US 70: East of Broken Bow to the Oklahoma/Arkansas State Line Environmental Assessment

McCurtain County

Oklahoma Department of Transportation
U.S. Department of Transportation
Federal Highway Administration

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U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
AND
OKLAHOMA DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL ASSESSMENT

US 70: EAST OF BROKEN BOW TO THE OKLAHOMA/ARKANSAS STATE LINE
MCCURTAIN COUNTY

Project Number NHY-022N(168) and NHY-002N(171)
State J-P #17427(04)(08)

The proposed project is described as the widening of US 70 in McCurtain County, Oklahoma.

This highway project is proposed for funding under Title 23, United States Code (USC). This statement for the improvement has been developed in consultation with the Federal Highway Administration and is submitted pursuant to 42 USC 4332(2)(c) and 49 USC 303.

Submitted:

Date: 7/16/2008

for Environmental Programs Division Engineer
Oklahoma Department of Transportation

Concur:

Date: 7/17/2008

for Robert T. Rodriguez
Division Administrator
Federal Highway Administration

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1.0 Introduction and Location

The Oklahoma Department of Transportation (ODOT) proposes to expand the existing US 70 in McCurtain County, Oklahoma starting from the current four-lane section five miles east of Broken Bow and extending 11 miles east to the Arkansas State line. The project proposes to expand US 70 from a two-lane highway to a four-lane highway. Currently, there is a large percent of heavy vehicles that frequent the facility. The large use of heavy vehicles and restricted site distance limiting passing opportunities create undesirable conditions on the current roadway facility.

This Environmental Assessment (EA) has been prepared to comply with the National Environmental Policy Act of 1969 (NEPA), as amended. The Federal Highway Administration (FHWA), U.S. Department of Transportation, is the lead federal agency and has developed environmental regulations for highway projects. These regulations, Title 23 of the Code of Federal Regulations, Part 771, provide instructions for assessing environmental impacts specific to federally-funded transportation projects. This document has been developed pursuant to 42 U.S Code (USC) 4332 (2)(C) and 49 USC 303. This EA provides appropriate information regarding the project's social, economic, and environmental impacts.

The project study area includes 300 ft on either side of the centerline of existing US 70 beginning 5 miles east of Broken Bow at N4730 extending 11 miles east to Arkansas State line in McCurtain County. Figure 1 depicts the project location and Figure 2 shows the project study area.

2.0 Purpose and Need for the Project

The existing US 70 is a two-lane highway generally consisting of four to five foot shoulders. Select locations along US 70 were improved in 2005 to widen the existing shoulder an additional three feet to accommodate the installation of guard rail. ODOT has completed two evaluation studies of US 70, the 1997 *US 70 Feasibility Study*, and the *Needs Study and Sufficiency Rating Report FY 2005 – FY 2024*. The 1997 study concluded this section of US 70 (from Broken Bow to the Arkansas State line) has a high crash rate and is a high priority for corridor improvement. The project termini were selected based on the feasibility study, which identified this section of roadway in need of the addition of two additional lanes along with the widening and resurfacing of the existing lanes. The western terminus starts were the current four lane section ends, approximately five miles east of Broken Bow. The eastern terminus ends at the Arkansas State line where another Arkansas project would continue the widening improvements into Arkansas. The 2005 Statewide Intermodal Transportation Plan identified US 70 from I-35 to Arkansas State line as a transportation improvement corridor. US 70 is a Principal Arterial.

The *Needs and Sufficiency Rating Report* evaluates roadways based on their existing geometric design and physical condition. This segment of US 70 was rated as "inadequate," indicating deficiencies in design and condition of the roadway. The report concluded that the deficiencies in design and the accidents occurred supported the proposed improvements. The final recommended improvements in the Needs and Sufficiency Rating Report recommended an expansion of the existing US 70 from two lanes to four lanes. The report identified this section of US 70 as one of the three "high priority" areas for improvement.

Traffic characteristics along the corridor consist of 20 percent heavy vehicles. The high percentage of heavy vehicles causes accelerated wear of the road, decreasing the roadway lifetime before repairs are needed. These heavy vehicles, along with limited sight distance in many areas along US 70, limit the passing opportunities along the current roadway facility, impeding traffic flow.

Figure 1. Project Location

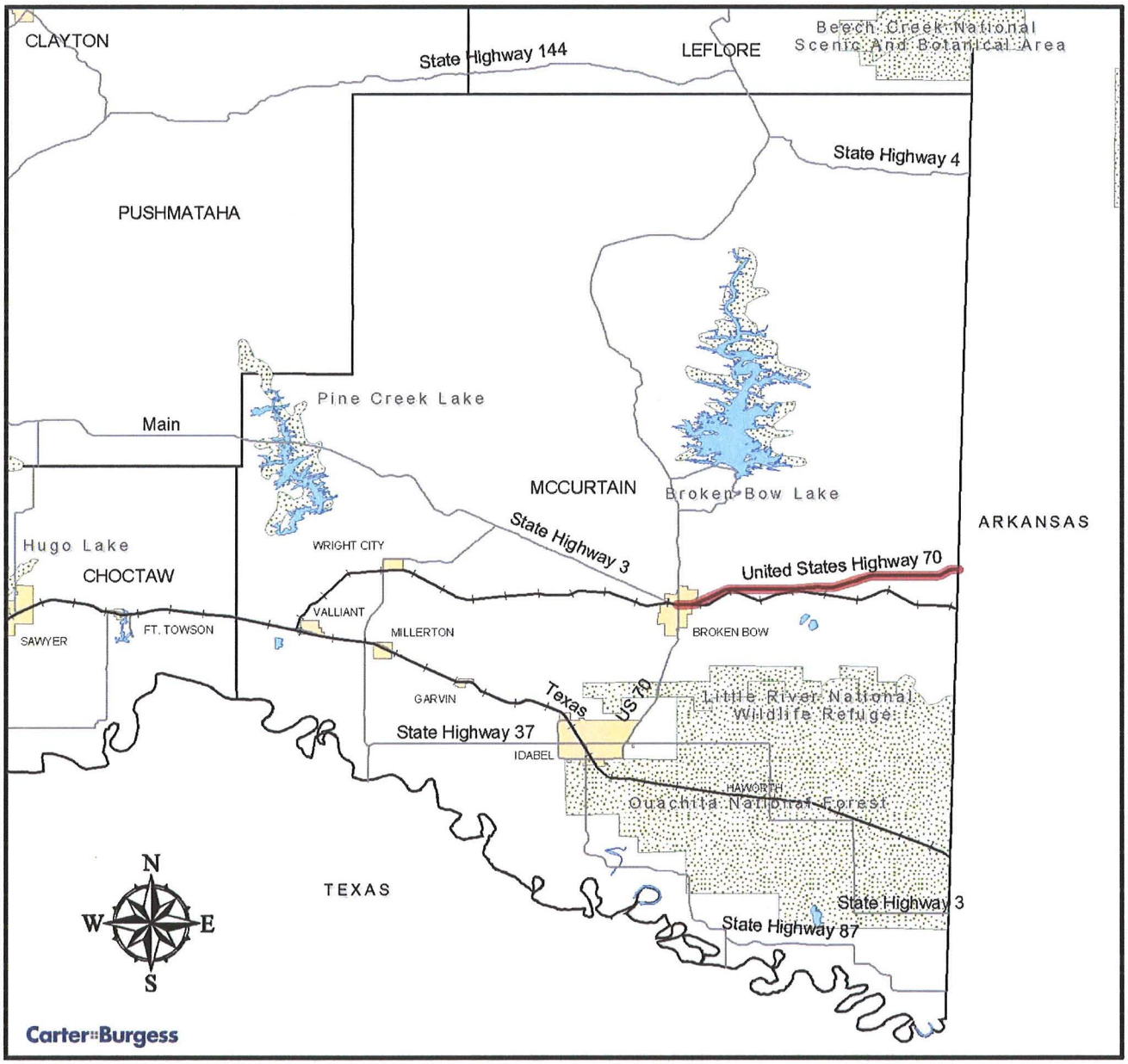
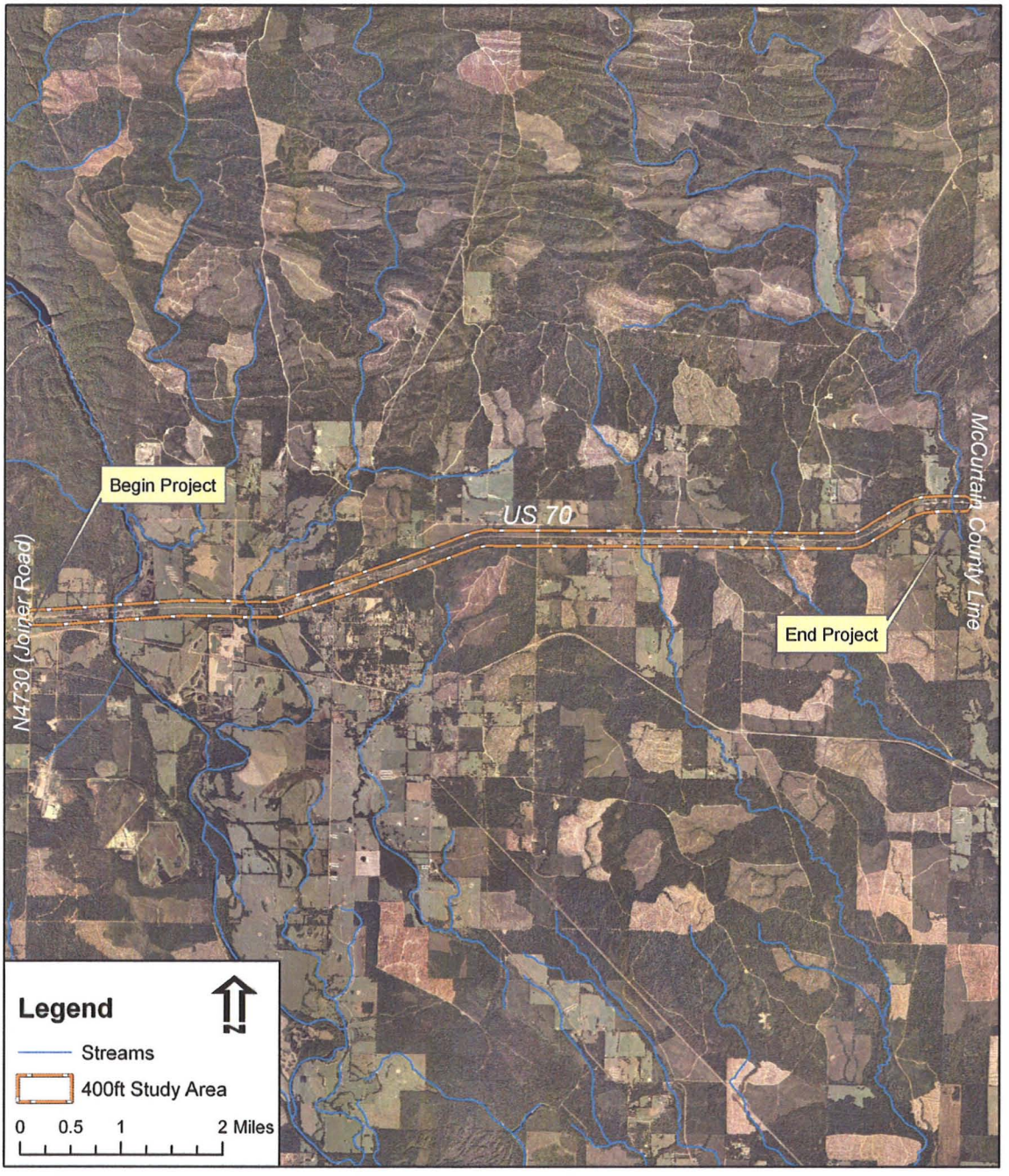


Figure 2. Study Area



Accident Data

Accident data recorded over a three year period from January 1, 2004 through December 31, 2006 showed the project area had 53 overall collisions, 39 resulted in injured people and three resulted in fatalities. The overall rates for collisions, injuries, and fatalities are 468.4, 212.1, and 17.7, respectively. These rates are higher than the rates for McCurtain County in 2000; 122.7 for collisions, 59.7 for injuries, and 3.3 for fatalities. The rates for the proposed project area also exceeded the 2000 state rates as well of 104.3 for overall collisions, 48.8 for injuries, and 2.9 for fatalities. These statistics attribute the accidents to inadequate roadway section within the project area, such as narrow shoulders and no separation between travel lanes of opposing traffic.

