of platooning would be expected. Drivers should be able to maintain operating speeds close or equal to the free-flow speed (FFS) of the facility.

LOS B - At LOS B, passing demand and passing capacity are balanced. Platooning becomes noticeable. It becomes difficult to maintain FFS operation, but the speed reduction is still relatively small.

LOS C - At LOS C, most vehicles are traveling in platoons. Speeds are noticeably reduced on all three classes of highway.

LOS D - At LOS D, platooning increases significantly. Passing demand is high but passing capacity approaches zero. A high percentage of vehicles are now traveling in platoons, and percent time-spent-following (PTSF) is quite noticeable. The fall-off from FFS is now significant.

LOS E - At LOS E, demand is approaching capacity. Passing is virtually impossible, and PTSF is more than 80%. Speeds are seriously reduced. Speed is less than two-thirds the FFS. The lower limit of this LOS represents capacity.

LOS F - LOS F exists whenever demand flow in one or both directions exceeds the capacity of the segment. Operating conditions are unstable, and heavy congestion exists on all two-lane highways.

APPENDIX A

DESCRIPTIONS OF LEVEL OF SERVICE

Multi-Lane Highway

LOS A - LOS A describes free-flow operations where FFS prevails and vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream. The effects of incidents or point breakdowns are easily absorbed.

LOS B - LOS B represents reasonably free-flow operations where FFS is maintained. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical psychological comfort provided to drivers is still high. The effects of minor incidents and point breakdowns are still easily absorbed.

LOS C - LOS C provides for flow with speeds near the FFS. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver. Minor incidents may still be absorbed, but the local deterioration in service quality will be significant. Queues may be expected to form behind any significant blockages.

LOS D - LOS D is the level at which speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited and drivers experience reduced physical and psychological comfort levels. Even minor incidents can be expected to create queuing, because the traffic stream has little space to absorb disruptions.

LOS E - LOS E describes operation at capacity. Operations at this level are highly volatile because there are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption to the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. At capacity, the traffic stream has no ability to dissipate even the most minor disruption, and any incident can be expected to produce a serious breakdown and substantial queuing. The physical and psychological comfort afforded to drivers is poor.

LOS F - LOS F is determined when the demand flow rate exceeds capacity. At this level, traffic flow has broken down. Whenever queues due to a breakdown exist, they have the potential to extend upstream for considerable distances.

Appendix B: Public Involvement Meeting Synopsis

PUBLIC INVOLVEMENT SYNOPSIS

Job Number 030026 Cossatot River – DeQueen (Hwy. 71) Sevier County Tuesday, August 20, 2019

An open forum public involvement meeting for the proposed Cossatot River – DeQueen (Hwy. 71) project was held at the Memorial Missionary Baptist Church (Fellowship Hall) in DeQueen, Arkansas from 4:00 – 7:00 p.m. on Tuesday, August 20, 2019. Efforts to involve minorities and the public in the meeting included:

- Display advertisement placed in the *DeQueen Bee* on Thursday, August 8, 2019 and Thursday, August 15, 2019.
- Public Service Announcements ran on KDQN 1390 AM from Thursday August 15 through Tuesday, August 20, 2019.
- Outreach letters mailed to public officials.
- Distribution of flyers in the project area.

The following information was available for inspection and comment. Small-scale copies of the displays are attached.

- Displays included two aerial photographs at a scale of 1" = 898', illustrating the project location.
- Preliminary design of the proposed project at a scale of 1" = 200'.
- Lap top computer showing the same design plans.

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

TABLE 1Public ParticipationTotalsAttendance at meeting (including ARDOT
staff)78Comments received18Letters received1Total comments received19

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

ARDOT staff reviewed all comments received and evaluated their contents. The summary of comments listed below reflects the personal perception or opinion of the person or organization making the statement. The sequencing

Table 2				
Survey Results	Totals			
Feels that the proposed widening project is needed.	14			
Does not feel that the proposed widening project is needed?	2			
Knowledge of any historical sites, family cemeteries, or archaeological sites in the project area?	3			
Knowledge of environmental constraints in the project area.	1			
Home or property limitations	3			
Suggestions to better serve the needs of the community	11			
Beneficial impacts due to the proposed project	12			
Adverse impacts due to the proposed project	6			

The following is a compilation of comments concerning issues associated with the project.

- Two commenters noted that the golf course was founded in 1927 and has historical significance to the community.
- A private cemetery was noted by David & Judy Jenkins and wishes to have access remain at this site. The cemetery will not be impacted.
- Two individuals wanted traffic lights installed at the golf course entrance.
- Four businesses wanted to move the project north to lessen impacts to their businesses and property. The businesses were a liquid petroleum gas dealer (Southern LP Gas), a seasonal fruit stand (The Peach Stand DQ), a forestry equipment facility (Suttle Equipment), and a horse training facility.
- One individual was concerned about sewer system impacts.

Job Number 030026- PI Synopsis August 20, 2019 Page 3 of 3

A listing of general comments concerning the proposed project follows:

- "Too close to one of the greens"
- "The narrow bridge replacements will be wonderful!"
- "Move the road to the north."
- "Maybe install an intersection light or signage at the golf course intersection."
- "Encourage I-49 to use this area of constructed highway."
- "Better highways increase property values."

Attachments:

Public handouts, including blank comment form Small-scale display copies

RJ DN

TT:tt

ARKANSAS DEPARTMENT OF TRANSPORTATION (ARDOT) CITIZEN COMMENT FORM

ARDOT JOB NUMBER 030026 COSSATOT RIVER – DE QUEEN (HWY. 71) SEVIER COUNTY

LOCATION: MEMORIAL MISSIONARY BAPTIST CHURCH (FELLOWSHIP HALL) 802 E. VANDERVOORT AVE. DE QUEEN, AR 4:00 – 7:00 P.M. TUESDAY, AUGUST 20, 2019

Make your comments on this form and leave it with ARDOT personnel at the meeting or mail it by 4:30 p.m. on Wednesday, September 4, 2019 to: Arkansas Department of Transportation, Environmental Division, P.O. Box 2261, Little Rock, AR, 72203-2261. Email: <u>environmentalpimeetings@ardot.gov</u>.

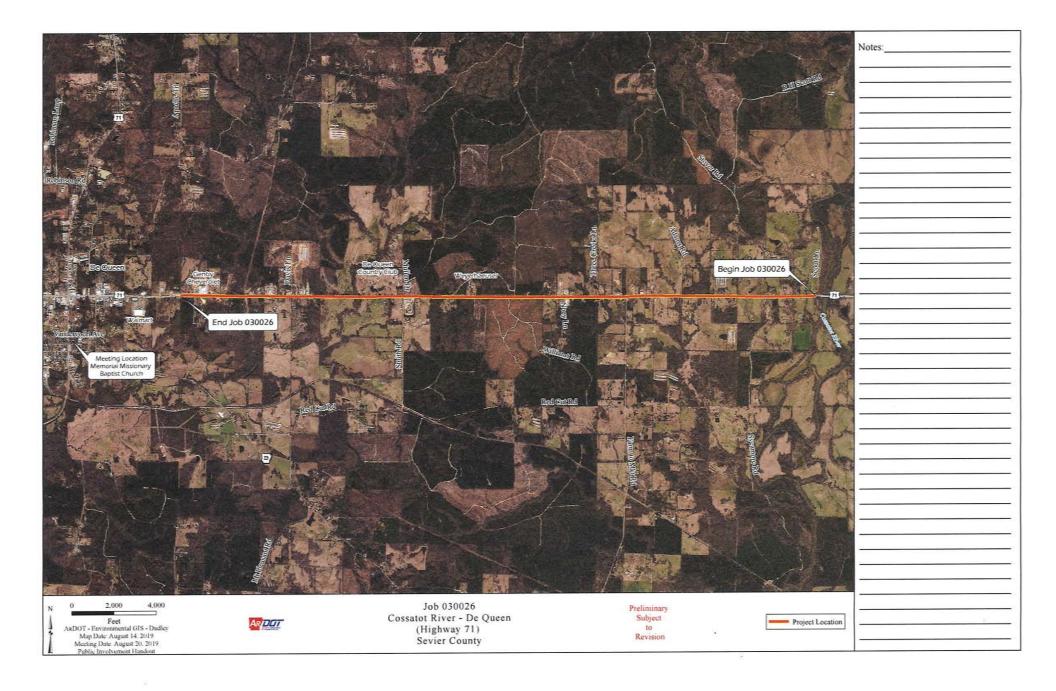
Yes	No	
		Do you feel there is a need to widen Highway 71 between the Cossatot River and the City of De Queen in Sevier County? Comment (optional)
		Do you feel that the proposed project will have any impacts (Beneficial or Adverse) on your property and/or community (economic, environmental, social, etc.)? Please explain.
		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 ARDOT staff.

(Continue on Back)

	No			E
		Does your home or property septic systems, that the Dep		
you are provide	a pro inform	essary for the ARDOT to cont perty owner along or adjace ation below. Thank you.	ent to the route under co	nsideration, pleas
			Phone: ()	
	3			
E-mail:				







Appendix C: Section 106 Correspondence



The Department of Arkansas Heritage

Mike Huckabee, Governor Cathie Matthews, Director

Arkansas Arts Council

Arkansas Natural Heritage Commission

Delta Cultural Center

Historic Arkansas Museum *

> Mosaic Templars Cultural Center

[™] Old State House Museum



Arkansas Historic Preservation Program

1500 Tower Building 323 Center Street Little Rock, AR 72201 (501) 324-9880 fax: (501) 324-9184 tdd: (501) 324-9811 e-mail: info@arkansaspreservation.org website: www.arkansaspreservation.org June 8, 2005

Mr. Marion Butler Division Head Environmental Division Arkansas State Highway and Transportation Department P.O. Box 2261 Little Rock, Arkansas 72203-2261

RE: Sevier County – General Section 106 Review – FHwA Report Entitled "A Cultural Resources Survey of AHTD Job Number 30026, Redwing – DeQueen, Sevier County, Arkansas" AHPP Project Number 56360

Dear Mr. Butler: Marin

My staff has reviewed the referenced cultural resources survey report. It is thorough, comprehensive, and well written. We also concur with the findings and conclusions presented therein. Specifically, no properties eligible for inclusion in the National Register of Historic Places are located in the construction area. Therefore, we have no objection to the proposed project and issue a no effect finding on this undertaking.

Thank you for your interest and concern for the cultural heritage of Arkansas. If you have any questions, please contact George McCluskey of my staff at (501) 324-9880.

Sincerely Ken Grunewald Deputy State Historic Preservation Officer

cc: Federal Highway Administration Caddo Nation Arkansas Archeological Survey

> RECEIVED AH T.D.

JUN 9 2005

ENVIRONMENTAL DIVISION

An Equal Opportunity Employer





Federal Highway Administration Arkansas Division

December 13, 2018

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – DeQueen (S) Sevier County HDA-AR

Mr. Everett Bandy Tribal Historic Preservation Officer Quapaw Nation P.O. Box 765 Quapaw, OK 74363-0765

Dear Mr. Bandy:

This letter is written in order to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Quapaw Nation regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) plans to widen 5.68 miles of State Highway 71 in Sevier County (see project location map). To date, a survey of existing records regarding previously recorded archeological sites has been conducted, and several historic archeological sites that appear to date to around the turn of the twentieth century and one Native American archeological site (3SV274) have been documented adjacent to the project (see attached site form). In an effort to further assess the sites for intact deposits and/or features and to identify any additional unknown archeological sites within the proposed project area, the ARDOT is planning to conduct a cultural resources survey of the project area.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Nation. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

Randal Looney Environmental Coordinator



Federal Highway Administration Arkansas Division

December 13, 2018

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – DeQueen (S) Sevier County HDA-AR

Dr. Ian Thompson Tribal Historic Preservation Officer & NAGPRA Program Coordinator Choctaw Nation of Oklahoma P.O. Box 1210 Durant, OK 74702

Dear Dr. Thompson:

This letter is written in order to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Choctaw Nation of Oklahoma regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) plans to widen 5.68 miles of State Highway 71 in Sevier County (see project location map). To date, a survey of existing records regarding previously recorded archeological sites has been conducted, and several historic archeological sites that appear to date to around the turn of the twentieth century and one Native American archeological site (3SV274) have been documented adjacent to the project (see attached site form). In an effort to further assess the sites for intact deposits and/or features and to identify any additional unknown archeological sites within the proposed project area, the ARDOT is planning to conduct a cultural resources survey of the project area.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Nation. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely

Randal Looney Environmental Coordinator



Administration

Arkansas Division

December 13, 2018

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – DeQueen (S) Sevier County HDA-AR

Mr. Phil Cross Acting Tribal Historic Preservation Officer Caddo Nation P.O. Box 487 Binger, OK 73009

Dear Mr. Cross:

This letter is written in order to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Caddo Nation regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) plans to widen 5.68 miles of State Highway 71 in Sevier County (see project location map). To date, a survey of existing records regarding previously recorded archeological sites has been conducted, and several historic archeological sites that appear to date to around the turn of the twentieth century and one Native American archeological site (3SV274) have been documented adjacent to the project (see attached site form). In an effort to further assess the sites for intact deposits and/or features and to identify any additional unknown archeological sites within the proposed project area, the ARDOT is planning to conduct a cultural resources survey of the project area.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Nation. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

Randal Looney Environmental Coordinator



Federal Highway Administration

Arkansas Division

December 13, 2018

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – DeQueen (S) Sevier County HDA-AR

Dr. Andrea Hunter **Tribal Historic Preservation Officer** The Osage Nation P.O. Box 779 Pawhuska, OK 74056

Dear Dr. Hunter:

This letter is written in order to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the Osage Nation regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Nation.

The Arkansas Department of Transportation (ARDOT) plans to widen 5.68 miles of State Highway 71 in Sevier County (see project location map). To date, a survey of existing records regarding previously recorded archeological sites has been conducted, and several historic archeological sites that appear to date to around the turn of the twentieth century and one Native American archeological site (3SV274) have been documented adjacent to the project (see attached site form). In an effort to further assess the sites for intact deposits and/or features and to identify any additional unknown archeological sites within the proposed project area, the ARDOT is planning to conduct a cultural resources survey of the project area.

Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Nation. If you have any guestions or need additional information, please contact me at (501) 324-6430.

Sincerely

Randal Loonev Environmental Coordinator



Arkansas Division

December 13, 2018

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – DeQueen (S) Sevier County HDA-AR

Ms. Sheila Bird Tribal Historic Preservation Officer United Keetoowah Band of Cherokee Indians in Oklahoma P.O. Box 746 Tahleguah, OK 74465

Dear Ms. Bird:

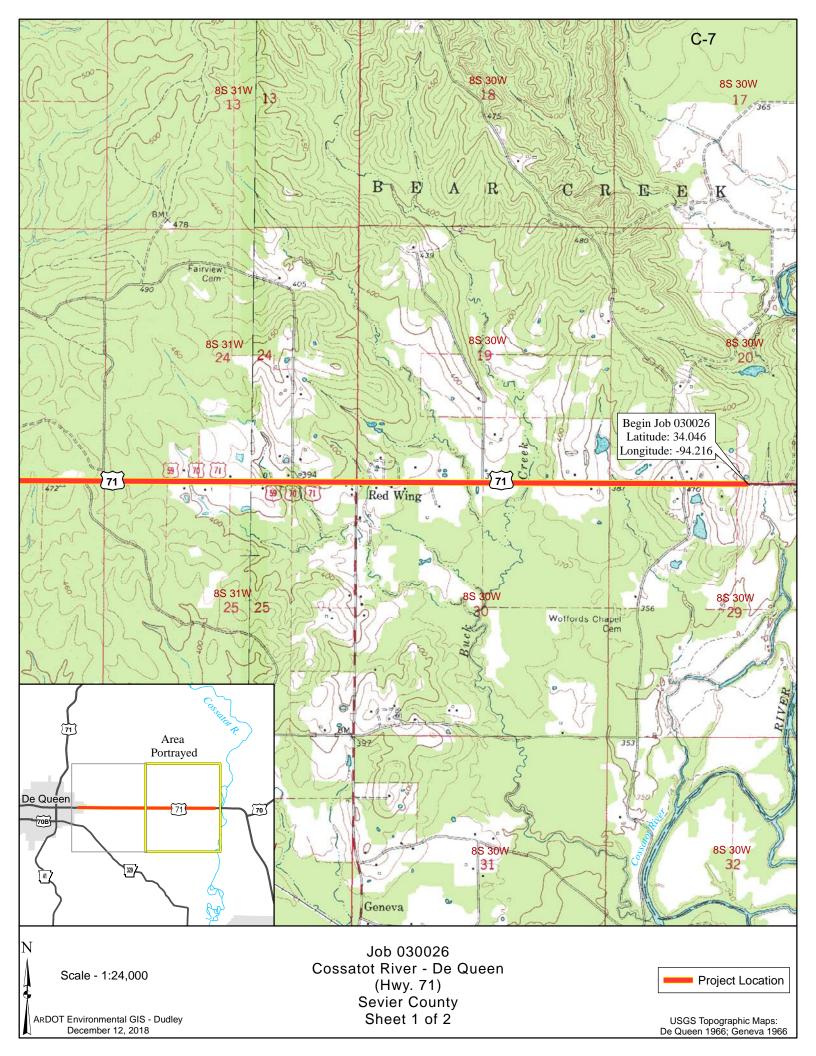
This letter is written in order to initiate consultation between the Federal Highway Administration, Arkansas Division Office and the United Keetoowah Band of Cherokee Indians in Oklahoma regarding a federal-aid highway project that may potentially affect ancestral lands or properties that may be of religious or cultural significance to your Band.

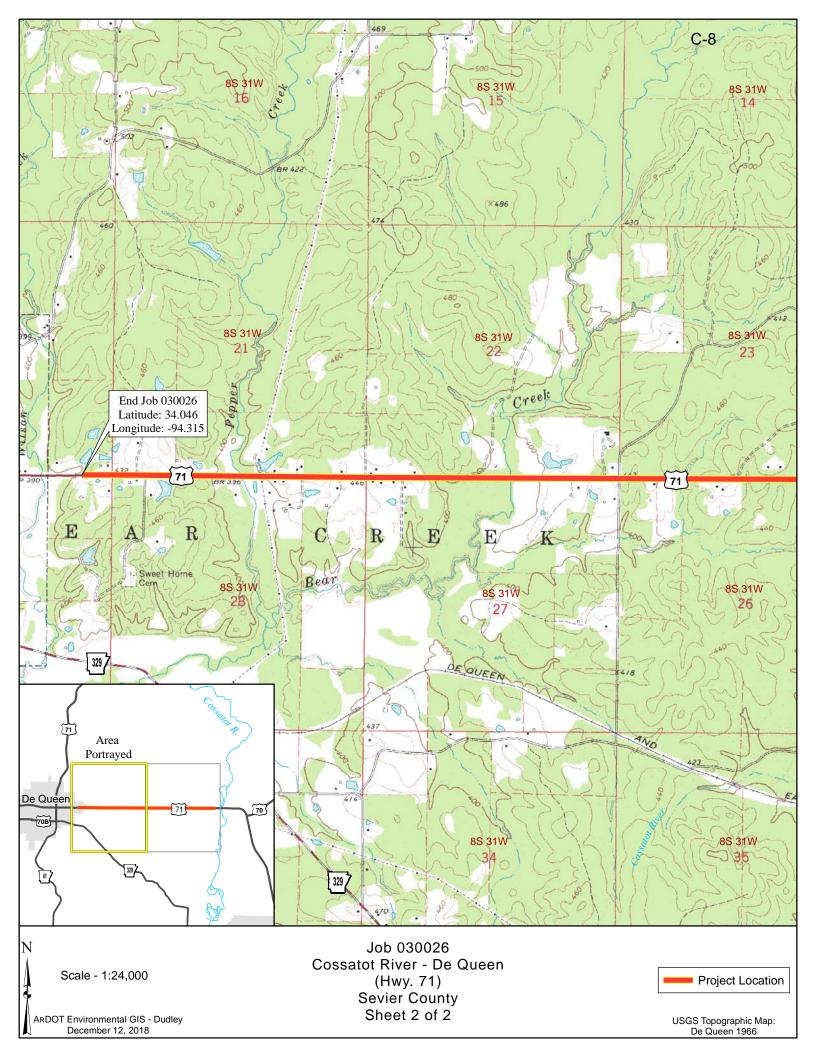
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Please review this information and notify us of any constraints or concerns that you may have regarding this undertaking. We would greatly appreciate your input regarding not only this project but also sites or properties in the immediate area that might be of cultural or religious significance to your Band. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

Randal Looney Environmental Coordinator





Couser, Felicia

From: Sent: To: Subject: Boykin, Kristina Thursday, December 27, 2018 12:28 PM Couser, Felicia FW: ArDOT Job 030026, Cossatot Riber - DeQueen (S) Sevier County, HDA-AR

From: Daniel R. Ragle [mailto:dragle@choctawnation.com]
Sent: Thursday, December 27, 2018 11:43 AM
To: Looney, Randal <Randal.Looney@dot.gov>
Cc: Boykin, Kristina <Kristina.Boykin@ardot.gov>
Subject: RE: ArDOT Job 030026, Cossatot Riber - DeQueen (S) Sevier County, HDA-AR

Thank you for the correspondence regarding the above referenced project. We are unaware of any Choctaw historic/sacred sites located within the project's APE. The Choctaw Nation of Oklahoma requests a copy of the survey report, once one is available. If you have any questions, please contact me by email.

Daniel Ragle

Compliance Review Officer Historic Preservation Dept. Choctaw Nation of Oklahoma (800) 522-6170 Ext. 2727 dragle@choctawnation.com www.choctawnation.com www.choctawnationculture.com



This message is intended only for the use of the individual or entity to which it is addressed and may contain information that is privileged, confidential and exempt from disclosure. If you have received this message in error, you are hereby notified that we do not consent to any reading, dissemination, distribution or copying of this message. If you have received this communication in error, please notify the sender immediately and destroy the transmitted information. Please note that any view or opinions presented in this email are solely those of the author and do not necessarily represent those of the Choctaw Nation.