Due to deficiencies in design and condition of the roadway creating a safety hazard for drivers and inadequate support for the large volume of heavy trucks, the proposed improvements are needed.

3.0 Alternatives Considered

Three basic alternatives were considered during the environmental process to address the inadequate roadway design; two construction designs plus the "No Build" Alternative were considered.

- Alternative No. 1 – Widen US 70 to the north from an undivided two-lane highway with a four foot shoulder to a four-lane divided freeway with a 10 foot outside shoulder. Right-of-way would be acquired primarily on the north side of the roadway.
- Alternative No. 2 – Widen US 70 to the south from an undivided two-lane highway with a four foot shoulder to a four-lane divided freeway with a 10 foot outside shoulder. Right-of-way would be acquired primarily on the south side of the roadway.
- Alternative No. 3 – No build Alternative. Under the No Build Alternative, no major transportation improvements would be made along the corridor beyond those already programmed and funded by ODOT. However, it does assume that routine maintenance would continue on US 70.

Table 1 shows the comparison of the two alternatives and the No Build Alternative based on certain engineering design criteria, construction costs, displacements, right-of-way needs, and environmental impacts.

Table 1. Design Evaluation Criteria

	Evaluation Category	Alternative No. 1 4R – Construct two new parallel lanes north of the existing US 70 roadway.	Alternative No. 2 4R – Construct two new parallel lanes south of the existing US 70 roadway.	Alternative No. 3 No-Build
Cost	Construction Cost	60.3 million	62.3 million	$0
	Right-of-Way Acres	168	161	0
	Commercial Relocations	5	8	0
	Residential Relocations	8	9	0
	Relocations Cost (Business and Residential)	1.9 Million	2.8 Million	$0
	Right-of-Way Cost ($2000/acre)	$335,575	$322,589	$0
Potential impacts: H=high, M=moderate, L=little, or N=none				
Environmental Categories	Wetland Impacts	L	L	N
	Archaeological Sites	L	L	N
	Historical Sites	L	L	N
	Hazardous Waste Sites	L	L	N
	Environmental Justice	L	L	N
	Endangered Species	L	L	N
	Underground Storage Tanks	M	H	N
	Potential Noise Impact	M	M	N
	Air Quality	L	L	N
	Parks or Wildlife Refuges	L	L	N
	Native American Concerns	L	L	N
	Social or Economic Issues	L	L	N
	Water Quality	L	L	N
	Wild and Scenic Rivers	L	L	N
	Water Body Modifications	L	L	N
Potential for improvements: H=high, M=moderate, L=little, or N=none				
Engineering	Clear Zone	H	H	N
	Safety Improvement Potential	H	H	N
	Site Distance	H	H	N

In the engineering category, both widening alternatives will provide the same degree of improved safety by upgrading to current design standards and can also be constructed with approximately an equal level of disruption to existing traffic. The addition of a center median will increase the safety and lower head-on collisions. The 10 foot outside shoulder will add a buffer for large vehicles from the edge of pavement.

In the cost category, Alternative No. 1 will produce a slightly lower construction cost than Alternative No. 2 and require fewer displacements.

In the environmental category, both of the improvement options produce similar impacts in a majority of the categories. The variance to this is the potential for impacting underground storage tanks. This is due to two existing gas stations on the south side of the road that are

situated very close to the southern right-of-way line. See Section 4.0 for more detailed discussion of the environmental categories.

The evaluation matrix, Table 1, was used as the basis for ranking the three alternatives in order to select a preferred alternative. Even though both improvement options were evaluated to the state line as the eastern terminus, it is recommended that any near-term construction be terminated approximately one mile west of the Arkansas border. In coordinating with the Arkansas State Highway & Transportation Department (AHTD), it was learned that they do not have any long term plans for upgrading the section of US 70 that this project could connect to at the state line. Terminating the near-term improvements one mile before the state line will prevent any future connection issues.

Alternative No. 1 was chosen as the preferred alternative for the following reasons:

- This alternative would provide improved safety to the public.
- This alternative would have fewer impacts to commercial and residential properties than Alternative No. 2.
- This alternative has lower construction costs than Alternative No. 2.
- This alternative will have a lower chance of impacting underground storage tanks.

4.0 Social, Economic and Environmental Impacts

Appendix 1 lists the social, economic and environmental factors for the Preferred Alternative.

4.1 Land Use

Aerial photographs and a visual survey provided the existing land use data within the study area. Land use in the proposed project area consists of rural land use; farm lands, pasture lands, and single home dwellings dominate the proposed project area.

4.2 Farmland

The US 70 study area includes soil types designated as prime farmlands. All designated prime farmlands in Oklahoma are monitored under the Farmland Protection Policy Act administered by the US Department of Agriculture, Natural Resources Conservation Service (NRCS).

The study area for the proposed project contains approximately 646.9 acres of prime farmland. A Farmland Conversion Impact Rating Form (AD-1006) was completed, and coordination with the NRCS has been initiated. The NRCS responded on May 30, 2008, with a completed AD-1006 form for a total score of 107. This score is below the 160 points required for further coordination with the NRCS. A copy of the completed form, the submittal letter, and the NRCS response letter is provided in Appendix 2.

4.3 Right-of-Way and Displacements

The Preferred Alternative would require approximately 168 acres of additional right-of-way. Potential impacts and/or displacements could include five businesses and up to eight single-family homes. Potential cost and acquisition of the right-of-way is listed in Table 1.

The residences to be displaced include five brick and wood-style single family residences and three mobile homes. Commercial displacements include Just a Dollar Flea Market, Home Town Café, Marshall Salon, and two taverns. Based on visual observation, these businesses employ approximately 10 to 30 employees. No additional impacts to businesses were recorded from closer proximity to the roadway.

Using a Multiple Listing Service (MLS), July 2008, 10 homes and two plots of land were identified near the proposed project area. The two land properties were priced at $25,000 and

$30,000. The homes for sale ranged in price from $89,000 to $695,000. Nine of the homes were located in Broken Bow, Oklahoma and one home was located in Hochatown, Oklahoma. No MLS data for east McCurtain County was available for business properties. While this MLS search provides possible housing opportunities for relocation, this data does not comprise all available housing that a potential impacted owner could relocate. The final location of the impacted residence or business will be decided between ODOT and each individual owner during the right-of-way acquisition phase.

Right-of-way acquisition would be in accordance with the Uniform Relocation Assistance and Real Property Acquisitions Policy Act of 1970, as amended. ODOT's Relocation Assistance Program provides financial assistance for relocation expense and advisory assistance in relocation resources available within the area. Relocation resources are available to all residential and business displacements without discrimination.

Last Resort Housing consideration ensures that comparable decent, safe, and sanitary replacement housing is made available to displaced person when such housing cannot otherwise be provided within the person's financial means. If necessary, this option would be available and accommodated.

4.4 Social and Economic Impacts Including Environmental Justice

4.4.1 Population Characteristics

US 70 is located in McCurtain County, Oklahoma. According to the 2000 Census, the population of McCurtain County is 34,402. US Census data for McCurtain County indicates that 70.5 percent of the population is White, 9.3 percent is Black, 13.6 percent is American Indian, 0.2 percent is Asian, 3.1 percent of the population is Hispanic or Latino, and another 1.3 percent is comprised of all of the remaining races.

4.4.2 Economic Profile of McCurtain County

McCurtain County is a small rural county in the State of Oklahoma. Information from the Regional Economic Information System, Bureau of Economic Analysis indicates the major sources of income in the county are manufacturing, service industry, retail trade, and government employment. These following types of businesses would be affected by the proposed project:

- Manufacturing
- Retail
- Recreation
- Utilities

Access to businesses may change, but all properties would remain accessible. When construction is completed, permanent signage to retail, commercial, and industrial facilities would be considered in accordance with ODOT signage policy and guidelines.

Short-term construction-related impacts may affect the community as well. Impacts could include occasional traffic congestion on or surrounding the widening of US 70, restricted access to homes and businesses, and noise and dust associated with construction activity. Mitigation would include temporary signage that directs traveling customers and clients to their destinations. During the construction plan development stage, a detailed traffic control plan will be developed in accordance with ODOT requirements.

Long-term community and economic benefits could occur to area residents and businesses as capacity of the roadway increases and unsafe conditions are eliminated easing travel in and out of the project area.

4.4.3 Environmental Justice

In February 1994, Executive Order 12898 was issued requiring federal agencies to incorporate consideration of environmental justice into the NEPA evaluation process. The purpose of this order was to ensure that minority and low-income populations and minority-owned businesses did not receive disproportionately high and adverse human health or environmental impacts as a result of federal actions.

Total 2000 population for McCurtain County is 34,402 with a population that is 29.5 percent racial minority (including Hispanic or Latino). This portion of US 70 is located in Census Tract 9985. From this tract, 3 "Block Groups" are located within the project corridor: Block Groups 1, 4, and 5 were all partially located within the project area. Figure 2 depicts these groups. The population of the areas within the project corridor for the three census block groups is shown in Table 2 (A 300 ft buffer around the project corridor was used to ascertain the population numbers for each block group segment).

Table 2. Census Block Population

Census Block Group	Total Pop.	White	Black	American Indian	Asian	Hispanic/ Latino[1]	Other	Total Minority	Percent Minority
Blk. Grp. 1 Census Tract 9985	100	90	0	9	0	0	1	10	10%
Blk. Grp. 4 Census Tract	53	43	0	7	0	0	3	10	19%
Blk. Grp. 5 Census Tract 9985	187	165	5	8	0	11	0	24	13%

Source: US Census Bureau
Note Hispanic or Latino are not considered a "race" so the total percentage of ethnicities may exceed 100 percent.

The percentage of minorities in all the block groups in the project area has a minority composition at or below the average from McCurtain County (29.5 percent). Based on this information, the project will not disproportionately impact minority populations.

The average wage for McCurtain County in 2000 based upon information provided by the Oklahoma Department of Commerce is $22,373 and the per capita income is $18,423. The household median income for the county is $24,509. The current U.S. Department of Health and Human Services (HHS) poverty guidelines for a family of four 2008 is $21,200. The percentage of persons living below poverty level in McCurtain County is 23 percent according to the US Census. The census uses a set of money income thresholds that vary by family size and composition to determine low income designation. If the family's total income is less than that family's threshold, every individual in the family is designated as low income. The thresholds are updated annually.

The percentage of persons living below the poverty level in the three referenced census block groups and the median household income is shown in Table 3.