QUAPAW NATION

P.O. Box 765 Quapaw, OK 74363-0765

(918) 542-1853 FAX (918) 542-4694

January 15, 2019

Arkansas State Highway and Transportation Department P.O. BOX 2261 Little Rock, Arkansas 72203-2261

Re: ArDOT Job 030026 Cossatot River - DeQueen (S), Sevier County, Arkansas

To whom it may concern,

The Quapaw Nation Historic Preservation Office has received and reviewed the information provided for the proposed ArDOT Job 030026 Cossatot River – DeQueen (S), Sevier County, Arkansas and concurs with your recommendations for this project to conduct a cultural resource survey.

In accordance with the National Historic Preservation Act, (NHPA) [16 U.S C. 470 §§ 470-470w-6] 1966, undertakings subject to the review process are referred to in S101 (d) (6) (A), which clarifies that historic properties may have religious and cultural significance to Indian tribes. Additionally, Section 106 of NHPA requires Federal agencies to consider the effects of their actions on historic properties (36 CFR Part 800) as does the National Environmental Policy Act (43 U.S.C. 4321 and 4331-35 and 40 CFR 1501.7(a) of 1969).

The Quapaw Nation has vital interests in protecting its historic and ancestral cultural resources. We do not anticipate that this project will adversely impact any cultural resources or human remains protected under the NHPA, NEPA, or the Native American Graves Protection and Repatriation Act. If however, artifacts or human remains are discovered during project construction, we ask that work cease immediately and that you contact the Quapaw Nation Historic Preservation Office.

Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Quapaw Nation on this matter.

Sincerely,

Everett Bande

Tribal Historic Preservation Of Quapaw Nation P.O. Box 765 Quapaw, OK 74363 (w) 918-238-3100

ARDOT

JAN 1 8 2019

ENVIRONMENTAL DIVISION



C-11 RECEIVED ARDOT

JAN 28 2019

ENVIRONMENTAL DIVISION

Osage Nation Historic Preservation Office

AVYYYY ROCU RUBON

Date: January 18, 2019

File: 1819-2504AR-12

RE: AHTD, 030026, Cossatot River - DeQueen (S), Sevier County, Arkansas

Arkansas Highway & Transportation Department Randal Looney 700 West Capitol Ave, Suite 3130 Little Rock, AR 72201

Dear Mr. Looney,

The Osage Nation Historic Preservation Office has received notification and accompanying information for the proposed project listed as AHTD, 030026, Cossatot River - DeQueen (S), Sevier County, Arkansas. There are no known Osage cultural resources within the project area. This office looks forward to future updates and reviewing the final report.

Should you have any questions or need any additional information, please feel free to contact me at the number listed below. Thank you for consulting with the Osage Nation on this matter.

Sincerely,

unic Junker James Munkres

Archaeologist



JAN 24 2019

FHWA ARKANSAS



United Keetoowah Band **Of Cherokee Indians in Oklahoma Office of Historic Preservation** P.O. Box 746 • Tahlequah, OK 74465 18263 W Keetoowah Circle • Tahlequah, OK 74464 Phone: (918) 871-2800 • Fax: (918) 414-4000 www.ukb-nsn.gov



February 12, 2019

RE: ARDOT Job 30026

To Whom It May Concern:

Thank you for consulting with the United Keetoowah Band of Cherokee Indians in Oklahoma (UKB). This letter serves as notification of receipt of your correspondence of December 13, 2019. In accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. 470f), and implementing regulation, 36 CFR 800, "Protection of Historic Properties" the UKB is responding to your request for consultation on the project in Sevier County, Arkansas.

In order to meet the federal Section 106 requirements and thoroughly review a project within 30 days, our office must receive the following:

- Name of Project with brief description of ground disturbing work
- Geographic Coordinates
- County
- State
- Listing of any Historic Properties within a half mile of the project
- Any supporting shapefiles of the project APE
- Cultural Survey Report
- Principal Investigator Name

At the end of this letter, I have added our Section 106 Consultation Procedures and Cultural Resource Survey Report Standards for your convenience.

Please note that these comments are based on information available to us at the time of the project review. We reserve the right to revise our comments as information becomes available.

If you have any questions or concerns, please contact me by phone or by email.

Thank You, Brin M. Mongoson

Erin Thompson Tribal Archaeologist/NAGPRA Coordinator United Keetoowah Band of Cherokee 18263 W. Keetoowah Circle Tahlequah, OK 74464 918-871-2838 ethompson@ukb-nsn.gov



FHWA

RECEIVED

FEB 2 1 2019

ENVIRONMENTAL DIVISION



United Keetoowah Band Of Cherokee Indians in Oklahoma Office of Historic Preservation P.O. Box 746 • Tahlequah, OK 74465 18263 W Keetoowah Circle • Tahlequah, OK 74464



Phone: (918) 871-2800 • Fax: (918) 414-4000 www.ukb-nsn.gov

Section 106 Consultation Procedures

The United Keetoowah Band of Cherokee Indians in Oklahoma Historic Preservation Office has developed the following consultation procedures for all Section 106 projects identified as federal undertakings.

Please submit:

- 1. A 1-page cover letter with the following information:
 - a. Project Number (include on all correspondence)
 - b. Project Name, City, County, and State
 - c. Project Type
 - i. Explanation of ground disturbance
 - d. Geographic Coordinates in WGS84 Latitude and Longitude
 - e. Contact information including individual's name, address, phone, fax, and email
 - f. Principal Investigator for survey report including address, phone, fax, and email
- 2. Professional cultural/archaeological survey report including curriculum vitae for all archaeologists who conduct the field surveys and produce the cultural survey reports.
- 3. Aerial and/or color USGS topographic maps locating project area within a) state, b) county, and c) local area
- 4. Aerial, color USGS topographic, planimetric maps specifically locating
 - a. 0.5 or 1.0 mile APE study area
 - b. Location of archaeological and historic sites in the APE and in close proximity to the APE
- 5. Project site plan maps depicting labeled shovel test locations. Do not submit hand drawn or hand annotated maps. The minimum shovel test density is one every 30 m for negatives. Positive shovel test densities should be every 15m until two negatives are excavated in order to delineate site boundaries. The minimum width for a shovel test is 30 cm. Shovel test minimum depth is to 30 cm below surface, sterile soil, or the water table. If terminated before sterile soil is reached, please provide an explanation either in the text or in the shovel test table. Excavated shovel tests must be screened using 0.25 inch mesh screen, dug in stratigraphic or 10 cm levels, and measurements must be recorded in centimeters.
- 6. Table listing shovel test locations, width (cm), depth (cm), soils, and results.
- 7. Date-stamped site photographs in color of
 - a. Field site
 - b. All shovel test units with a scale and geographic coordinates



United Keetoowah Band Of Cherokee Indians in Oklahoma Office of Historic Preservation

P.O. Box 746 • Tahlequah, OK 74465 18263 W Keetoowah Circle • Tahlequah, OK 74464 Phone: (918) 871-2800 • Fax: (918) 414-4000 www.ukb-nsn.gov



Cultural Resource Survey Report Standards

Below are the requirements for a cultural resource survey report that will enable the United Keetoowah Band of Cherokee Indians in Oklahoma, Office of Historic Preservation to efficiently and effectively assess the proposed project. Please include in all reports:

- 1. Abstract
 - a. Brief summary of the project, survey results, and recommendations
- 2. Introduction
 - a. Introduce project and project design
- 3. Environmental Setting
 - a. Specific location, legal description, composition of project site
 - b. General location, geomorphology, landform, soils, vegetation, hydrology
- 4. Cultural History
 - a. Brief overview of cultural occupation represented in locale
- 5. File Search and Previous Research
 - a. Results of file search in state database for previously recorded archaeological sties and review of previous archaeological investigations
 - b. The file search should be for both below ground archaeological sites and above ground historic sites as some states have two repositories for this information (i.e. Tennessee)
- 6. Field Methods and Analytical Techniques
 - a. How field survey and analysis were conducted
- 7. Results of Archaeological Field Investigations
 - a. Review of finding and identification of National Register of Historic Places
- 8. Recommendations
 - a. Summarization of archaeological sites identified, NRHP determinations, and project recommendations
- 9. References Cited



ARKANSAS DEPARTMENT OF TRANSPORTATION

ARDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

10324 Interstate 30 | P.O. Box 2261 | Little Rock, AR 72203-2261 Phone: 501.569.2000 | Voice/TTY 711 | Fax: 501.569.2400

May 22, 2019

Ms. Stacy Hurst Arkansas Historic Preservation Program 1100 North Street Little Rock, Arkansas 72201

> RE: Job Number 030026 Cossatot River – De Queen (S) Route 71, Section 6 Sevier County

Dear Ms. Hurst,

Enclosed for your review is an updated Architectural Resources Survey (ARS) for the above referenced project. A previous Request for Technical Assistance was sent for five structures in November 2004 for the referenced project. The project proposes to widen 5.43 miles and replace two bridges on Highway 71 in Sevier County. Twentyseven properties, including two bridges, may be impacted by the project.

Photographs, descriptions and location maps for the properties are included so your staff may evaluate their eligibility for inclusion in the National Register of Historic Places. If you have any questions about the project, please contact Milton Hughes of my staff at (501) 569-2080.

Sincerely,

John Fleming

John Fleming Division Head Environmental Division

JF:KB:MH:cb

Enclosure ARS



Asa Hutchinson Governor

Stacy Hurst Secretary Parks, Heritage & Tourism

Arkansas Arts Council

Arkansas Historic Preservation Program

Arkansas Natural Heritage Commission

Arkansas State Archives

Delta Cultural Center

Historic Arkansas Museum

Mosaic Templars Cultural Center .

Old State House Museum





1100 North Street Little Rock, AR 72201

(501) 324-9880 fax: (501) 324-9184

info@arkansaspreservation.org www.arkansaspreservation.com

An Equal Opportunity Employer

August 13, 2019

Mr. John Fleming **Division Head** Environmental Division Arkansas State Highway and Transportation Department P.O. Box 2261 Little Rock, AR 72203-2261

RE: Sevier County — General Section 106 Review - FHWA Cossatot River-De Queen (S) Route 71. Section 6 ARDOT Job Number: 030026 AHPP Tracking Number: 55233.03

Dear Mr. Fleming:

The staff of the Arkansas Historic Preservation Program (AHPP) reviewed the Project Identification Form for the above-referenced job. The undertaking entails adding 1.48 miles to an existing project area along U.S. Highway 70.

Based on the provided information and the negative results of the cultural resources survey, the AHPP concurs with the finding of no historic properties affected pursuant to 36 CFR § 800.4(d)(1) for the proposed undertaking.

Tribes that have expressed an interest in the area include the Caddo Nation (Ms. Tamara Francis), the Chickasaw Nation (Ms. Karen Brunso), the Choctaw Nation of Oklahoma (Mr. Daniel Ragle), the Osage Nation (Dr. Andrea Hunter), the Quapaw Nation (Mr. Everett Bandy), and the Shawnee Tribe (Ms. Tonya Tipton). We recommend consultation in accordance with 36 CFR § 800.2(c)(2).

Thank you for the opportunity to review this undertaking. Please refer to the AHPP Tracking Number listed above in all correspondence. If you have any questions, please call Eric Mills of my staff at 501-324-9784 or email eric.mills@arkansas.gov.

Sincerely,

cc:

Director, AHPP

Mr. Randall Looney, Federal Highway Administration Dr. Ann Early, Arkansas Archeological Survey



Arkansas Division

January 29, 2020

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – De Queen (S) Sevier County, Arkansas HDA-AR

Dr. Ian Thompson Tribal Historic Preservation Officer & NAGPRA Program Coordinator Choctaw Nation of Oklahoma P. O. Box 1210 Durant, OK 74702

×.

Dear Dr. Thompson:

As part of continuing consultation, we have enclosed for your review the Project Identification Form for the above noted job. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

Randal Looney Environmental Coordinator



Federal Highway Administration Arkansas Division

January 29, 2020

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

In Reply Refer To: ARDOT Job 030026 Cossatot River – De Queen (S) Sevier County, Arkansas HDA-AR

Dr. Andrea A. Hunter Tribal Historic Preservation Officer The Osage Nation P. O. Box 779 Pawhuska, OK 74056

Dear Dr. Hunter:

As part of continuing consultation, we have enclosed for your review the Project Identification Form for the above noted job. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

Randal Looney Environmental Coordinator



Federal Highway Administration Arkansas Division

January 29, 2020

700 West Capitol Ave Suite 3130 Little Rock AR 72201 (501) 324-6430

1

In Reply Refer To: ARDOT Job 030026 Cossatot River – De Queen (S) Sevier County, Arkansas HDA-AR

Ms. Charlotte Wolfe Tribal Historic Preservation Officer United Keetoowah Band of Cherokee Indians in Oklahoma P. O. Box 746 Tahlequah, OK 74465

Dear Ms. Wolfe:

As part of continuing consultation, we have enclosed for your review the Project Identification Form for the above noted job. If you have any questions or need additional information, please contact me at (501) 324-6430.

Sincerely,

MI

Randal Looney Environmental Coordinator

Enclosure

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Appendix D: Social, Environmental Justice, Community Impacts, and Economics

Social, Environmental Justice, Community Impacts and Economics

A socio, environmental justice, and community impacts discipline describes the existing conditions in the project study area and evaluates potential impacts with or without the proposed project.

Social

The geographic area considered for analysis of existing social conditions and impacts consists of Sevier County and the City of De Queen. De Queen, the county seat of Sevier County and called The Heart of Tri-Lakes County, has an estimated population is 6,623.

The purpose of the project is to provide safer and efficient intrastate and interstate movement of people and goods for greater mobility.

Environmental Justice

• What is Environmental Justice and how do we deal with it?

Environmental Justice refers to social equity in bearing the burden of adverse environmental impacts. In the past, minorities and low-income populations have experienced disproportionate impacts caused by construction of transportation projects. In response to this concern, Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, 1994, was issued by President Bill Clinton in 1994. Among other things, it directed that:

"Each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

Projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898. The environmental justice evaluation determines whether low-income or minority populations would suffer disproportionately high and adverse effects of an action. Low income is defined based on the Department of Health and Human Services (DHHS) 2019 poverty guidelines, which is \$25,750 for a family of four (4). The American Factfinder (2013-2017) found that 26.6 percent of the population of the City of De Queen live below the poverty level. The median household income stands at \$39,948 which is higher than the poverty guidelines published by the DHHS.

The Federal Highway Administration defines Minority as a person who is:

- Black (having origins in any of the black racial groups of Africa);
- Hispanic (of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
- Asian American (having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands); or
- American Indian and Alaskan Native (having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition);
- Native Hawaiian and Other Pacific Islander (having origins in any of the original peoples of Hawaii, Guam, Samoa or Pacific Islands).
- How would Social, Environmental Justice and Economic Conditions be affected during construction of each Alternative?

The No-Action Alternative consists of no improvements being made to the existing Highway 71 while sustaining routine maintenance. Due to increased truck traffic, traffic delays and congestion that would remain without widening Hwy. 71. There would be no impacts to residents, tenants and business owners.

Alternative 1 follows along existing Highway 71, passing through areas that are primarily business, commercial, and residential properties. This alignment will not sever any subdivisions and will not disrupt community services and facilities located along Highway 71.

• Would the project have unavoidable adverse effects on Environmental Justice/Title VI populations that could not be mitigated?

The 2010 U.S. Census data covers the project area and provides population demographic characteristics. The total population of this census block is approximately 445 residents. Table 1, provides a Demographic comparison of population demographics for the City of De Queen, Sevier County and the State of Arkansas.

While some impacts may be borne by those populations, the level of adverse impacts would not be disproportionately high. Based on the above discussion and analysis (U.S. Census Bureau, field observations, and door to door outreach), the proposed project will not cause disproportionately high and adverse effects on any minority or low-income populations in accordance with the provisions of E.O. 12898 and FHWA Order 6640.23. No further EJ analysis is required.

Table 1							
Demographic Data							
	City of De Queen	Sevier County	State of Arkansas				
Population 2017	6,623	17,206	2,977,944				
Population 2010	6,594	17,508	2,915,918				
Median Resident Age	27.6	35	37.9				
Median Household Income	\$39,948	\$43,675	\$43,813				
Median House Value	\$85,800	\$75,400	\$118,500				
White-Non Hispanic	44.6%	64.4%	77.3%				
Hispanic	58.1%	32.9%	7.2%				
Black	5.5%	4.8%	15.4%				
Other Races	48.7%	28.4%	4.8%				
Education Attained by Age 25+							
High School Graduates	61.2%	71.8%	85.6%				
Bachelor's Degree or higher	11.1%	10.6%	22.0%				
Employment by Industry Type							
Agriculture, Forestry, Fishing and Hunting & Mining	2.2%	6.3%	3.0%				
Manufacturing, Construction, Warehousing & Transportation	51.9%	43.3%	25.4%				
Educational Services, and Health Care & Social Assistance	12.4%	18.9%	24.4%				
Other Services, Except Public Administration	4.1%	4.0%	4.8%				
Unemployment Rate	3.8%	6.6%	6.3%				

Community Impacts

• Community character and how community service facilities will be affected during construction?

The study area encompasses mostly residential, agricultural and manufacturing areas, with low residential housing and minimal community service retail establishments. Businesses located within the proposed project area: De Queen Country Club, Gentry Chevrolet, Kingdom Hall of Jehovah Witnesses. Numerous community service facilities are located to the west of the project, outside of the proposed project limits.

The project will create benefits such as improved commuter, truck, and local accessibility for businesses, commercial and residential usage, unimpeded traffic flow, and improved safety for motorists. Recreational users and emergency service providers would also benefit from the enhanced circulation and accessibility throughout the project area.

Constructions delays, dust, noise and exhaust fumes from equipment would temporarily affect residences and businesses along the alignment. Access to homes and businesses would be maintained during construction.

Economics

• What measures are proposed to minimize or avoid effects to social and economic resources?

The right of way acquisition necessary for the proposed widening project will be minimized as much as possible. The opportunity for businesses to relocate within the vicinity of the project area is an option. The Department's design engineers will work closely with residents and business owners regarding driveway configurations and other specific property concerns. Property acquisition will be completed in accordance with the federal Uniform Relocation and Real Property Acquisition Policies Act of 1970.

• Would the project have unavoidable adverse effects on Environmental Justice/Title VI populations that could not be mitigated?

In the project area, there are approximately 79 individuals that are considered over the age of 65, and 61 individuals are considered minority, or not of the white population in the City of De Queen. The percentage of minority residents in the county as a whole is substantially less than the percentage of minority residents in the City.

The data gathered from the U.S. Census and field observations indicate the minimal presence of EJ/Title VI populations in the project area. While some impacts will be borne by those populations, the level of impacts would not be disproportionately high. Based on this information, the study area is not considered a minority-predominant community. Further steps to minimize the impacts will be considered during the final design phase.

Poverty Level

The 2013-2017 American Community Survey data on poverty shows the highest percentage of the population below the poverty level in the City of De Queen as being 26.6%. In Sevier County, the median household income stands at \$43,675, which is higher than the Poverty guidelines threshold published by the Department of Health and Human Services which is \$26,200 for a family of 4 (four).

Relocation

Relocations occur when residential, business, or non-profit properties fall within the established right of way limits for a proposed project. Until the final design has been established, relocation quantities are estimates.

Estimated right of way widths were used in determining potential structures to be relocated. A Conceptual Stage Relocation Inventory were completed in August 2019. It describes the existing residential and commercial locations in the project study area and estimates the ROW acquisition and Utility relocation costs, as well as, evaluates potential relocation impacts within the proposed project.

Studies, Coordination, and Methods

A current site inspection of the entire project study area was conducted to verify existing land use on a parcel by parcel basis. Each parcel was examined through visual inspection to determine if Alternative 1 would prevent or limit the ability to use the property for an existing or allowed land use.

• What regulations do we follow when dealing with relocations of residential and commercial property?

Where right of way acquisition is needed, the acquisition and relocation program would be conducted in accordance with the federal Uniform Relocation and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources are available to all relocated residents and businesses without discrimination.

Inspections of the potential displacement locations are conducted by Relocation Coordinators. The Coordinators utilize area demographic data, visual inspections, past experiences and knowledge in making this determination.

The Right of Way Procedures for the Acquisition Manual and the Right of Way Policies and Procedures Manual, Section 6 will govern right of way acquisition proceedings. These laws ensure fair and equitable treatment of those displaced. They also encourage and expedite acquisition of property by negotiation.

• What effects to relocations would result under the No Action Alternative?

The No-Action Alternative would not require the relocation of any residences, businesses, or personal properties. No new right of way would be acquired.

• What effects to relocations would result under Alternative 1?

The alignment would relocate 2 residential owners, 1 residential tenant, 5 businesses, 1 landlord business, and 17 personal properties. There are a total of 2 low-income households, 1 minority family, 1 elderly household and 1 household with individuals that have disabilities that would be relocated as a result of this project. The alignment has the potential to impact 9 - 12 employees.

• Are replacement housing and commercial business sites available in the study area?

Consistent with the Uniform Relocation Assistance & Real Property Acquisition Policies Act of 1970, relocation of displaced residents/businesses considers the availability of residences similar in cost and access to services as the displaced residences/businesses.

Appendix E: Conceptual Stage Relocation Study



ARKANSAS DEPARTMENT OF TRANSPORTATION ARDOT.gov | IDriveArkansas.com | Scott E. Bennett, P.E., Director

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INTEROFFICE MEMORANDUM

August 26, 2019

TO: John Fleming, Division Head, Environmental Division

SUBJECT: Job 030026 Cossatot River – De Queen (S) Route 71 Section 6 Sevier County CONCEPTUAL STAGE RELOCATION STATEMENT

GENERAL STATEMENT OF RELOCATION PROCEDURE

Persons displaced as a direct result of acquisition for the proposed project will be eligible for relocation assistance in accordance with Public Law 91-646, the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended (The Uniform Act). The Relocation Program provides advisory assistance and payments to minimize the adverse impact and hardship of displacement upon such persons. No lawful occupant shall be required to move without receiving a minimum of 90 days advance written notice. All displaced persons; residential, business, farm, nonprofit organization, and personal property relocatees are eligible for reimbursement for actual reasonable moving costs.