Figure 3. Census Block Groups within Project Area

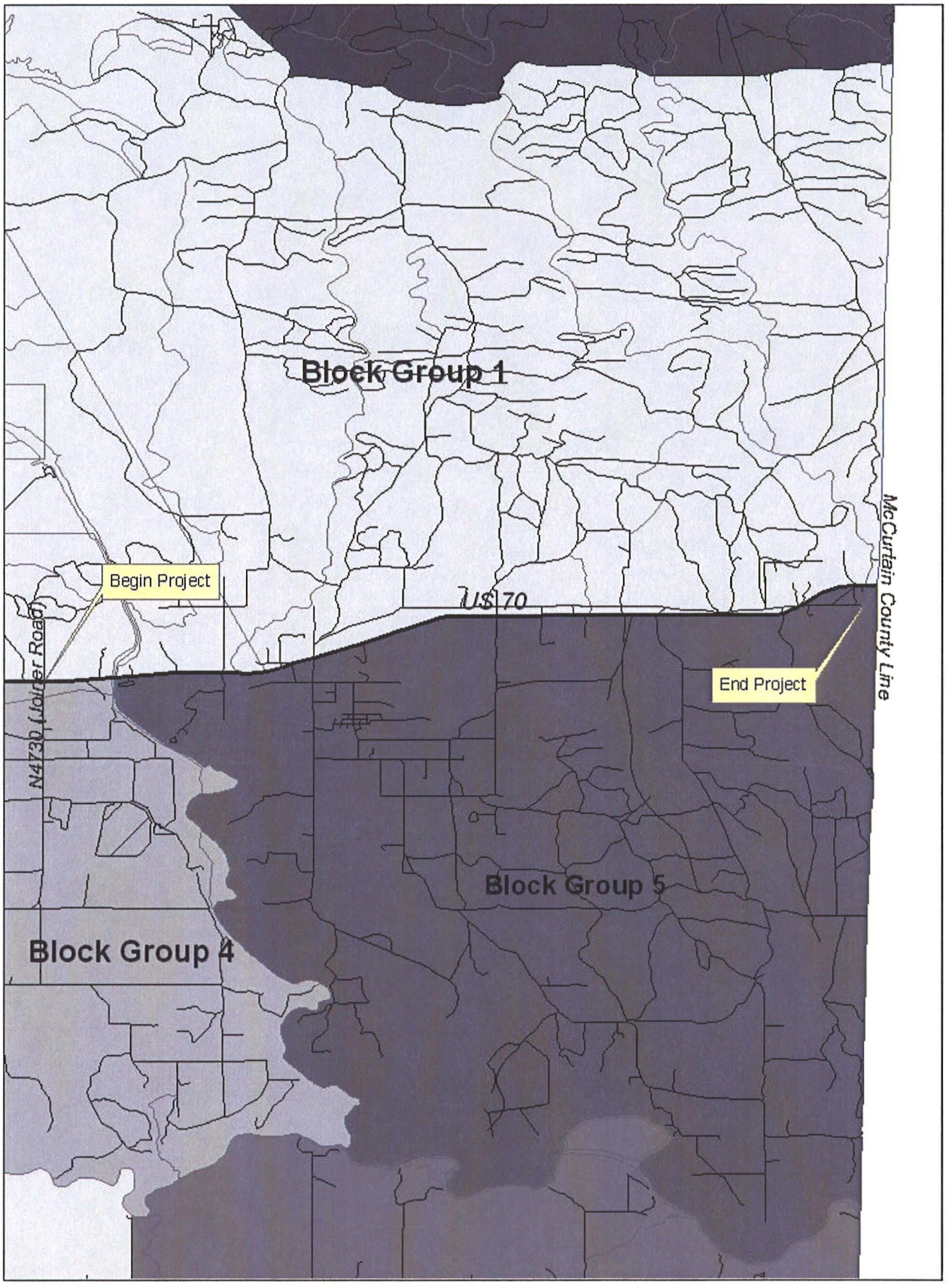


Table 3. Census Block Percentages of Persons Living Below Poverty Level

Census Block Group	Census Block Percentage Below Poverty Level	Median Household Income (1999 Dollars)
Blk. Grp. 1 Census Tract 9985	27%	$29,688
Blk. Grp. 4 Census Tract 9985	13%	$28,355
Blk. Grp. 5 Census Tract 9985	27%	$21,935

All of the block groups in the project area have a greater percentage of people living in poverty than the 23 percent county average with the exception of Block Group 4 which has 13 percent living in poverty. All block groups have a greater median household income than the HHS 2008 poverty guidelines; therefore, no low-income populations were identified in the project area based on CEQ guidelines for environmental justice.

According to 2000 Census data, the median rent for McCurtain County is $302, which indicates occupants of the multi-family buildings in the project area are likely not low-income since lower rent prices are available elsewhere in the county. The same Year 2000 Census data indicates there are 9,394 rental units vacant in the county indicating there is no shortage of vacant rental units.

Because no low-income or minority populations were identified in the proposed corridor, there would be no disproportionate and adverse impacts to environmental justice populations.

4.5 Noise

A traffic noise assessment report was prepared in accordance with ODOT's Highway Noise Abatement Policy Directive C-201-3 and FHWA's Noise Abatement Criteria (23 CFR 772). There are five main steps comprising traffic noise studies: 1) identify noise-sensitive receivers; 2) determine existing ambient peak noise levels; 3) predict future peak noise levels; 4) identify traffic noise impacts; and 5) evaluate mitigation measures for sensitive receivers where traffic noise impacts occur.

Potential noise impacts are commonly distinguished as either short-term or long-term impacts. Short-term impacts are typically associated with the noise generated during construction activities, while long-term impacts on surrounding land uses are generated by future traffic volumes. Long-term noise impacts were determined in accordance with ODOT's Highway Noise Abatement Policy Directive, specific requirements of which include:

- Using design year traffic volumes to predict future traffic noise levels;
- Ensuring that existing noise levels reflect the noisiest hour of the day affecting a given receptor; and
- Using exterior 67 dBA $L_{eq(h)}$ criterion for most noise-sensitive receptors. Leq is defined as the steady state sound level that, in a stated period of time, contains the same acoustic energy as the time-varying sound level during the same period. $L_{eq(h)}$ is the hourly value of L_{eq}. $L_{eq(h)}$ is based on the more commonly known decibel (dB) and the "A-weighted" decibel unit (dBA).

ODOT's Highway Noise Abatement Policy Directive states that noise impacts occur when:

1) The projected future noise level approaches by one decibel or exceeds the FHWA Noise Abatement Criteria;
2) When predicted exterior L_{eq} noise levels exceed existing exterior L_{eq} noise levels by 15 dB or more; and
3) In those cases where no frequent exterior human activities occur, the interior criterion of the FHWA Noise Abatement Criteria shall be used. Impacts occur when interior noise levels approach by one dB or exceed this interior criterion level.

Existing noise levels were determined by utilizing a precision sound meter. Future noise levels were calculated using the FHWA traffic noise computer model. Under current conditions, two (2) residential receivers exceed the 67 dBA $L_{eq(h)}$ for the Noise Abatement Criteria, Category B (NAC-B). Based on the new four-lane facility and with projected traffic growth, the same two (2) residential receivers will exceed the NAC-B. The noise levels for these receivers are expected to increase approximately 1.0 decibel in the design year (2030) over current conditions. In considering noise mitigation, it was found that noise abatement for the impacted receivers would require blocking driveway access to US-70. Maintaining this access would render a noise abatement wall ineffective. Mitigation is not feasible for the identified receivers, and therefore, noise abatement is not recommended for this project. In planning noise compatible land use planning, the future 66 dBA impact zone was determined to be 325 feet from the center of the new divided four-lane facility. The noise assessment report will be provided to the local officials to aid in noise compatible land use planning.

4.6 Water Quality

Surface water resources in the project area consist primarily of streams and wet areas shown in Table 5.

Table 5. Surface Water Resources

Waterbody*	Description
1	Ephemeral Streambed
2 (Mountain Fork River)	Perennial Streambed
3	Ephemeral streambed
4	Intermittent Streambed
5	Intermittent Streambed
6	Ephemeral Streambed/Herbaceous Wetland/On Channel Pond
7	Ephemeral Streambed
8	Ephemeral Streambed
9	Ephemeral Streambed
10	Ephemeral Streambed
11	Ephemeral Streambed
12	Ephemeral Streambed
13	Ephemeral Streambed
14	Ephemeral Streambed
15	Ephemeral Streambed
16	Ephemeral Streambed
17	Intermittent Streambed
18	Ephemeral Streambed
19	Ephemeral Streambed
20	Ephemeral Streambed

21	Ephemeral Streambed
22 (Rock Creek)	Perennial Streambed

*Refer to Exhibits 2 and 3 of Appendix 4 for crossing locations

A large amount of surface water runs into the Mountain Fork River, which is located in the lower Red River Basin. According to the draft *Year 2006 Beneficial Use Monitoring Program* (BUMP), this segment of the Mountain Fork River is assigned the following beneficial uses:

- Public and Private Water Supply
- Cool (Trout) Water Aquatic Community – Fish and Wildlife Propagation
- Agriculture – Class I Irrigation
- Primary Body Contact – Recreation

The project corridor overlies the Trinity Aquifer, also known as Antlers Aquifer. The aquifer underlies about 41,000 square miles that extends from south-central Texas to southeastern Oklahoma. It is an important water supply for several communities in the Central and Northern Texas area and is a source of domestic water supplies. The aquifer consists of interbedded sandstone, sand, limestone, and shale of Cretaceous age. Its thickness ranges from a few feet in aquifer outcrop areas to more than 1,000 feet in downdip areas. Water within the aquifer is confined by low-permeability rocks, and where the aquifer does not outcrop, it is confined by the Walnut Formation. The depth to the base of fresh water in most of the area is between 50 and 800 feet, but some well depths exceed 3,000 feet in the confined zone. Wells completed in the aquifer normally yield 50 to 500 gallons per minute, while some yield as much as 2,000 gallons per minute (U.S. Geological Survey, 1996).

Impacts would include both short-term (construction-related) and long-term (operation-related) impacts. Filling and grading activities would be in compliance with the Oklahoma Pollutant Discharge Elimination System (OPDES) General Permit for Construction Activities. The OPDES prescribes a series of measures or best management practices (BMPs) that would serve to minimize impacts to waters of the U.S. as a result of construction in adjacent uplands. The new roadway would be in compliance with all federal and state laws relating to mitigation and elimination of water quality impacts. The applicable standard environmental measures dictated by Federal regulation and the Department's 1999 *Standard Specifications for Highway Construction* would be followed.

Mountain Fork River is identified as part of the Oklahoma Scenic River system. Best management practices (silt fences, rock berms, etc.) will implement during construction while working within the river's watershed.

4.7 Potential Jurisdictional Wetland Impacts

Biologists conducted surveys in May 2004 to identify and delineate jurisdictional wetlands. Wetlands were delineated using the criteria from the *1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual.*

Two potential jurisdictional wetland areas were observed within the proposed project area. The site locations and potential area of impact are listed in Table 6 and shown in the potential jurisdictional wetlands finding in Appendix 4. Final determinations regarding potential jurisdictional wetlands are subject to verification by the USACE.