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 their 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.

There are two basic types of residential relocation payments: (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 \$31,000.00 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 tenant may receive a rental subsidy payment of up to \$7,200.00. Tenants may elect to receive a down payment rather than a rental subsidy to enable them to purchase a replacement dwelling. Replacement housing payments are made in addition to moving expense payments.

Businesses, farms and nonprofit organizations are eligible for reestablishment payments, not to exceed \$25,000.00. Reestablishment expense payments are made in addition to moving expense payments. A business, farm or nonprofit organization may be eligible for a fixed payment in lieu of the moving costs and reestablishment costs if relocation cannot be accomplished without a substantial loss of existing patronage. The fixed payment will be computed in accordance with the Uniform Relocation Act and cannot exceed \$40,000.00.

If the displacee is not satisfied with the amounts offered as relocation payments, they 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 relocated or their relocation eligibility expires. 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 preliminary construction plans, aerial photographs, and an on-site project review, it is estimated that the subject project could cause the following displacements and costs:

Proposed Project:

2	Residential Owners	\$ 80,000.00
1	Residential Tenant	\$ 15,000.00
5	Businesses	\$ 200,000.00
1	Landlord Businesses	\$ 25,000.00
17	Personal Property	\$ 42,500.00
	Services	\$ 65,250.00
	Total	\$ 427,750.00

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 displacement locations by Relocation Coordinators. The Relocation Coordinators utilize area demographic data, visual inspections, past experiences and knowledge in making this determination.

An available housing inventory has been compiled and it indicates there are at least seventeen comparable replacement dwellings available for sale and four comparable replacement dwellings available for rent within a reasonable proximity of the project area. At least ten developed commercial properties and three vacant land commercial

Residential (For Sale)	Number of Units
\$ 0.00 - 50,000	2
50,001 - 100,000	5
100,001 – 150,000	5
150,001 and up	5
Total	17
Residential (Monthly Rent)	
\$ 0.00 - 500.00	4
501.00 and up	0
Total	4
Commercial Properties (For Sale) \$ 0 - 100,000 100,001 - 200,000 200,001 - 300,000 300,001 - 400,000 401,000 and up Total	2 1 4 1 2 10
Commercial Land	
(For Sale)	
\$ 0 - 100,000	1
100,001 and up Total	2
lotal	3
Commercial Properties	
(For Lease) \$ 0 - 1,000	2
1,001 - 2,000	2 1
2,001 and up	ò
Total	3

properties are currently for sale in the project area. There are at least three commercial properties for lease. A breakdown of the available properties is as follows:

This is a widening project that will widen Arkansas Highway 71 and replace two structures (bridges) between the Cossatot River and the City of De Queen. The units contained in the housing inventory are in Sevier County. The dwellings and number of dwellings are comparable and adequate to provide replacement housing for the families displaced on the project. The housing market should not be detrimentally affected and there should be no 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 replacement property inventory was compiled from data obtained from real estate companies, web sites, and local newspapers for 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, are reasonably accessible to the displacees' places of employment, adequate to accommodate the displacees, and in neighborhoods which are not subject to unreasonable adverse environmental 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 consistent with the requirements of 49 CFR, Subpart A, Section 24.2 and Title VIII of the Civil Rights Act of 1968.

A commercial property inventory indicates there are at least ten developed properties available in the subject area at this time. The businesses displaced on the project may not be able to relocate in the immediate area of their displacement resulting in termination of the operation. However, in order to assist the displaced businesses and nonprofit organizations in relocating, the State will explore all possible sources of funding or other resources that 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 Small Business Administration and other Federal Agencies. Emphasis will be given in providing relocation advisory services to the businesses and nonprofit organizations. Appropriate measures will be taken to ensure that each entity displaced is fully aware of their benefits, entitlements, courses of action that are open to it, 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 minority, one low-income, one disabled person and one elderly residential household displaced by the project. All displacees will be offered relocation assistance under provisions in the applicable FHWA regulations. At the time of displacement another inventory of available housing in the subject area will be obtained and an analysis of the market made to ensure that there are dwellings adequate to meet the needs of all displacees. Also, special relocation advisory services and assistance will be administered commensurate with displacees' needs, when necessary. 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 DEPARTMENT OF TRANSPORTATION CONCEPTUAL STAGE RELOCATION INVENTORY

Job No.: 030026 Job Name: Cossatot River - De Queen (S) Date of Inventory: August 15, 2019

RELO #	RELO TYPE	Street #	Street Name		IMP. VAL	IN	/IP. RENT	Family Size or # Employees	Occ Length	Eld? Y/N/U	Min? Y/N/U	Low Inc? Y/N/U	DSS? Y/N/U
1	BUS	2039	Hwy. 70-71 E	\$	12,188.00	\$	122.00	2	6				
2	BUS	991	Hwy. 70-71 E	\$	16,375.00	\$	164.00	1	6				
3	РРО		Hwy. 70-71 E			New York							
4	РРО	1803	Hwy. 70-71 E			確し		William Contraction					
5	РРО	111	Farm to Market Road			Total Control							
6	BUS	1770	Hwy. 70-71 E	\$	44,625.00	\$	446.00	2	1				
7	РРО	1761	Hwy. 70-71 E										
8	BUS	1740	Hwy. 70-71 E	\$	36,688.00	\$	367.00	2	15				
9	РРО	671	Fairview Rd.	の市場									
10	R/O	1700	Hwy. 70-71 E	\$	52,500.00	\$	525.00	1	13	N	N	Y	Y
11	РРО		Hwy. 70-71 E	NO HUN		and the state							
12	РРО	1673	Hwy. 70-71 E										
13	РРО	1674	Hwy. 70-71 E	all and		Service .						T. Stations	
14	R/O	1644	Hwy. 70-71 E	\$	91,625.00	\$	916.00	3	9	N	Y	N	Y
15	R/T		Hwy. 70-71 E	\$	14,563.00	\$	146.00	1	10	Y	N	Y	Y

ARKANSAS DEPARTMENT OF TRANSPORTATION CONCEPTUAL STAGE RELOCATION INVENTORY

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RELO #	RELO TYPE	Street #	Street Name	IMP. VAL	IMP. RENT	Family Size or # Employees	Occ Length	Eld? Y/N/U	Min? Y/N/U	Low Inc? Y/N/U	DSS? Y/N/U
16	РРО	1390	Hwy. 70-71 E								
17	РРО	101	Smith Rd.								
18	РРО	1209	Hwy. 70-71 E								
19	PPO	1212	Hwy. 70-71 E								
20	РРО	1204	Hwy. 70-71 E								
21	PPO	1144	Hwy. 70-71 E								
22	РРО	1128	Hwy. 70-71 E								
23	РРО	1122	Hwy. 70-71 E								
24	PPO	1121	Hwy. 70-71 E								
25	BUS	1049	Hwy. 70-71 E	\$ 95,063.00	\$ 951.00	1	3				
26	LL BUS		Hwy. 70-71 E	\$ 14,563.00	\$ 146.00	1	5				
27											
28											
29											
30											

ARKANSAS DEPARTMENT OF TRANSPORTATION CONCEPTUAL STAGE RELOCATION INVENTORY Job No. 030026 Job Name Cossatot River - DeQueen (S) Date of Inventory 8-15-19

Type Relocation	Number	Residential Property Values or Rental Rates	Large Family Households	Disabled Person Households	Minority Households	Elderly Households	Low Income Households	Employees Affected (Range)
Residential Owners	2	\$50,000.00 - \$100,000.00	0	0	1	0	1	N/A
Residential Tenants	1	\$100.00 - \$500.00	0	1	0	1	1	N/A
Businesses	5	\$10,000.00 - \$100,000.00						8-10
Landlord Businesses	1	\$10,000.00 - \$15,000.00						1-2
Personal Property	17	N/A	0	0	0	0	0	0
Totals	26	N/A	0	1	1	1	2	9-12

Appendix F: Noise Analysis

Fundamentals of Sound and Noise

Noise is defined as unwanted or undesirable sound. The three basic parameters of how noise affects people are summarized below.

Intensity is determined by the level of sound expressed in units of decibels (dB). A 3 dB change in sound level is barely perceptible to most people in a common outdoor setting. However, a 5 dB increase presents a noticeable change and a 10 dB sound level increase is perceived to be twice as loud. Outdoor conversation at normal levels at a distance of 3 feet becomes difficult when the sound level exceeds the mid-60 dBA range.

Frequency is related to the tone or pitch of the sound. The amplification or attenuation of different frequencies of sound to correspond to the way the human ear "hears" these frequencies is referred to as "A-weighting." The A-weighted sound level in decibels is expressed as dBA.

Variation with time occurs because most noise fluctuates from moment to moment. A single level called the equivalent sound level (Leq) is used to compensate for this fluctuation. The Leq is a steady sound level containing the same amount of sound energy as the actual time-varying sound evaluated over the same time period. The Leq averages the louder and quieter moments, but gives more weight to the louder moments.

For highway noise assessment purposes, Leq is typically evaluated over the worst 1-hour period and written as Leq(h). The Leq(h) commonly describes sound levels at locations of outdoor human use and activity, and reflects the conditions that will typically produce the worst traffic noise (e.g., the highest traffic volumes traveling at the highest possible speeds).

Noise Impact and Abatement Criteria

Traffic noise impacts are determined by comparing design year Leq(h) values to: (1) a set of Noise Abatement Criteria (NAC) for different land use categories; and (2) existing Leq(h) values. A noise impact occurs when design year (future build) levels approach or exceed the NAC value or a substantial increase in noise occurs. An approach is considered to be 1 dBA less than the NAC value. A substantial increase is defined as 10 dBA or greater than existing noise levels. A *noise sensitive receptor* (receptor) is defined as a representative location of a noise sensitive area for various land uses. Most receptors associated with highway traffic noise analysis are categorized as NAC Activity Category B (residential) and C (e.g., parks, hospitals, schools, places of worship). Since the NAC value for Activity Categories B and C is 67 dBA, noise impacts would occur at 66 dBA or greater.

Consideration of noise abatement measures is required when the NAC value is approached or exceeded, or when a substantial increase is predicted. Noise barriers (e.g., walls or berms) are the most common noise abatement measures.

Screening Level Noise Analysis

A screening level noise analysis (screening analysis) may be performed for projects that are unlikely to cause noise impacts and/or where noise abatement measures are likely to be unfeasible for acoustical or engineering reasons. Factors common to these types of projects include low traffic volumes, slower speeds, the presence of few or no receptors, and the need for roadway access points (e.g., driveways, roadway intersections, etc.). For screening analysis purposes, the ARDOT noise policy requires determining noise levels within 4 dBA of the NAC value. The screening analysis threshold would therefore be 63 dBA for Activity Categories B and C.

Screening analysis results represent a worst-case scenario with higher sound levels than would be expected in detailed modeling. The results may be used to determine the need for detailed analysis if noise impacts are likely and the placement of noise barriers is feasible. It may also be used for projects that lack receptors in order to assess impacts on undeveloped land.