Table 6. Site Locations and Potential Areas of Impact

Site	Location	Acres

1	Approximately 7.0 miles east of Broken Bow, OK on U.S. 70 to the north. Located at latitude 94 deg 35 min 36.52 sec – 34 deg 2 min 34.52 sec longitude	0.266
2	Approximately 7.0 miles east of Broken Bow, OK on U.S. 70 to the south. Located at latitude 94 deg 35 min 37.63 sec – 34 deg 2 min 46 sec longitude	0.259
Total Acres		**0.525**

The proper Section 404 permit would be obtained along with appropriate wetland mitigation, if required.

4.8 Floodplains

The Federal Emergency Management Agency (FEMA) floodplain maps identified two areas of the project area that cross the floodplain. The FEMA maps showed floodplain areas extending 9,000 linear feet along the existing highway around Mountain Fork River and 600 linear feet along the highway at Rock Creek within the project Right-Of-Way. The proposed project would not increase the base flood elevation to a level that would violate applicable floodplain regulations and ordinances.

4.9 Threatened or Endangered Species

The project occurs in an area where there are federally listed endangered or threatened species or critical habitat. A biological field review was performed for the referenced project. The Department submitted a letter to U.S. Fish and Wildlife Service (USFWS) stating that the project, as proposed, will have no effect on the federally-listed Interior Least Tern, Piping Plover and Redcockaded Woodpecker and the project, as proposed, may affect or not likely to adversely affect the Ouchita rock pocketbook mussel, scaleshell mussel, winged mapleleaf mussel, leopard darter, American alligator and American burying beetle (ABB). USFWS concurred with the no effect determinations and may affect determinations given the implementation of appropriate best management practices for storm water, erosion and sediment control and chemical and fuel handling measures dictated by Federal Regulations and the Department's Standard Specifications for Highway Construction. In addition, the appropriate effects determination and mitigation measures proposed for the American burying beetle will be addressed in the programmatic biological assessment and conservation strategy, and formalized in a Memorandum of Understanding and through conclusion of formal consultation among the Federal Highway Administration, the Department and the USFWS. Appendix 4 contains information on the complete biological studies and coordination with USFWS.

In addition, USFWS has expressed concern over the potential impacts of the proposed project to the riparian zones and wetlands. To accommodate USFWS's concerns, the right-of-way for the proposed project will be minimized as much as reasonable consistent with the needs of public mobility and safety to accommodate the design of the project to meet current design standards and accommodate any utility relocation.

USFWS has noted the project could potentially affect species protected by Migratory Bird Treaty Act (MBTA). To the extent determined appropriate and biologically sound by ODOT biologists, the Department will consider appropriate measures to minimize such impacts on this project. The Department and FHWA are also committed to development of a programmatic understanding with USFWS which balances broad consideration of the MBTA with the needs of transportation improvement in Oklahoma.

Refer to Appendix 4 for complete biological studies and coordination with USFWS.

4.10 Historic/Archaeological Preservation

A cultural resources survey has been conducted by the Department's consultant and accepted by the Oklahoma Archeological Survey in consultation with the Oklahoma State Historic Preservation Office (SHPO) and appropriate Native American Tribes. The proposed project involves a determination of no adverse effect by the SHPO.

If archaeological remains are encountered during excavation, the contractor shall immediately cease the excavation operation and notify the ODOT project engineer. If any new discoveries are made, ODOT cultural resources coordinator will be contacted for further evaluation. Refer to the full *Archaeological Survey and Preliminary Setting Assessment Report* in Appendix 5 for further information.

4.11 Hazardous Waste Information

An *Initial Site Assessment* (ISA) for Hazardous Waste was conducted in August 2004 to identify potential sites, as well as any conditions that might indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into the ground, groundwater, or surface water within the vicinity of the proposed project (see Appendix 6 for the complete ISA). See Table 8 for a summary of potential contaminators.

Table 8. Potential Contaminators

Potential Contaminator	Vicinity to Project	Threat
Underground Storage Tank (UST)	Within 1.0 mile radius	Slight potential to contaminate
Leaking Underground Storage Tank (LUST)	Within 0.5 mile radius	Slight potential to contaminate
Above Ground Storage Tank	Within 1.0 mile radius	Slight potential to contaminate
Resource Conservation and Resource Recovery (RCRIS) – small quantity generator of hazardous waste	Within 0.25 mile radius	Low potential to contaminate
Hazardous Materials Incident Report System (HMRIS)	Within 1.0 mile radius	Unlikely potential to contaminate
Oklahoma Complaint Database	Within 0.5 mile radius	Very low potential to contaminate
Polychlorinated Biphenyls (PCBs) Activity Database	Within 0.25 mile radius	Low potential to contaminate
Federal Insecticide Fungicide Rodenticide Act (FIFRA)/Toxic Substance Control Act (TSCA)	Within 1.0 mile radius	Low potential to contaminate
Facility Index System (FINDS)	Within 0.25 mile radius	Low potential to contaminate

The ISA revealed no evidence of recognized adverse environmental conditions in connection with the proposed project corridor. The proposed project corridor appears to avoid most tracts that indicate a potential for environmental impact within the project area

If potentially hazardous conditions are encountered during right-of-way acquisition or construction, then ODOT has procedures in-place to remove USTs and any contaminated soil that may be encountered.

5.0 Public Involvement and Coordination

On May 19, 2004, a scoping letter soliciting comments relating to the social, economic, and environmental effects of this project was mailed to 54 local, county, state, and federal agencies, organizations, and individuals. A copy of this letter and its recipients is provided in Appendix 7. Fourteen replies were received and are attached in Appendix 8. The following summarizes the responses received from the scoping letters:

- The Oklahoma Scenic Rivers Commission stated the proposed project will have no adverse impacts on any of Oklahoma's "Scenic River Areas."

  Response: The comment is noted.

- The Oklahoma Department of Wildlife Conservation (ODWC) stated one state listed endangered species and two Special Concern Category 2 (SSII) are known to occur in the

area. ODWC gave recommendations for minimizing habitat loss for wildlife on the proposed project.

Response: A threatened and endangered species and wildlife survey was conducted along the proposed project. No rare species or their habitats were found. ODOT would minimize impacts to wildlife and their habitat. See the threatened and endangered species section in Section 4 of this document for further information on wildlife impacts.

- The Oklahoma Water Resource Board (OWRB) referenced their website to find the number and contact the local floodplain administrator should any work be required in a floodplain. OWRB indicated it has a Memorandum of Agreement (MOA) with ODOT. OWRB suggested John Dyer of ODOT be contacted to ensure this project would comply with OWRB's Chapter 55 regulations and the ODOT MOA.

  Response: ODOT Biologist has reviewed the wetlands findings and vegetation and wildlife field reports. This project would comply with OWRB's Chapter 55 Regulations and the ODOT MOA.

- Jerry Ellis from the State of Oklahoma House of Representatives stated this section of US 70 receives heavy truck traffic daily. He noted the addition of two lanes would greatly improve safety.

  Response: The comment is noted.

- The Caddo Nation of Oklahoma stated that they have a long history in the project area. It was noted that many mound locations and associated villages of the Caddo are located in this area. The Caddo requested ODOT consult with them prior to any ground disturbing activities and also requested copies of any previous cultural resources survey reports that relate to the construction of the highway.

  Response: Consultation with the Oklahoma State Archeological Survey concluded that no archeological sources that would warrant National Register eligibility would be disturbed from the proposed project (see Appendix 5). ODOT will consult with the Caddo Nation of Oklahoma prior to ground disturbing. If archaeological material is encountered during construction, the Oklahoma State Archeological Survey will be immediately contacted.

- A second letter was sent for the Caddo Nation of Oklahoma, which requested they be provided with the exact boundaries of the project, the potential area of effect, and any known historic properties that are within or near the area of potential effect.

  Response: The cultural resources survey identifying the potential area of effect and the historical properties in the potential area of effect are include in Appendix 5. The exact boundaries of the proposed project would be sent to the Caddo Nation of Oklahoma when they have been designed.

- The Kiamichi Economic Development District of Oklahoma stated they have no further comment on the proposed project.

  Response: The comment is noted.

- The USACE stated the project area crosses numerous regulated watercourses and would be a candidate for authorization under a Nationwide Permit for Linear Transportation Crossings (NWP-14), but more information was needed to process any permit request. The USACE noted that General Condition 13 must be followed if impacts to Special Aquatic Sites or more than 1/10 acre of waters of the is impacted by the project.

Response: A waters of the U.S. and wetland survey has been completed. Two potential jurisdiction wetlands and 22 water crossings were noted. When final design is complete, a permit package would be submitted. Please see the Wetlands Impact and Water Quality section of Section 4 of this document for further information on waters of the U.S.

- The Oklahoma Tourism and Recreation Department noted the only park in the vicinity is Eagletown Community Park. It was stated if there is no permanent impact on the park facility, then the proposed project would have no negative impacts.

  Response: There will be no impacts to Eagletown Community Park.

- The Oklahoma State Archeological Survey stated that after a file search, four known archeological sites were listed in the proposed project area and archeological materials are likely to be encountered They stated that a archeological field inspection is necessary prior to project construction. It was noted that coordination with the State Historic Preservation Office and the appropriate Native American tribe/groups is needed to identify their concerns.

  Response: An archeological report has been submitted to the Oklahoma State Archeological Survey, which concluded that no impacts would occur to archeological deposits that would be considered for National Register eligibility (see Appendix 5). If archaeological material is encountered during construction, the Oklahoma State Archeological Survey will be immediately contacted. Proper Native American consultation and coordination with the SHPO has been performed by ODOT.

- The Eastern Oklahoma Regional Office (EORO), Bureau of Indian Affairs (BIA), stated the project area lies within the jurisdictional areas of the Choctaw Nation of Oklahoma, a federally recognized Tribe. They recommended ODOT coordinate directly with the Choctaw Nation of Oklahoma.

  Response: Coordination was initiated between ODOT and the Choctaw Nation of Oklahoma, March 2005.

- The Choctaw Nation of Oklahoma sent a letter documenting the phone conversation with ODOT. A time extension was provided to the Choctaw Nation of Oklahoma to review the project and do historical research to assess possible impacts to their cultural interest and historic sites.

  Response: The comment for time extension was noted. However, the Choctaw Nation did not provide any additional comments.

- The Oklahoma Historical Society stated when impacted properties are identified documentation with photographs of all structures in excess of 45 years of age be submitted before an opinion would be issued.

  Response: An historical survey was performed and concluded that no historical properties would be affected by the proposed project. Concurrence was received from the SHPO office on April 12, 2005. See SHPO coordination letters located in Appendix 5 of this document.

5.1 Public Meeting

The public meeting was held at the Broken Bow Public Library, located at 404 North Broadway in Broken Bow. The purpose of the meeting was to assist ODOT in gathering comments concerning the proposed improvements to US 70. Sixteen (16) people signed the attendance roster for the meeting. Three people registered from the public and thirteen registered as part of

roster for the meeting. Three people registered from the public and thirteen registered as part of the ODOT team. Minutes of the meeting are provided in Appendix 9. No public comments (written or verbal) were received at the meeting and no written comments were mailed to ODOT.

After the approval of this document, it will be made available to the public for comment. All comments received will be reviewed and considered prior to preparation of final design plans for the project.