The FHWA Traffic Noise Model Version 2.5 (TNM) software program is used to predict existing and future Leq(h) traffic noise levels. The TNM straight line model uses the existing year and design year traffic and roadway information. Receivers (discrete points modeled in the TNM program) are incrementally placed away from the roadway centerline to determine the distance to which impacts extend. The model assumes that the roadway and receivers were located at the same elevation with no intervening barriers such as topography or dense vegetation.

Project Evaluation and Screening Analysis Results

Activity Category B and C receptors were identified in the Hwy. 71 project corridor. However, noise abatement measures were determined to not be feasible because driveways are required to access the roadway, and due to the

presence of highway intersections. A screening analysis was therefore considered an appropriate level of noise assessment for this project.

TNM modeling was completed using the existing year 2021 and design year 2041 (future build) traffic and roadway information. Due to the difference in design speeds, both the rural and urban segments of the project corridor were modeled. Receivers were extended from the centerline of Hwy. 71 to distances correlating to approximately 66 dBA for existing and future build conditions, and 63 dBA for future build conditions. The tenth value was used for rounding the decibel levels (e.g., 62.8 dBA reported as 63 dBA). The model calculation tables and input data are attached.

Rural Results: A total of 17 receptors were predicted to experience noise impacts within a distance of 225 feet under future build conditions, 11 of which were predicted to experience noise impacts within a distance of 160 feet under existing conditions. Three receptors were predicted to experience noise levels within the 63 dBA screening analysis threshold at a distance of 325 feet under future build conditions. The predicted noise impact and screening analysis threshold distances and receptors are shown on the attached **Figure 1**.

Urban Results: A total of five receptors were predicted to experience noise impacts within a distance of 125 feet under future build conditions, three of which were predicted to experience noise impacts within a distance of 100 feet under existing conditions. No additional receptors were predicted to experience a noise level within the 63 dBA screening analysis threshold at a distance of 225 feet under future build conditions. The predicted noise impact and screening analysis distances and receptors are shown on the attached **Figure 2**.

No substantial increases (\geq 10 dBA) were predicted. Because noise levels in the project area are already dominated by traffic noise from the existing roadway, the impacts caused by the proposed project would be minor (e.g., noise levels not exceeding a 1 to 2 dBA increase).

As previously noted, access points such as driveways and intersections are needed along the project corridor. For engineering reasons, it would not be possible to construct an effective noise barrier accommodating these access points. A detailed noise analysis is therefore not recommended for this project.

Project construction operations typically increase noise levels. These increases would be temporary and have minimal to minor adverse effects on land uses and activities in the project area. Local ordinances may prohibit construction activities or restrict noise levels or high noise levels between certain time periods (e.g., nighttime and/or weekend work). Temporary construction noise reduction measures such as nighttime and/or weekend work restrictions may also be considered.

Planning Information for Local Officials

The ARDOT encourages local communities and developers to practice noise compatibility planning. As presented in **Table 1** and **Table 2**, noise level predictions for future build conditions were made at incremental distances. As previously described, rural and urban Activity Category B and C exterior areas would be impacted within a distance of approximately 225 feet and 125 feet from the centerline of Hwy. 71, respectively. These predictions do not represent noise levels at every location at a particular distance back from the roadway. Noise levels will vary with changes in terrain and other site conditions.

 Table 1. Noise Levels for Compatibility Planning - Rural

Distance (ft)*	Leq(h), dBA**
225	66
325	63
350	62
400	60

* Perpendicular to centerline of Hwy. 71

** Rounded to tenth value

Table 2. Noise Levels for Compatibility Planning - Urban

Distance (ft)*	Leq(h), dBA**
125	66
225	63
325	60
400	58

* Perpendicular to centerline of Hwy. 71

** Rounded to tenth value

Table 3 presents the NAC. This information is included to inform local officials and planners of anticipated noise levels so that future development will be compatible. In compliance with federal guidelines, a copy of this screening analysis will be transmitted to the City of De Queen and the Tri-Lakes Metropolitan Planning Organization for land use planning purposes.

NOISE DATA WORKSHEET

Job No: 030026	
Job Name: Cossatot River-De Queen	
Roadway Reference: Hwy. 71 (Rural)	
County: Sevier	
Design Year: 2041	
Year(s) To Be Modeled: 2021 2041	
Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide	Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D)
2021 EXISTING (RURAL)	K - Percent of ADT occuring in design hour D - Directional Distribution
Operating Speed: 60	Kfactor 11%
Traffic Data: YEAR ADT %TRUCK DHV	CARS MT HT CARS/2 MT/2 HT/2
	10% 90%
	0 0 0 0 0 0
2021 7,000 19% 770	624 15 132 312 7 66

1

NOISE DATA WORKSHEET

Job No: 030026				
Job Name: Cossatot River-De Queen				
Roadway Reference: Hwy. 71 (Rural)				
County: Sevier				
Design Year: 2041				
Year(s) To Be Modeled: 2021 2041				
Roadway Cross-Sections: 4 12',1 11' lanes; 2 8' shoulders total 75' wide	Note:	DHV = (ADT)(K) DDHV = (ADT)(K)(0)	
2041 PROPOSED (RURAL)]	K - Percent of ADT D - Directional Distr	•••••••••••••••••••••••••••••••••••••••	sign hour
Operating Speed: 60	Kfactor 11%		button	
Traffic Data: YEAR ADT %TRUCK DHV	CARS MT	HT CARS	2 MT/2	HT/2
	10%	90%		
	0 0	0 0 160 379	0	0 80
2041 8,500 19% 935	757 18	160 379	9	00

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NOISE DATA WORKSHEET

Job Name: Cossatot River-De Queen Roadway Reference: Hwy. 71 (Urban) County: Sevier Design Year: 2041 Year(s) To Be Modeled: 2021 2041 Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D) 2021 EXISTING (Urban) DHV = (ADT)(K)(D) DHV = (ADT)(K)(D) Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 Yeaffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 QU21 7,000 19% 770 624 15 132 312 7 66	Job No: 030026				
County: Sevier Design Year: 2041 Year(s) To Be Modeled: 2021 2021 2041 Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D) K - Percent of ADT occuring in design hour D - Directional Distribution Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 I I I I I I I I I I I I I I I I I I I	Job Name: Cossatot River-De Queen				
Design Year: 2041 Year(s) To Be Modeled: 2021 2041 Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D) K - Percent of ADT occuring in design hour D - Directional Distribution Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 0 0 0 0 0 0 0 0	Roadway Reference: Hwy. 71 (Urban)				
Year(s) To Be Modeled: 2021 2041 Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D) K - Percent of ADT occuring in design hour D - Directional Distribution Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 Image: VEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2	County: Sevier				
Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide Note: DHV = (ADT)(K) DDHV = (ADT)(K)(D) K - Percent of ADT occuring in design hour D - Directional Distribution Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 0 0 0 0 0 0 0 0	Design Year: 2041				
Z021 EXISTING (Urban) DDHV = (ADT)(K)(D) K - Percent of ADT occuring in design hour D - Directional Distribution Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 Image: Imag	Year(s) To Be Modeled: 2021 2041				
Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 Image: Image	Roadway Cross-Sections: 2 11' lanes; 2 6' shoulders total 34' wide	Note:))	
Operating Speed: 40 Kfactor 11% Traffic Data: YEAR ADT %TRUCK DHV CARS MT HT CARS/2 MT/2 HT/2 Image: Image	2021 EXISTING (Urban)]		· · · · · · · · · · · · · · · · · · ·	sign hour
1000 1000 90% 1000 1000 90% 10000 1000 1000	Operating Speed: 40	Kfactor 11%			
	Traffic Data: YEAR ADT %TRUCK DHV	CARS MT	HT CARS/2	2 MT/2	HT/2
2021 7,000 19% 770 624 15 132 312 7 66					
	2021 7,000 19% 770	624 15	132 312	1	00

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NOISE DATA WORKSHEET

Job No: 030026				
Job Name: Cossatot River-De Queen				
Roadway Reference: Hwy. 71 (Urban)				
County: Sevier				
Design Year: 2041				
Year(s) To Be Modeled: 2021 2041				
Roadway Cross-Sections: 4 12',1 11' lanes; 2 9.5' ccg w/side total 75' wide 2041 PROPOSED (URBAN)	Note:	DHV = (ADT)(K) DDHV = (ADT)(K)(K - Percent of ADT		sian hour
2041 INOI OOLD (ORDAN	1	D - Directional Distr		olgi i liou
Operating Speed: 40	Kfactor 11%]		
Traffic Data: YEAR ADT %TRUCK DHV	CARS MT	HT CARS	2 MT/2	HT/2
	10%	90%		
	0 0	0 0	0	0
2041 8,500 19% 935	757 18	160 379	9	80

RESULTS: SOUND LEVELS							Job 030026	3				
ARDOT							14 Octobe	er 2019				
M.Pearson							TNM 2.5					
							Calculated	d with TNN	1 2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Job 030										
RUN:		Existin	-									
BARRIER DESIGN:		INPUT	HEIGHTS							shall be used		
ATMOSPHERICS:		68 dea	F, 50% RH							y substantiates approval of FH		
Receiver											· · ·	
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			-	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reducti	on	
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus
							SubTine		-			Goal
			dBA	dBA	dBA	dB	dB		dBA	dB d	B	dB
25	1	1	1			76.4	10	Snd Lvl	76.4	0.0		8 -8.
50	2				1				73.1			8 -8.
75	3							· · · ·	71.1	0.0		8 -8.
100	4		0.0	69.6	66	69.6	10	Snd Lvl	69.6	0.0		8 -8.
125	5	1	0.0	68.5	66	68.5	10	Snd Lvl	68.5	0.0		8 -8.
150	6	1	0.0	67.0	66	67.0	10	Snd Lvl	67.0	0.0		8 -8.
160	7	1	0.0	<mark>66.3</mark>	66	66.3	10	Snd Lvl	66.3			8 -8.
175	9	1	0.0	65.3	66	65.3	10		65.3			8 -8.
200	10	1	0.0	63.9	66				63.9	0.0		8 -8.
225	11	1	0.0	62.6	66	62.6	10		62.6			8 -8.
250	12	! 1	0.0	61.5			10		61.5			8 -8.
300	13		0.0						59.6			8 -8.
325	14	1	0.0						58.8			8 -8.
350	15		0.0			-			58.0			8 -8.
400	16	i <u>1</u>	0.0	56.6	66	56.6	5 10		56.6	6.0		8 -8.
Dwelling Units		# DUs	Noise Ree	1		_						
			Min	Avg	Max	_						
		<u> </u>	dB	dB	dB	1						
All Selected		15				_						
All Impacted		7				J						
All that meet NR Goal		0	0.0	0.0	0.0							

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RESULTS: SOUND LEVELS							Job 030020	6				
ARDOT							14 Octobe	er 2019				
M.Pearson												
							Calculate	d with TNM	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Job 030										
RUN:			<mark>ed 2041 Ru</mark>	iral				_				
BARRIER DESIGN:		INPUT	HEIGHTS					÷ .		e shall be use		
ATMOSPHERICS:	ATMOSPHERICS: 68 deg F, 50% RH									y substantiate approval of F		,e
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n Sub'l Inc	Impact	LAeq1h	Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
40	1	1	0.0	75.4	66	75.4	10	Snd Lvl	75.4	0.0		8 -8.
50	2	2 1	0.0	74.1	66	74.1	10	Snd Lvl	74.1	0.0		8 -8.
75	3	3 1	0.0	71.9	66	71.9	10	Snd Lvl	71.9	0.0		8 -8.
100	4	ļ 1	0.0	70.5	66	70.5	10	Snd Lvl	70.5	5 0.0		8 -8.
125	5	5 1	0.0	69.3	66	69.3	10	Snd Lvl	69.3	3 0.0		8 -8.
150	6	5 1	0.0	68.3	66	68.3	10	Snd Lvl	68.3	3 0.0		8 -8.
160	7	7 1	0.0	68.0	66	68.0	10	Snd Lvl	68.0	0.0		8 -8.
175	9	9 1			i 66	67.5	10	Snd Lvl	67.5	5 O.O		8 -8.
200	10) 1	0.0	66.7					66.7			8 -8.
225	11								66.0]	8 -8.
250	12	2 1							65.3			8 -8.
300	13								64.2			8 -8.
325	14								63.2			8 -8.
350	15								62.3			8 -8.
400	16	<u>}</u> 1	0.0	60.6	66	60.6	10)	60.6	6 0.0	L	8 -8.
Dwelling Units		# DUs	Noise Ree									
			Min	Avg	Max	1						
			dB	dB	dB							
All Selected		15				-						
All Impacted		10				-						
All that meet NR Goal		0	0.0	0.0	0.0							

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F-10

RESULTS: SOUND LEVELS							Job 03002	6				
ARDOT							14 Octobe	er 2019				
M.Pearson							TNM 2.5	2010				
								d with TNN	125			
RESULTS: SOUND LEVELS							Calculate		2.0			
PROJECT/CONTRACT:		Job 03	0026									
RUN:			g 2021 Urb	an								
BARRIER DESIGN:			HEIGHTS	-				Average r	pavement type	shall be use	d unless	
									ghway agency			2
ATMOSPHERICS:		68 deg	F, 50% RH						ent type with			,
Receiver												
Name	No.	#DUs	Existing	No Barrier					With Barrier			AND A DESCRIPTION OF A REPORT OF
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
											ĺ	Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
25	1	1	0.0	73.3	66	73.3	10	Snd Lvl	73.3	0.0		8 -8.0
50	2	1	0.0	69.9	66	69.9	10	Snd Lvl	69.9	0.0		8 -8.0
85	3	1	0.0	67.3	66	67.3	10	Snd Lvl	67.3	0.0		8 -8.0
<mark>100</mark>	4	1	0.0	<mark>66.4</mark>	66	66.4	10	Snd Lvl	66.4	0.0		8 -8.0
125	5	1	0.0	65.3		1			65.3	0.0		8 -8.0
150	6		0.0	63.9			10		63.9	0.0		8 -8.0
160	7	1	0.0	63.2	66	63.2	10		63.2	0.0		8 -8.0
175	9	1	0.0	62.3		62.3	10		62.3			8 -8.0
200	10	1	0.0	60.9			10		60.9	0.0		8 -8.0
225	11	1	0.0	59.7			10		59.7	0.0		8 -8.0
250	12								58.7		1	8 -8.0
300	13				1				56.9			8 -8.0
325	14	1		56.1			10		56.1			8 -8.0
350	15			55.4		1.			55.4			8 -8.0
400	16	1	0.0	54.2	66	54.2	10		54.2	0.0		8 -8.0
Dwelling Units	ALL	# DUs	Noise Red									
			Min	Avg	Мах							
			dB	dB	dB							
All Selected		15	0.0	0.0	0.0							
All Impacted		4	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

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F-11

RESULTS: SOUND LEVELS							Job 030026	3		at 1.y		
ARDOT							14 Octobe	er 2019				
M.Pearson						TNM 2.5						
							Calculated	d with TNM	2.5			
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Job 03	<mark>0026</mark>									
RUN:		Propos	ed 2041 Ur	ban								
BARRIER DESIGN:		INPUT	HEIGHTS						oavement type			
									ghway agency			е
ATMOSPHERICS:		68 deg	F, 50% RH					of a differ	ent type with	approval of F	HWA.	
Receiver								* 45.47				
Name	No.	#DUs	Existing	No Barrier					With Barrier			
			LAeq1h	LAeq1h		Increase over	existing	Туре	Calculated	Noise Reduc	tion	
				Calculated	Crit'n	Calculated	Crit'n	Impact	LAeq1h	Calculated	Goal	Calculated
							Sub'l Inc					minus
												Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
40	1	1	0.0	72.3	66	3 72.3	10	Snd Lvl	72.3	0.0		8 -8
50	2	! 1	0.0	70.9	9 66	1		Snd Lvl	70.9			8 -8
85	3	1			66	68.1	10		68.1			8 -8
100	4	. 1	0.0	67.3					67.3			8 -8
125	5	1	0.0	<mark>66.2</mark>				Snd Lvl	66.2			8 -8
150	6								65.2			8 -8
160	7				1				64.8		ļ	8 -8
175	9	1					1		64.3			8 -8
200	10) 1							63.6		`	8 -8
225	11					1			62.8			8 -8
250	12								62.2			8 -8
300	13								61.1			8 -8
325	14								60.2			8 -8
350	15								59.3			8 -8 8 -8
400	16	i 1	0.0	57.6	66	57.6	i 10		57.6	0.0		o -8
Dwelling Units		# DUs	Noise Re	duction		_						
			Min	Avg	Max	_						
			dB	dB	dB	_						
All Selected		15	5 0.0	0.0	0.0	ס						
All Impacted		5	5 0.0	0.0	0.0	ס						
All that meet NR Goal		0	0.0	0.0	0.0)						

C:\TNM\030026 - COSSATOT RIVER-DE QUEEN\030026EXR\030026EXU\030026PROU

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Activity Category	L _{eq(h)} dBA	Evaluation Location	Activity Description
А	57	Exterior	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B*	67	Exterior	Residential properties.
C*	67	Exterior	Active sport areas, amphitheaters, auditoriums, campgrounds, cemeteries, day care centers, hospitals, libraries, medical facilities, parks, picnic areas, places of worship, playgrounds, public meeting rooms, public or nonprofit institutional structure, radio stations, recording studios, recreation areas, Section 4(f) sites, schools, television studios, trails, and trail crossings.
D	52	Interior	Auditoriums, day care centers, hospitals, libraries, medical facilities, places of worship, public meeting rooms, public or nonprofit institutional structure, radio studios, recording studios, schools, and television studios.
E*	72	Exterior	Hotels, motels, offices, restaurants/bars, and other developed lands, properties or activities not included in A-D, or F.
F			Agriculture, airports, bus yards, emergency services, industrial, logging, maintenance facilities, manufacturing, mining, rail yards, retail facilities, shipyards, utilities (water resources, water treatment, electrical), and warehousing.
G			Undeveloped lands that are not permitted.

 Table 3. Noise Abatement Criteria (NAC)

* Includes undeveloped lands permitted for this activity category.

Appendix G: Visual Impact Assessment

Visual Impact Assessment Scoping Questionnaire

Project Name: Cossatot River - De Queen(S) Location: Highway 71, Sevier County Special Conditions/Notes: Conducted By: M. Pearson

Environmental Compatibility

- 1. Will the project result in a noticeable change in the physical characteristics of the existing environment? (Consider all project components and construction impacts - both permanent and temporary, including landform changes, structures, noise barriers, vegetation removal, railing, signage, and contractor activities.)
- □ High level of permanent change (3)
- □ Low level of permanent or temporary change (1)
- Moderate level of permanent change (2) No Noticeable Change (0)
- 2. Will the project complement or contrast with the visual character desired by the community? (Evaluate the scale and extent of the project features compared to the surrounding scale of the community. Is the project likely to give an urban appearance to an existing rural or suburban community? Do you anticipate that the change will be viewed by the public as positive or negative? Research planning documents, or talk with local planners and community representatives to understand the type of visual environment local residents envision for their community.)
- Low Compatibility (3)High compatibility (1)

- □ Moderate Compatibility (2)
- 3. What level of local concern is there for the types of project features (e.g., bridge structures, large excavations, sound barriers, or median planting removal) and construction impacts that are proposed? (Certain project improvements can be of special interest to local citizens, causing a heightened level of public concern, and requiring a more focused visual analysis.)
- High concern (3)Low concern (1)

- \square Moderate concern (2)
- □ Negligible Project Features (0)



- 4. Is it anticipated that to mitigate visual impacts, it may be necessary to develop extensive or novel mitigation strategies to avoid, minimize, or compensate for adverse impacts or will using conventional mitigation strategies, such as landscape or architectural treatment adequately mitigate adverse visual impacts?
- Extensive Non-Conventional Mitigation Likely
 Some non-conventional Mitigation Likely (2)
 (3)
- No Mitigation Likely (0)

□ Some Mitigation Likely (1)

Cumulative Impacts likely: 6-10 years (2)

- 5. Will this project, when seen collectively with other projects, result in an aggregate adverse change (cumulative impacts) in overall visual quality or character? (Identify any projects [both state and local] in the area that have been constructed in recent years and those currently planned for future construction. The window of time and the extent of area applicable to possible cumulative impacts should be based on a reasonable anticipation of the viewing public's perception.)
- □ Cumulative Impacts likely: 0-5 years (3)
- □ Cumulative Impacts unlikely (1)

Viewer Sensitivity

1. What is the potential that the project proposal may be controversial within the community, or opposed by any organized group? (This can be researched initially by talking with the state DOT and local agency management and staff familiar with the affected community's sentiments as evidenced by past projects and/or current information.)

	High Potential (3) Low Potential (1)
\mathbf{M}	Low Potential (1)

- □ Moderate Potential (2)
- □ No Potential (0)
- 2. *How sensitive are potential viewer-groups likely to be regarding visible changes proposed by the project?* (Consider among other factors the number of viewers within the group, probable viewer expectations, activities, viewing duration, and orientation. The expected viewer sensitivity level may be scoped by applying professional judgment, and by soliciting information from other DOT staff, local agencies and community representatives familiar with the affected community's sentiments and demonstrated concerns.)
- High Sensitivity (3)Low Sensitivity (1)

□ Moderate Sensitivity (2)

- 3. To what degree does the project's aesthetic approach appear to be consistent with applicable laws, ordinances, regulations, policies or standards?
- Low Compatibility (3)

- □ Moderate Compatibility (2)
- 4. Are permits going to be required by outside regulatory agencies (i.e., Federal, State, or local)? (Permit requirements can have an unintended consequence on the visual environment. Anticipated permits, as well as specific permit requirements - which are defined by the permitter, may be determined by talking with the project environmental planner and project engineer. Note: coordinate with the state DOT representative responsible for obtaining the permit prior to communicating directly with any permitting agency. Permits that may benefit from additional analysis include permits that may result in visible built features, such as infiltration basins or devices under a storm water permit or a retaining wall for wetland avoidance or permits for work in sensitive areas such as coastal development permits or on Federal lands, such as impacts to Wild and Scenic Rivers.)
- \Box Yes (3) \square Maybe (2) **M** No (1)
- 5. Will the project sponsor or public benefit from a more detailed visual analysis in order to help reach consensus on a course of action to address potential visual impacts? (Consider the proposed project features, possible visual impacts, and probable mitigation recommendations.)
- □_ Yes (3) □ Maybe (2) No (1)

Total Project Score: 11

- High compatibility (1)

Determining the Level of Visual Impact Assessment

Total the scores of the answers to all ten questions on the Visual Impact Assessment Scoping Questionnaire. Use the total score from the questionnaire as an indicator of the appropriate level of VIA to perform for the project. Confirm that the level suggested by the checklist is consistent with the project teams' professional judgments. If there remains doubt about whether a VIA needs to be completed, it may be prudent to conduct an Abbreviated VIA. If there remains doubt about the level of the VIA, begin with the simpler VIA process. If visual impacts emerge as a more substantial concern than anticipated, the level of VIA documentation can always be increased.