6.0 List of Preparers

Randy Alexander, C.W.B. – Jacobs Engineering Group, Inc., 777 Main Street, Fort Worth, Texas. Senior Environmental Scientist, B.S. Wildlife and Fisheries Science – Texas A&M University, 15 years of experience (Wetlands/Section 404, biological field studies, NEPA report preparation)

Nathan Drozd – Jacobs Engineering Group, Inc., 7950 Elmbrook Drive, Dallas, Texas. Transportation Planner, B.S. Wildlife and Fisheries Science – Texas A&M University, six years of experience (NEPA report preparation and data collection)

Frank Holland – Jacobs Engineering Group, Inc., 777 Main Street, Fort Worth, Texas. Environmental Scientist, M.A. Rangeland Ecology and Management, B.S. Rangeland Ecology and Management – Texas A&M University, six years of experience (report preparation and data collection)

Stephanie Messerli, P.E., AICP- Jacobs Engineering Group, Inc., 2705 Bee Cave Road, Suite 300, Austin, Texas. Project Manager. Masters of Regional & City Planning – University of Oklahoma, B.S. Civil Engineering – University of Nebraska, 15 years of experience (project management and engineering)

Sandy Wesch-Schulze, P.E., AICP – Jacobs Engineering Group, Inc., 7950 Elmbrook Drive, Dallas, Texas. Manager of Projects – Environmental and Planning (DFW), B.S. Civil Engineering – Texas A&M University, 20 years of experience (NEPA report preparation and document review)

Appendix 1: Social, Economic and Environmental Factors

ITEMS NORMALLY CONSIDERED DURING PROJECT DEVELOPMENT

- Purpose And Need for Project
- Alternatives
- Affected Environment
- Possible Environmental Consequences:
  - Land Use Impacts
  - Farmland Impacts
  - Social Impacts
  - Relocation Impacts/Right-of-Way Acquisition
  - Joint Development
  - Considerations Relating to Pedestrians and Bicyclists
  - Air Quality Impacts
  - Noise Impacts
  - Water Quality Impacts
  - Permits
  - Wetland Impacts
  - Water Body Modification and Wildlife Impacts
  - Floodplain Impacts
  - Wild and Scenic Rivers
  - Rechannelization
  - Threatened or Endangered Species
  - Historic and Archaeological Preservation
  - Hazardous Waste Sites
  - Underground Storage Tanks
  - Visual Impacts
  - Energy/Utilities
  - Construction Impacts
  - Relationship of Local Short-Term Uses vs. Long-Term Productivity
  - Irreversible and Irretrievable Commitment of Resources
  - Effects on Public Parks, Wildlife and Waterfowl Refuges and Historic Sites
- Comments
- Drainage Concerns
- Accidents/Safety Concerns

Appendix 2: National Resource Conservation Service Coordination and Form AD 1006

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request
Name Of Project US 70 Broken Bow	Federal Agency Involved ODOT/FHWA
Proposed Land Use Transportation	County And State McCurtain County, Oklahoma
PART II *(To be completed by NRCS)*	Date Request Received By NRCS

Does the site contain prime, unique, statewide or local important farmland? *(If no, the FPPA does not apply -- do not complete additional parts of this form).* Yes ☑ No ☐	Acres Irrigated 1,444	Average Farm Size 193	
Major Crop(s) Wheat	Farmable Land In Govt. Jurisdiction Acres: 483,004 % 40	Amount Of Farmland As Defined in FPPA Acres: 404,453 % 33	
Name Of Land Evaluation System Used CALES	Name Of Local Site Assessment System None	Date Land Evaluation Returned By NRCS 5/27/08	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	645.9			
B. Total Acres To Be Converted Indirectly	0.0			
C. Total Acres In Site	645.9	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland	395.0			
B. Total Acres Statewide And Local Important Farmland	0.0			
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted	0.0			
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value	35.6			
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	46	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use	15	15			
2. Perimeter In Nonurban Use	10	10			
3. Percent Of Site Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	0			
5. Distance From Urban Builtup Area	0	0			
6. Distance To Urban Support Services	0	0			
7. Size Of Present Farm Unit Compared To Average	10	10			
8. Creation Of Nonfarmable Farmland	25	9			
9. Availability Of Farm Support Services	5	5			
10. On-Farm Investments	20	12			
11. Effects Of Conversion On Farm Support Services	25	0			
12. Compatibility With Existing Agricultural Use	10	0			
TOTAL SITE ASSESSMENT POINTS	160	61	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	46	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	61	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	107	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☒

Reason For Selection:

(See Instructions on reverse side) **Form AD-1006 (10-83)**

This form was electronically produced by National Production Services Staff

NRCS COORDINATION LETTER

April 30, 2008

Kenneth Swift
District Conservationist
Natural Resources Conservation Service
Idabel Field Service Center
201 N. Central Ave., Room 124
Idabel, OK 74745-3831

RE: Site assessments for Farmland Protection Policy Act (FPPA): US 70 Improvements from Mountain Fork River to the Arkansas State Line, Project # HPPY-1061(002)HP, Job Piece #17424(05)

Dear Mr. Swift,

The Oklahoma Department of Transportation is in the early developmental stages of planning for the expansion of US 70, 6.2 miles east of Broken Bow, Okalahoma to the Arkansas state line. The proposed project is to expand US 70 from a two-lane undivided highway to a four-lane divided highway with a center median.

Please find attached two copies of USDA Form AD-1006 and plans for the following federal actions in McCurtain County, OK:

In accordance with the current 7 CFR Part 658 - Farmland Protection Policy Act, Parts 1 and III of Form AD-1006 have been completed. Please complete the NRCS portions of this form within the next 45 days and return one copy to:

Stephanie Messerli, PE, AICP
Jacobs Carter Burgess
2705 Bee Cave Road, Suite 300
Austin, TX 78746

Your assistance is greatly appreciated. If you have any questions, please call me at 512-732-7548 or stephanie.messerli@jacobs.com.

Sincerely,

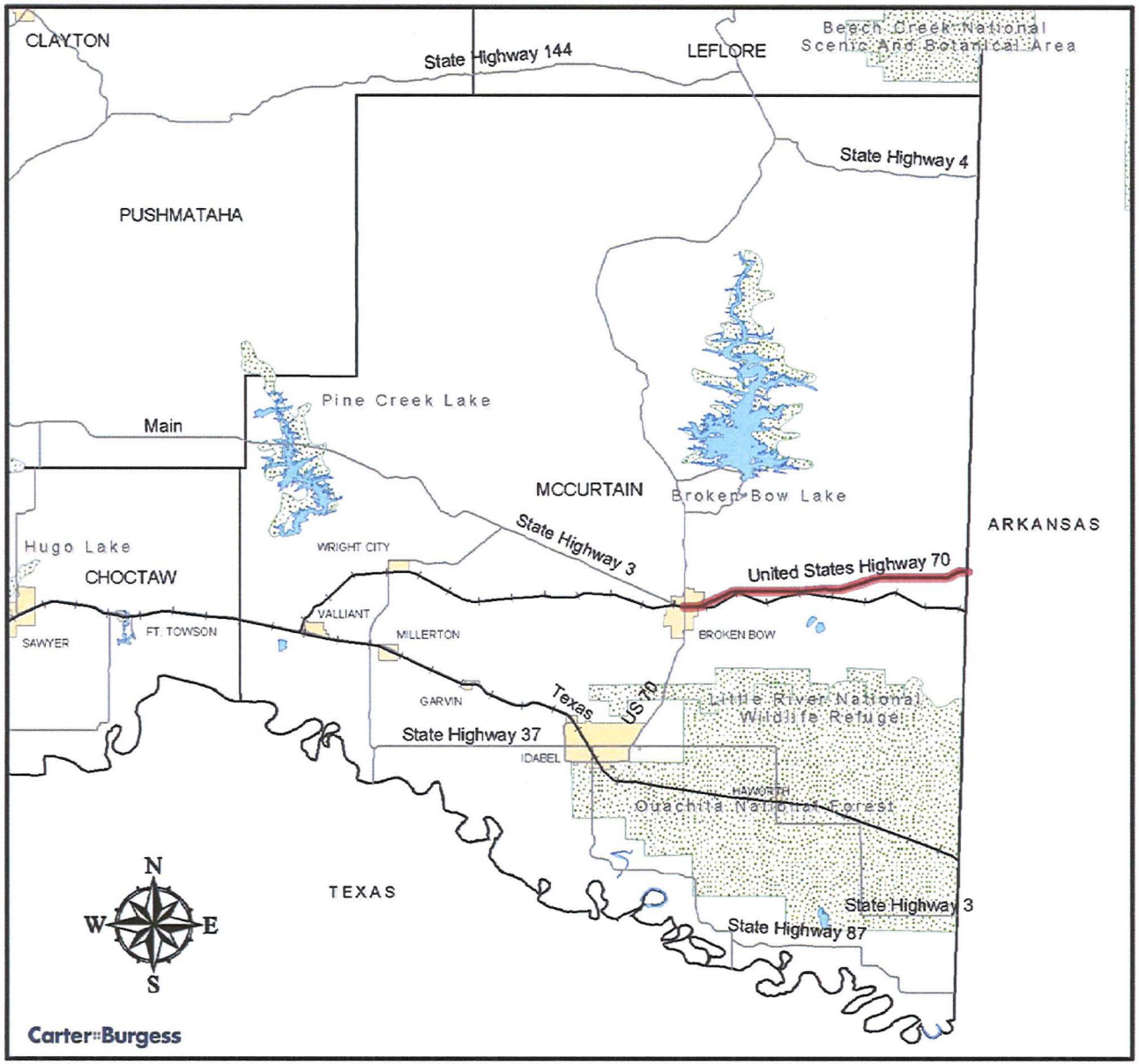
Stephanie Messerli

Stephanie Messerli, PE, AICP
Jacobs Carter Burgess

Enclosures: Plans and Form AD-1066

Copy to: Oklahoma Department of Transportation – Environmental Division

U.S. 70 Study - McCurtain County



RailRoad
Federal Lands
Citys
Lakes
Counties
U.S. 70 Study

Project Description

U.S. 70 - McCurtain County
From 6.4 miles east of Jct. U.S. 70 and S.H. 3 in Broken Bow easterly to the Arkansas State Line.

The scope of work for the U.S. 70 corridor includes
1. Enviromental Studies
2. Hydraulic an Hydrology Analysis
3. Geometric Study
4. Traffic Analysis

Project Located in McCurtain County

United States Department of Agriculture

NRCS

Natural Resources Conservation Service, 201 N. Central Avenue, Idabel, OK 74745 580.286.5342

Stephanie Messerli, PE, ACIP
Jacobs Cater Burgess
2705 Bee Cave Road, Suite 300
Austin, TX 78747

May 30, 2008

RE: Site assessment for Farmland Protection Policy Act (FPPA): US 70 Improvements from Mountain Fork River to the Arkansas State Line, Project # HPPY-1061(002)HP, Job Piece #17424(05)

Dear Ms. Messerli,

Please find attached the requested completed USDA Form AD-1006.

Thank-you for the opportunity to comment on the proposed work during the planning stage. The proposed improvements will impact prime farmland, therefore, please make a reasonable attempt to minimize the conversion of prime farmland soils, where possible.

If you have any questions, please call me at (580) 286-5342 or kenneth.swift@ok.usda.gov.

Sincerely,

Kenneth W. Swift

Kenneth W. Swift
District Conservationist
Natural Resources Conservation Service
Idabel Field Office

Appendix 3: Noise Assessment Report

Noise Assessment Report

for

US 70: Beginning 6.4 miles East of SH 3 in Broken Bow and Extending East to the Oklahoma/Arkansas State Line

McCurtain County, Oklahoma

Prepared for:

Oklahoma Department of Transportation
200 N. E. 21st Street
Oklahoma City, OK 73105

Prepared by:

Carter-Burgess

July 2008

I. Introduction

This Noise Assessment Report investigates the noise impacts that could result from the proposed improvements to the US 70 corridor from 6.4 miles east of the junction of SH 3 in Broken Bow to the east of the Oklahoma/Arkansas state line in McCurtain County, Oklahoma. The proposed improvements include the expansion of the existing two-lane roadway facility to a four-lane roadway facility as described in the Environmental Assessment (EA) as Alternative No. 1.