The level of the VIA can initially be based on the following ranges of total scores:

□ Score 25-30

An *Expanded VIA* is probably necessary. It is recommended that it should be proceeded by a formal visual scoping study prior to beginning the VIA to alert the project team to potential highly adverse impacts and to develop new project alternatives to avoid those impacts. These technical studies will likely receive state-wide, even national, public review. Extensive use of visual simulations and a comprehensive public involvement program would be typical.

□ Score 20-24

A *Standard VIA* is recommended. This technical study will likely receive extensive local, perhaps state-wide, public review. It would typically include several visual simulations. It would also include a thorough examination of public planning and policy documents supplemented with a direct public engagement processes to determine visual preferences.

□ Score 15-19

An *Abbreviated VIA* would briefly describe project features, impacts and mitigation requirements. Visual simulations would be optional. An Abbreviated VIA would receive little direct public interest beyond a summary of its findings in the project's environmental documents. Visual preferences would be based on observation and review of planning and policy documents by local jurisdictions.

Score 10-14

A *VIA Memorandum* addressing minor visual issues that indicates the nature of the limited impacts and any necessary mitigation strategies that should be implemented would likely be sufficient along with an explanation of why no formal analysis is required.

□ Score 6-9

No noticeable physical changes to the environment are proposed and no further analysis is required. Print out a copy of this completed questionnaire for your project file to document that there is no effect. A *VIA Memorandum* may be used to document that there is no effect and to explain the approach used for the determination.

Visual Impact Assessment Definitions

The FHWA guidelines recognize three types of visual resources:

- **Natural visual resources** include landforms and land cover such as trees, vegetation, and water.
- **Cultural visual resources** include manmade elements such as roadways, embankments, bridges, and buildings
- **Project visual resources** include the existing highway's geometrics, structures, and fixtures and those that will be placed in the environment as part of the proposed project.

The overall composition of visual resources helps determine the **visual character** of a scene or landscape. For highway project assessment purposes, visual resources and character are considered from two perspectives:

- 1. The view of the project to the surrounding community (neighbors).
- 2. The view from the project to motorists (travelers).

Neighbors who can see a highway project and travelers who use it are defined as **viewers**. Visual resource changes are assessed by considering the compatibility and/or contrast of the proposed projects with the visual character of existing environments. Viewer responses to these changes are predicted by considering both exposure and sensitivity.

Viewer exposure considers the physical limits of the views and the number and type of viewers. **Viewer sensitivity** considers the expectations of viewers based on existing environments and the extent to which various visual resources may be important to them.

The predicted viewer response to changes in the existing landscape are used to determine **visual quality** impacts. Potential impacts may be identified as neutral, adverse, or beneficial and described in the following terms:

- Extent Are the effects site-specific, local, or even regional?
- Duration Are the effects temporary or permanent, or short-term or long-term?
- Scale Are the effects negligible, minor, moderate, or major?

Potential impact durations are defined below.

- Short-term during construction.
- Short/medium-term 1 to 5 years while new vegetation becomes established after construction.
- Medium/long-term 5 to 15 years after construction when new vegetation would be effective mitigation.
- Long-term Over 15 years.

Potential impact scales are defined below.

Negligible: Changes would be non-detectable or, if detected, effects would be slight and local. Impacts would not require mitigation.

Minor: Changes would be noticeable, although the changes would be small and localized. Conventional mitigation measures may be necessary to reduce potential effects.

Moderate: Changes would be noticeable and have localized and potentially regional scale impacts; historical conditions would be altered. Conventional mitigation measures may be necessary to reduce potential effects.

Major: Changes would be noticeable and would have substantial consequences on a local and/or regional level. Mitigation measures to offset the effects would be required to reduce impacts, although long-term changes to the resource would be possible.

Appendix H: NRCS-CPA-106 Form

FARMLAND CONVERSION IMPACT RATING FOR CORRIDOR TYPE PROJECTS

PART I (To be completed by Fea		3. Date	of Land Evaluation	4.	4. Sheet 1 of							
1. Name of Project			5. Feder	ral Agency Involved								
2. Type of Project			6. County and State									
PART II (To be completed by NR	1. Date Request Received by NRCS 2. Person Completing Form											
 Does the corridor contain prime, unit (If no, the FPPA does not apply - Do 			YES NO]	4. Acres	Irrigated A	Average I	Farm Size				
5. Major Crop(s)				nment Jurisdiction		7. Amour	nt of Farmla	Farmland As Defined in FPPA				
, , , ,			%		Acres	s:	%					
8. Name Of Land Evaluation System L	lsed	9. Name of Loca	al Site Asse			10. Date	Land Evalu	ation Ref	turned by NRCS			
				Alternati	ve Corri	idor For S	Segment _					
PART III (To be completed by Fe	deral Agency)			Corridor A	1	idor B	Corrid	or C	Corridor D			
A. Total Acres To Be Converted Dire	ectly											
B. Total Acres To Be Converted Indi	rectly, Or To Receive	Services										
C. Total Acres In Corridor												
PART IV (To be completed by N	RCS) Land Evaluat	ion Informatio	n									
A. Total Acres Prime And Unique Fa	armland											
B. Total Acres Statewide And Local	Important Farmland											
C. Percentage Of Farmland in Cour	nty Or Local Govt. Uni	t To Be Converte	ed									
D. Percentage Of Farmland in Govt.	Jurisdiction With Same	e Or Higher Relat	tive Value									
PART V (To be completed by NRCS	6) Land Evaluation Info	ormation Criterior	n Relative									
value of Farmland to Be Serviced	or Converted (Scale o	of 0 - 100 Points))									
PART VI (To be completed by Fed	leral Agency) Corrido	or	Maximum									
Assessment Criteria (These criter	ia are explained in 7	CFR 658.5(c))	Points									
1. Area in Nonurban Use			15									
2. Perimeter in Nonurban Use			10									
3. Percent Of Corridor Being Fai	rmed		20									
4. Protection Provided By State	And Local Governmen	t	20									
5. Size of Present Farm Unit Co	mpared To Average		10									
6. Creation Of Nonfarmable Farr	mland		25									
7. Availablility Of Farm Support	Services		5									
8. On-Farm Investments			20									
9. Effects Of Conversion On Far	m Support Services		25									
10. Compatibility With Existing A	gricultural Use		10									
TOTAL CORRIDOR ASSESSM	ENT POINTS		160									
PART VII (To be completed by Fe												
Relative Value Of Farmland (From	100											
Total Corridor Assessment (From Part VI above or a local site assessment)												
TOTAL POINTS (Total of above		260										
1. Corridor Selected:	2. Total Acres of Farr Converted by Proj		3. Date Of S	Selection:	4. Was	s A Local Si	te Assessm	ient Used	1?			
					YES	NO						

5. Reason For Selection:

NOT Complete a form for each segment with more than one Alternate Corridor

NRCS-CPA-106 (Rev. 1-91)

DATE

Appendix I: Additional Correspondence



United States Department of the Interior

FISH AND WILDLIFE SERVICE Arkansas Ecological Services Field Office 110 South Amity Suite 300 Conway, AR 72032-8975 Phone: (501) 513-4470 Fax: (501) 513-4480 http://www.fws.gov/arkansas-es



In Reply Refer To: Consultation Code: 04ER1000-2020-SLI-0062 Event Code: 04ER1000-2020-E-00161 Project Name: 030026 Cossatot River De Queen (S) October 15, 2019

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies endangered, threatened, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*). This letter only provides an official species list and technical assistance; if you determine that listed species and/or designated critical habitat may be affected in any way by the proposed project, even if the effect is wholly beneficial, consultation with the Service will be necessary.

If you determine that this project will have no effect on listed species and their habitat in any way, then you have completed Section 7 consultation with the Service and may use this letter in your project file or application.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found on our website.

<u>Please visit our website at http://www.fws.gov/arkansas-es/IPaC/home.html for species-specific guidance to avoid and minimize adverse effects to federally endangered,</u>

threatened, proposed, and candidate species. Our web site also contains additional information on species life history and habitat requirements that may be useful in project planning.

If your project involves in-stream construction activities, oil and natural gas infrastructure, road construction, transmission lines, or communication towers, please review our project specific guidance at <u>http://www.fws.gov/arkansas-es/IPaC/ProjSpec.html</u>.

The karst region of Arkansas is a unique region that covers the **northern third of Arkansas** and we have specific guidance to conserve sensitive cave-obligate and bat species. **Please visit** <u>http://www.fws.gov/arkansas-es/IPaC/Karst.html</u> to determine if your project occurs in the karst region and to view karst specific-guidance. Proper implementation and maintenance of best management practices specified in these guidance documents is necessary to avoid adverse effects to federally protected species and often avoids the more lengthy formal consultation process.

If your species list includes any mussels, Northern Long-eared Bat, Indiana Bat, Yellowcheek Darter, Red-cockaded Woodpecker, or American Burying Beetle, your project may require a presence/absence and/or habitat survey prior to commencing project activities. Please check the appropriate species-specific guidance on our website to determine if your project requires a survey. We strongly recommend that you contact the appropriate staff species lead biologist (see office directory or species page) prior to conducting presence/absence surveys to ensure the appropriate level of effort and methodology.

Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Through the consultation process, we will analyze information contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at www.fws.gov/ endangered/esa-library/index.html#consultations.

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to

federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, **the accuracy of this species list should be verified after 90 days.** This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. **Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.**

Attachment(s):

Official Species List

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Arkansas Ecological Services Field Office

110 South Amity Suite 300 Conway, AR 72032-8975 (501) 513-4470

Project Summary

Event Code: 04ER1000-2020-E-00161

Project Name: 030026 Cossatot River De Queen (S)

Project Type: TRANSPORTATION

Project Description: Widen Highway 71 to 5 lanes

Project Location:

Approximate location of the project can be viewed in Google Maps: <u>https://www.google.com/maps/place/34.0460812383638N94.26192283630417W</u>



Counties: Sevier, AR

Endangered Species Act Species

There is a total of 4 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/9045</u>	Threatened
Fishes	
NAME	STATUS
Leopard Darter <i>Percina pantherina</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/8470</u>	Threatened
	STATUS
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i> There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: <u>https://ecos.fws.gov/ecp/species/5165</u>	Threatened
Scaleshell Mussel Leptodea leptodon No critical habitat has been designated for this species. Species profile: <u>https://ecos.fws.gov/ecp/species/5881</u>	Endangered

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.