The purpose of this document is to determine the noise impacts and the possible mitigation of any impacts. This will be achieved by using computer modeling to predict future noise levels using traffic projections for the design year. The report relies on design traffic data as provided to Oklahoma Department of Transportation (ODOT) Planning & Research Division and Traffic Engineering Consultants, Inc. The noise analysis was performed using TNMLook-Up Tables, a computer program based on the Federal Highway Administration's (FHWA) Transportation Traffic Noise Model 2.5, and compiles with the ODOT Policy Directive (*Highway Noise Abatement*).

II. Terminology

This noise analysis will discuss noise levels as L_{eq} (h). L_{eq} is defined as the steady state sound level that, in a stated period of time, contains the same acoustic energy as the time-varying sound level during the same period. Leq(h) is the hourly value of Leq. Leq(h) is based on the more commonly known decibel (dB) and the "A-weighted" decibel unit (dBA). Sound occurs over a wide range of frequencies. However, not all frequencies are detectable by the human ear; therefore, an adjustment is made to the high and low frequencies to approximate the way an average person hears traffic sounds. It is commonly measured in decibels and is expressed as "dB." This adjustment is called A-weighting and is expressed as "dBA."

Decibels are logarithmic units as opposed to the more common linear units. For example, temperature units of Fahrenheit and Celsius are linear. A two-degree increase is twice as much as a one-degree increase. However, in decibels, a three decibel increase from a noise source results in a doubling of sound energy, but not in the human perception of sound. Research indicates that, to an average listener, a 10 dBA increase is perceived as twice as loud. One dBA is the smallest change in sound level an average person can detect under ideal conditions. Usually, an observer cannot detect an increase in noise of three to four decibels if the increase takes place over several years.

III. Methodology

Traffic noise analysis consists of a comparison of physically measured or computer modeled noise levels for existing conditions with computer modeled noise levels for future conditions. FHWA's TNM software is used to model noise levels based on traffic data, roadway geometry, and receptor site locations. A receptor is a location usually representing a dwelling unit, where exterior human activity occurs, and modeled for noise levels and evaluated for noise impacts.

The FHWA has five noise activity categories based on land use and sound levels, each of which has its own Noise Abatement Criteria (NAC) as shown in **Table 1**. If a project would result in higher Leq(h) values than the NAC values for a given location, then noise abatement or mitigation measures must be evaluated. For locations where there is no outside human activity

(i.e., churches), interior noise levels can be determined using adjustment factors and compared to NAC for determining impacts. An impact occurs when, at a given receptor, future noise levels approach by one dBA, meet or exceed the FHWA NAC for its activity category, or when the future noise levels exceed existing noise levels by 15 dBA at a given receptor. Once an impact is identified, then noise abatement is considered for the impacted area. Only those areas for which mitigation is determined to be feasible and reasonable as defined by ODOT Policy Directive "Highway Noise Abatement" will be recommended.

Table 1. Federal Highway Administration Noise Abatement Criteria

Activity Category	L_{eq} Noise Level	Description Activity Category
A	57 (Exterior)	Tracts of land in which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of these qualities is essential if the area is to continue to serve its intended purpose. Such areas could include amphitheaters, particular parks or portions of parks, open spaces, or historic districts which are dedicated or recognized by appropriate local officials for activities requiring some requiring special qualities of serenity and quiet.
B	67 (Exterior)	Picnics areas, recreation areas, playgrounds, active sport areas, and parks which are not included in Category A and residences, motels, hotels, public meeting rooms, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Exterior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.

Source: Federal Highway Administration

IV. Traffic Data

The unit of measurement for traffic on a highway is the average daily traffic (ADT), which is defined as the total volume of vehicles during a given time period (typically greater than one year), divided by the number of days in that time period. The design year ADT is the volume of traffic that is anticipated for the specified year. Design hourly volume (DHV) is the traffic count (vehicles per hour) and is used to model noise levels. The design year ADT for the US 70 project corridor is 2030. Project traffic volumes DHV are shown in Table 2. Locations are mapped in Figure 1.

Table 2. Projected 2030 Traffic Volumes

LOCATION	LOCATION DESCRIPTION	2030 ADT	2030 DHV	2030 DHV Factor	2030 (%) DHV Cars	2030 (%) DHV MT	2030 (%) DHV HT
1	¼ mile west of Mountain Fork River	7450	745	10%	(80%) 596	(7%) 52	(13%) 97
2	1 mile east of Mountain Fork River	7500	750	10%	(70%) 525	(21%) 158	(9%) 67
3	½ mile east of Eagletown Road	6400	640	10%	(75%) 480	(11%) 70	(14%) 90
4	½ mile west of Oklahoma/Arkansas state line	6000	600	10%	(70%) 420	(15%) 90	(15%) 90

Source: ODOT/Traffic Engineering Consultants

Noise analysis models the "worst hour for noise" which occurs when the highest volume (DHV) for an hour is combined with the highest speeds. The highest hourly traffic predicted to travel at the design speed of 65 mph is observed at Location 2, which illustrated vehicles per hour (vph) of 750. This volume of traffic will be used to model the "worst hour of the day" or peak hour traffic noise levels. To accurately model traffic, a breakdown of traffic vehicles and their speeds in modeled traffic is required and are also shown in Table 2. Worse case traffic conditions of peak hour traffic were used.

V. Identification of Receivers

Recent aerial photographs and field investigations were used to help identify possible noise sensitive receivers. Surrounding properties along the US 70 project corridor are characterized as mostly undeveloped (pastureland and woody vegetation) with sparsely scattered residences (single-family), small businesses (automotive, service stations, convenience stores, canoe rental facilities), and a wildlife refuge located along the project corridor boundaries. Approximately five rural communities were noted along the boundaries consisting of mixed-use [a combination of single-family homes (no more than three) and small businesses (no more than two)] within the same locality. Individual receivers (residence or business) were noted otherwise throughout the project corridor. Residential receivers located within the project vicinity are classified NAC Category B. The commercially developed land is classified as NAC Category C.

VI. Existing Noise Levels

Existing noise readings were determined using field measurements; seven measurements were taken near existing roadways at the existing right of way line. Existing noise readings were taken in April 2004. The exterior noise levels ranged between 66 to 71 dBA. There were no other sources that contribute to substantial background noise. Therefore, it is assumed for this analysis that noise levels for the design year is due to highway traffic. Measurements taken at the seven sensitive receivers and their locations are shown in Table 3. Measurement locations are illustrated in Figure 2.

Table 3. US 70 Project Corridor 2004 Existing Noise Levels

Measurement Number	Site Description	Existing Noise Level (dB)
1 (R1)	Eastbound roadway/Entrance for the Riverside Canoe Rental and Shuttle (just East of Mountain Fork Bridge)	69
2 (R2)	Eastbound roadway/Entrance for residential and commercial (Curtis Bryer Hydraulics Shop) just west of overflow structure	67
3 (R3)	Eastbound roadway/Approximately 11 miles east of Broken Bow, in front of single-family residences (commercial – Fina Station/K&K Country Store located just east of residences)	69
4	Eastbound roadway/Undeveloped Forested Area	71
5 (R4)	Westbound roadway/Convenience Store located just west of Oklahoma/Arkansas state line	70
6	Westbound roadway/Entrance of Three River Wildlife Management Area	68
7 (R5)	Westbound roadway/Entrance of Post Office	66

VII. Future Noise Levels

Future noise levels were modeled using the traffic data in Table 2. The "worst hour of noise" was observed at Location 2. Vehicle type at Location 2 was observed as 70 percent of the vehicles were cars, 21 percent were medium trucks, and nine percent were heavy trucks. Table 4 shows the predicted noise levels in 2030. The hourly equivalent sound level without a noise barrier ranges between 70 dBA and 76 dBA. Receiver locations are illustrated in Figure 3.

Table 4. US 70 Project Corridor 2030 Predicted Noise Levels

Receiver Location	Distance from Existing US 70 Centerline	NAC Category	NAC Level	2030 Predicted Noise Level (dB)	Increase +/- dBA	Noise Impact?	Comments
R1-Residential/EB, just east of Mountain Fork Bridge*	145	B	67	69.9	0.9	Yes	Exceed s NAC
R2-Commercial/EB, just west of overflow structure	110	C	72	71.1	4.1	Yes	Exceeds NAC
R3-Residence/EB approximately 11 miles east of Broken Bow*	140	B	67	70.1	1.1	Yes	Exceeds NAC
R4-Business/WB, just west of Oklahoma/Arkansas state line	71	C	72	73.0	3.0	Yes	Exceeds NAC
R5-Business/WB, Post Office	253	C	72	67.3	1.3	No	---

*Representative receiver located in a rural community consisting of mixed-use (single-family home/business) within one locality.

Predicted noise levels for the proposed project exceeded the NAC at four receiver locations. As indicated in Table 4, the proposed project would result in a traffic noise impact.

VIII. Noise Mitigation Options and Criteria

If a noise impact is anticipated, noise abatement must be considered. As indicated in Table 4, the proposed project will result in traffic noise impacts. Therefore, noise abatement measures were considered for the project. Four abatement measures were considered:

- Physical alteration of vertical and or horizontal alignment of the roadway
- Noise buffer zones by acquisition of undeveloped property
- Traffic Management
- Noise walls

Alteration of Horizontal and/or Vertical Alignments: Any alteration of the existing alignment would displace existing businesses and residences, require additional right-of-way and not be cost effective/reasonable.

Buffer Zone: The acquisition of sufficient undeveloped land adjacent to the highway project to preclude future development that could be impacted by highway traffic noise would not be cost effective/reasonable.

Traffic Management: Control devices could be used to reduce the speed of the traffic; however, the minor benefit of one dBA per five mph reduction in speed does not outweigh the associated increase in congestion and air pollution. Other measures such as time or use restrictions for certain vehicles are prohibited on state highways.

Noise Walls: This is the most commonly used noise abatement measure. However, for this project, a noise wall would severely restrict access to adjacent activity areas. Numerous gaps in the noise barrier for driveways and streets would satisfy access requirements but render the barrier ineffective (infeasible). Also, noise barriers could have a detrimental impact on nearby businesses by restricting views and access by potential customers. Finally, a noise barrier would not be cost effective for an individual receiver. Before any abatement measure can be incorporated into the project, it must be both feasible and reasonable. If a noise impact is anticipated, noise abatement must be considered. In order to be feasible, the measure should substantial reduce noise levels by at least seven dBA at impacted first row receivers; and to be reasonable it should not exceed $30,000 for each benefited receiver. A benefited receiver is a residential receptor that receives at least a five decibel reduction when compared to no mitigation and includes all residential receptors (not only first row receptors).

IX. Noise Abatement

Predicted noise levels for the proposed project exceeded the NAC at four receiver locations; therefore, noise barriers were analyzed for the project to determine if noise abatement was reasonable and feasible. For this project, a noise barrier would severely restrict access to a majority of the adjacent activity areas. Numerous gaps in the noise barrier would satisfy access requirements but would render the barrier ineffective (unfeasible). Also, noise barriers could have a detrimental impact on nearby businesses by restricting views and access by potential customers. Finally, a noise barrier would not be cost effective for an individual receiver. For these reasons as described, noise barriers would not be feasible or reasonable for R1 through R4. In addition, noise barriers would not be feasible or reasonable for representative receivers (represented by R1 and R3) located within the five identified communities along the project corridor consisting of mixed-use within one locality. No noise abatement measures are recommended for this project.

X. Information for Local Officials

Undeveloped land and natural lands are adjacent to the project. No known development is currently planned, designed or programmed in these areas. There is no NAC for undeveloped land; however, to avoid noise impacts that may result from future development of properties adjacent to the project, local officials responsible for land use control programs should ensure, to the maximum extent possible, no new activities are planned or constructed along or within the predicted (2030) noise impact contours shown in Table 5.

Table 5. 2025 Noise Contour Lines

Location	66 dB (Category B)	71 dB (Category C)
US 70 project corridor	325 feet from centerline*	110 feet from centerline*

* Distance calculated from the centerline of the eastbound and westbound roadways.

On the date of approval of the EA document (Date of Public Knowledge), which includes this noise assessment, FHWA and ODOT are no longer responsible for providing noise abatement for new development adjacent to the project.A copy of this traffic noise analysis will be provided to local officials to ensure, to the maximum extent possible, future developments are planned, designed and programmed in a manner that will avoid traffic noise impacts.

XI. Construction Noise

The ODOT "Highway Noise Abatement" Policy Directive states that any special noise sensitive land uses or activities will be identified which maybe affected by construction noise from the proposed project, and any special measures, which are feasible and reasonable will be added to the project plans and specifications.

Noise associated with the construction of the project is difficult to predict. Heavy machinery, the major source of noise in construction, is constantly moving in unpredictable patterns. However, construction normally occurs during daylight hours when occasional loud noises are more tolerable. None of the receivers is expected to be exposed to construction noise for a long duration; therefore, any extended disruption of normal activities is not expected.

XII. Conclusions

Traffic noise impacts have been examined for the proposed reconstruction of US-70 east of Broken Bow to the Oklahoma/Arkansas State Line in McCurtain County. Under current conditions, two residential receivers exceed the 67 dBA Leq(h) for the Noise Abatement Criteria, Category B (NAC-B). Based on the new four-lane facility and with projected traffic growth, the same two residential receivers will exceed the NAC-B. The noise levels for these receivers are expected to increase approximately 1.0 decibel in the design year (2030) over current conditions. In considering noise mitigation, it was found that noise abatement for the impacted receivers would require blocking driveway access to US 70. Maintaining this access would render a noise abatement wall ineffective. Mitigation is not feasible for the identified receivers, and therefore, noise abatement is not recommended for this project. In planning noise compatible land use planning, the future 66 dBA impact zone was determined to be 325 feet from the center of the new divided four-lane facility. This noise assessment report will be provided to the local officials to aid in noise compatible land use planning.

Noise Modeling Data

* * * * CASE INFORMATION * * * *

* * * * Results calculated with TNM Version 2.5 * * * *

Future Noise: US-70 beginning 6.4 miles east of SH-3 in Broken Bow and extend east to the Oklahoma/Arkansas State Line.

* * * * TRAFFIC VOLUME/SPEED INFORMATION * * * *

Automobile volume (v/h):	525
Average automobile speed (mph):	65
Medium truck volume (v/h):	158
Average medium truck speed (mph):	65
Heavy truck volume (v/h):	67
Average heavy truck speed (mph):	65
Bus volume (v/h):	-0-
Average bus speed (mph):	-0-
Motorcycle volume (v/h):	-0-
Average Motorcycle speed (mph):	-0-

* * * * TERRAIN SURFACE INFORMATION * * * *

Terrain surface: hard

* * * * RECEIVER INFORMATION * * * *

DESCRIPTION OF RECEIVER #1: R1 (Single Residential Dwelling)

Distance from center of EB and WB roadways (ft):	145.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	69.9

DESCRIPTION OF RECEIVER #2: R2 (Commercial)

Distance from center of EB and WB roadways (ft):	110.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	71.1

DESCRIPTION OF RECEIVER #3: R2 (Single Residential Dwelling)

Distance from center of EB and WB roadways (ft):	140.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	70.1

DESCRIPTION OF RECEIVER #4: R4 (Store)

Distance from center of EB and WB roadways (ft):	71.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	73.0

DESCRIPTION OF RECEIVER #5: R5 (Post Office)

Distance from center of EB and WB roadways (ft):	253.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	67.3

DESCRIPTION OF RECEIVER #6: 66 dBA Contour

Distance from center of EB and WB roadways (ft):	325.0
A-weighted Hourly Equivalent Sound Level without Barrier (dBA):	66.1

Run/Print Date: 07/15/08, KML; revised 07/16/08, KML

TABLE 2.

Projected 2030 24 Hour Traffic Volume Data*

US 70 East of Broken Bow, Oklahoma

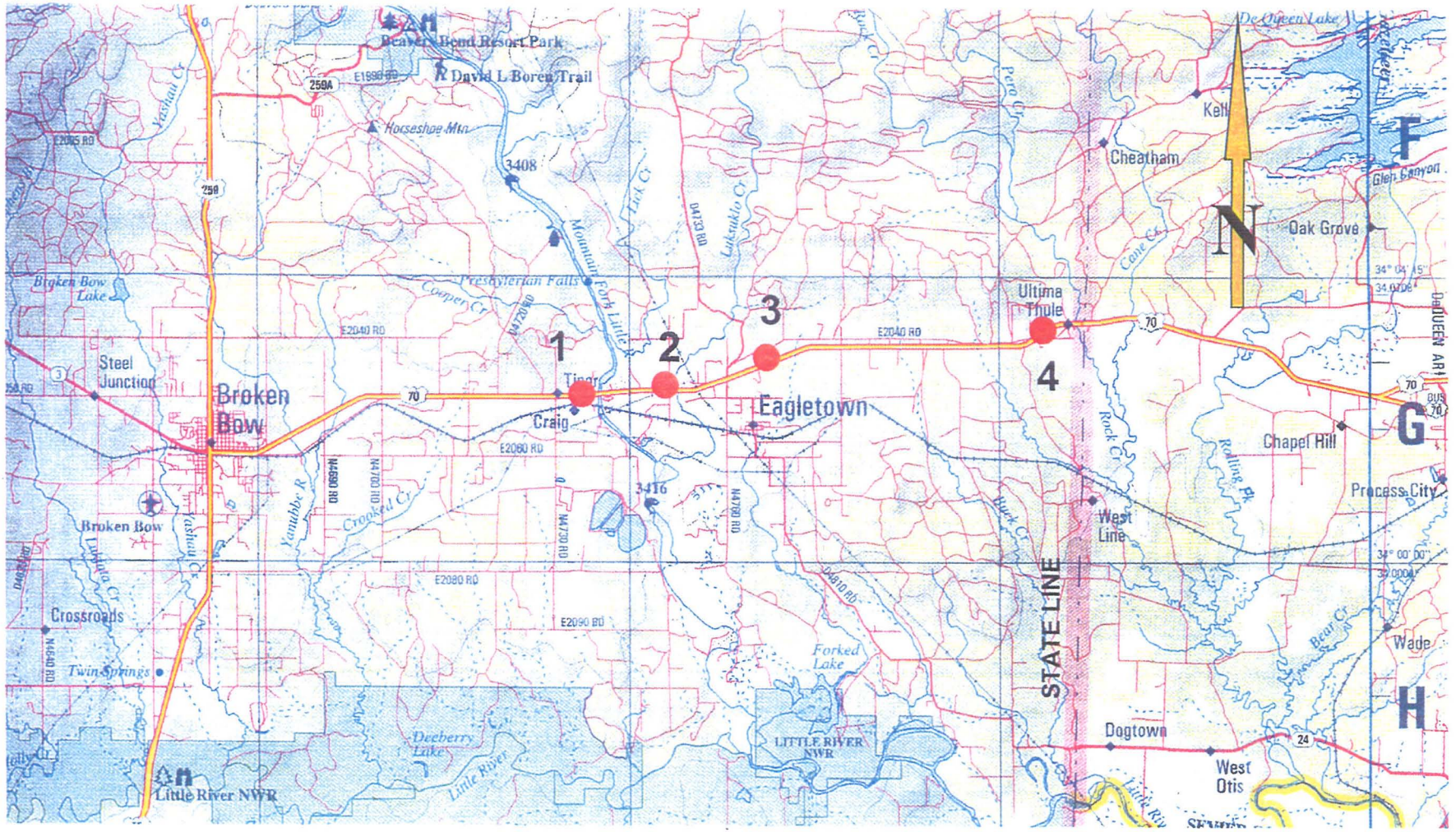
Location	Direction	Projected 2030 Data										
		24-Hour	Am Peak	PM Peak	T(ADT)		T3		T(DHV)		D	K
1	Eastbound	4160	350	415	895	21.5%	580	13.9%	65	15.7%		
	Westbound	3290	300	300	565	17.2%	350	10.6%	55	18.3%		
	Total	7450	650	715	1460	19.6%	930	12.5%	120	16.8%	55.84%	9.98%
2	Eastbound	3500	170	310	750	21.4%	490	14.0%	55	17.7%		
	Westbound	4000	315	350	850	21.3%	470	11.8%	60	17.1%		
	Total	7500	485	660	1600	21.3%	960	12.8%	115	17.4%	53.33%	10.00%
3	Eastbound	3400	170	300	740	21.8%	490	14.4%	55	18.3%		
	Westbound	2970	175	330	655	22.1%	370	12.5%	50	15.2%		
	Total	6370	345	630	1395	21.9%	860	13.5%	105	16.7%	53.38%	9.71%
4	Eastbound	2800	170	260	750	26.8%	400	14.3%	60	23.1%		
	Westbound	3200	180	270	600	18.8%	445	13.9%	40	14.8%		
	Total	6000	350	530	1350	22.5%	845	14.1%	100	18.9%	53.33%	9.64%

TABLE 3.

Projected 2030 Design Traffic Data

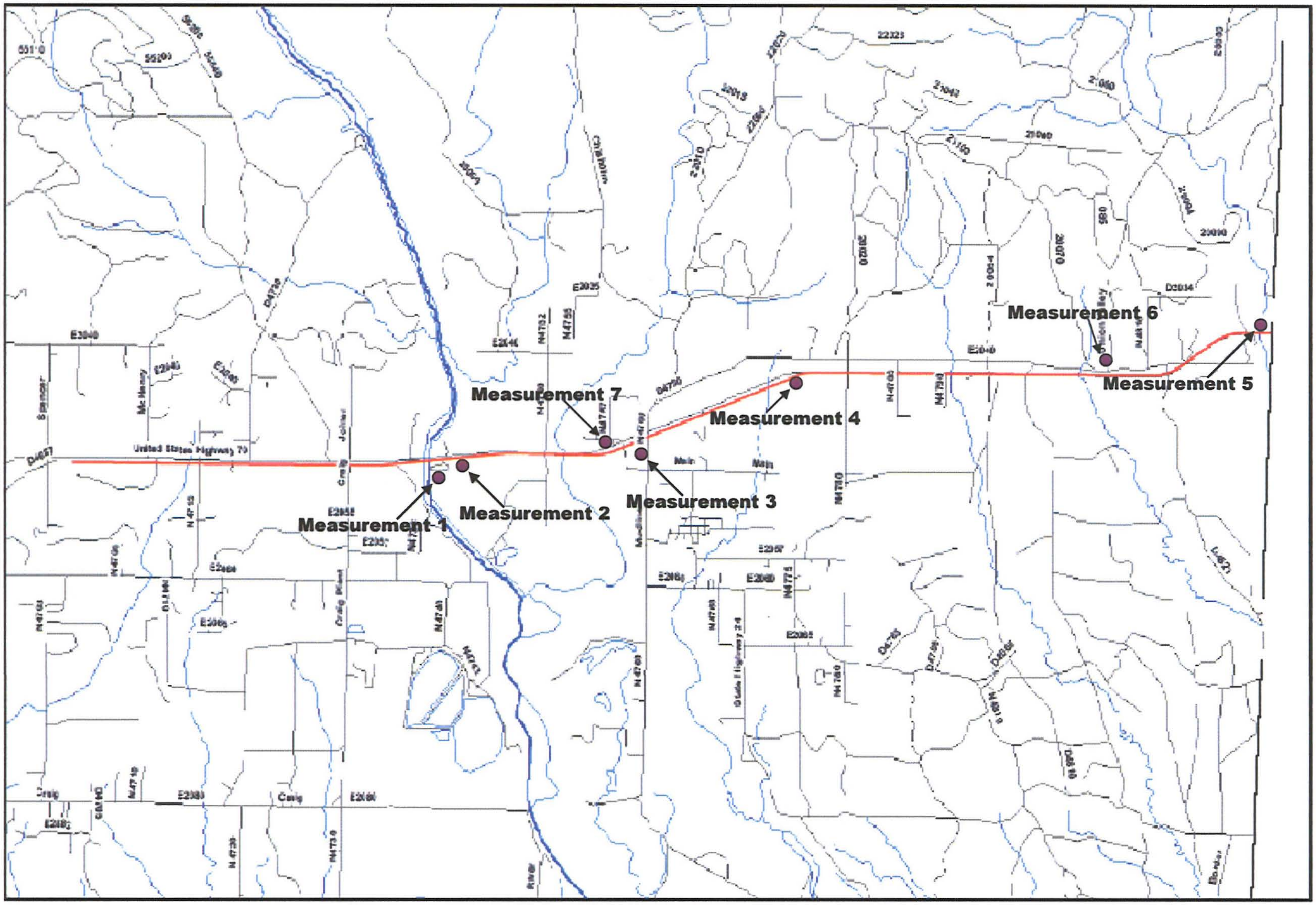
US 70 East of Broken Bow, Oklahoma

Location	ADT	T(ADT)	T3	T(DHV)	D	K
1	7450	20%	13%	17%	55%	10%
2	7500	20%	13%	17%	55%	10%
3	6400	22%	14%	17%	55%	10%
4	6000	22%	14%	19%	55%	10%



TRAFFIC ENGINEERING CONSULTANTS

FIGURE 1. Traffic Count Locations
US 70 East of Broken Bow



Carter::Burgess

Measurement Locations – US70 McCurtain County Oklahoma

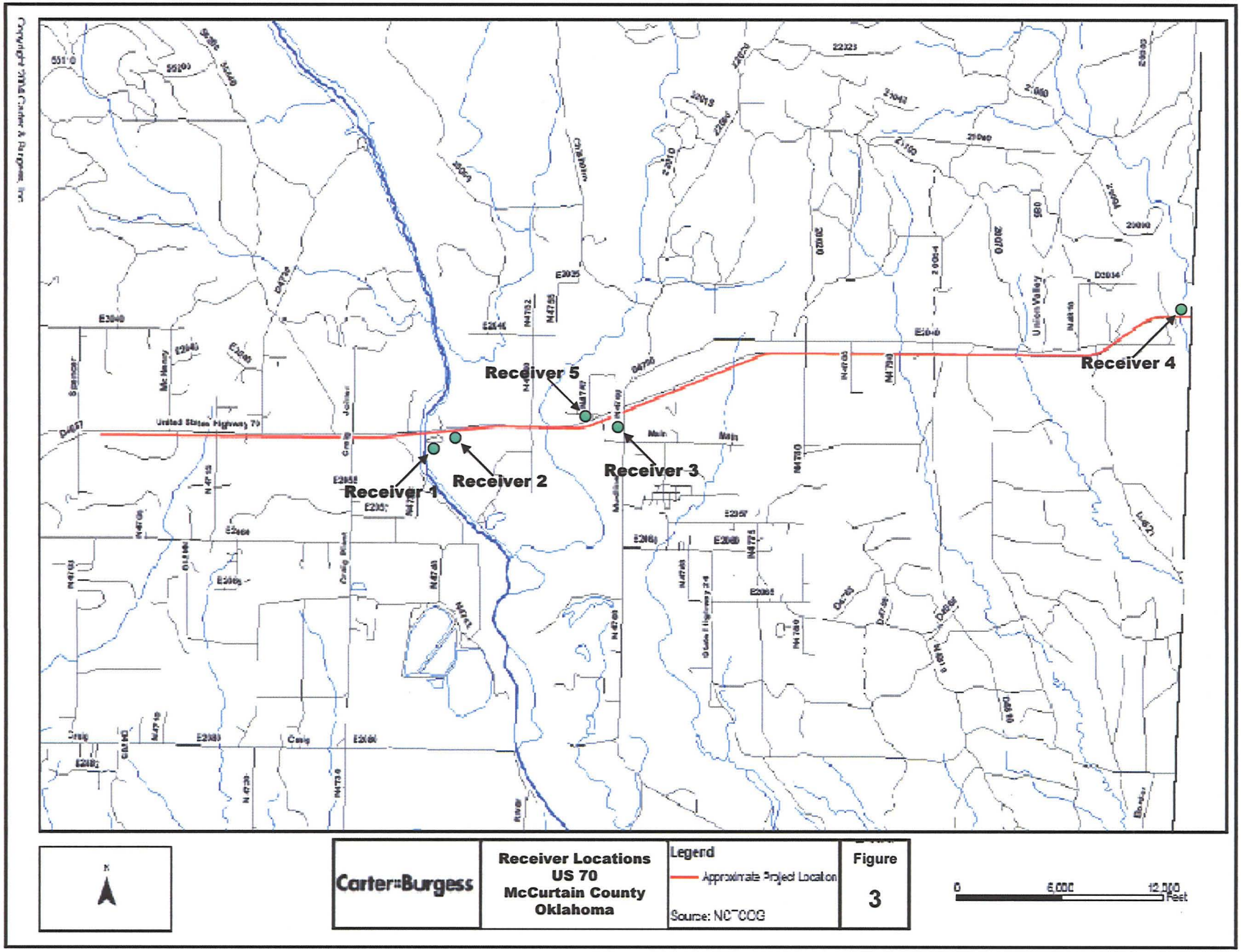
Legend

Approximate Project Location

Source: NCTCOG

Figure 2

0 6,000 12,000 Feet


Receiver 1
Receiver 2
Receiver 3
Receiver 4
Receiver 5
United States Highway 70
Carter=Burgess
Receiver Locations
US 70
McCurtain County
Oklahoma
Legend
Approximate Project Location
Source: NCTCOG
Figure
3
0
6,000
12,000
Feet

Appendix 4: Wetlands Findings Report, Vegetation, and Wildlife Field Study

Oklahoma Department of Transportation

Environmental Programs Division

Office 521-2704
Fax 522-5193

DATE: April 21, 2008

TO: Joan Lindley, Environmental Programs Division

FROM: Julianne Hoagland, Department Natural Resources Biologist

SUBJECT: Endangered Species Act Recommendations for McCurtain County US-70 widening, J/P 17427(04)

An Endangered Species Act Section 7 consultation letter was sent to the USFWS for this project on March 24, 2008. The letter indicated a no effect determination for Interior Least Tern, Piping Plover and Red-cockaded Woodpecker; a may affect, not likely to adversely affect, determination for Ouachita rock pocketbook mussel, scaleshell mussel, winged mapleleaf mussel, leopard darter, and American alligator; and referenced the draft programmatic biological assessment and biological opinion for the American burying beetle. The Service responded with a letter dated April 10, 2008 (attached). The Service concurs with the no effect determinations and may affect determinations, given the implementation appropriate BMPs for storm water, erosion and sediment control, and chemical/fuel handling measures (dictated by Federal Regulation and the ODOT's Standard Specifications for Highway Construction). Additionally, the following plan note for ABB should be included in the final project plans and/or final contract document.

> **American Burying Beetle (ABB) Note:**
> The Contractor shall be familiar with the ABB to insure compliance with the Endangered Species Act. If any dead or injured ABB is found on site, immediately contact the Department Biologist in Environmental Programs Division at (405) 521-2515. Care must be taken in handling dead or injured beetles in order to preserve biological material for later analysis. The finder must insure that evidence intrinsic to the specimen is not unnecessarily disturbed. Information regarding the ABB, including photographic images and life history characteristics, is available at the USFWS website at URL http://www.fws.gov/southwest/es/Oklahoma/beetle1.htm.

The Service has expressed concern over the potential impacts of the proposed project on riparian zones and wetlands. They recommend that impacts to wetlands be avoided or minimized, and that all practicable, least environmentally damaging alternatives be examined and considered. The Service will likely seek mitigation for unavoidable impacts to important fish and wildlife habitats caused by the proposed project. The Service also recommends that the applicable standard environmental measures dictated by Federal Regulation and ODOT's Standard Specifications for Highway Construction be both specified in the final project plans and implemented.

The Service requests that all final decision documents associated with this project, including issued permits, final plan sheets and related documents be provided to them. They also request that, if any of their recommended measures for the protection of fish and wildlife resources are not implemented, a written narrative explaining why those recommended measures were not implemented be provided to their office.

If you have any questions or need any further information, please contact me at 521-2515.

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Division of Ecological Services
9014 East 21st Street
Tulsa, Oklahoma 74129
918/581-7458 / (FAX) 918/581-7467

In Reply Refer To:
FWS/R2/OKES/
2008-I-0153

April 10, 2008

RECEIVED
APR 15 2008
ENVIRONMENTAL
PROGRAMS DIV.

Julianne W. Hoagland
Oklahoma Department of Transportation
200 Northeast 21st Street
Oklahoma City, Oklahoma 73105-3204

Dear Ms. Hoagland:

Thank you for your March 24, 2008, letter requesting the U.S. Fish and Wildlife Service (Service) provide comments regarding the proposed improvements to US-70 [JP 17427(04)] in McCurtain County, Oklahoma. McCurtain County commissioners propose to expand the existing two-lane undivided highway to a four-lane divided highway with a center median. The proposed project extends 6.4 miles east of Broken Bow, Oklahoma, to the Arkansas state line. Our comments are provided in accordance with section 7 of the Endangered Species Act (ESA), the Migratory Bird Treaty Act (MBTA), and the National Environmental Policy Act (NEPA). In addition, the Service is providing comments with respect to wetlands and other important fish and wildlife resources.

Threatened and Endangered Species

The Service concurs that the proposed activities would not impact the federally-listed interior least tern *Sterna antillarum*, the piping plover *Charadrius melodus,* or the red-cockaded woodpecker *Picoides borealis.*

The proposed project corridor crosses the Mountain Fork of the Little River, which supports several federally-protected species of mussels. Given the distance between the proposed project and the confluence of the Mountain Fork and the Little River, the degree of existing disturbance along the project corridor, and the implementation of appropriate storm water and erosion control measures, the Service concurs that the proposed project is not likely to adversely affect the scaleshell mussel *Leptodea leptodon,* the Ouachita rock pocketbook *Arkansia wheeleri,* or the winged mapleleaf mussel *Quadrula fragosa.*

The Mountain Fork River also supports a known population of leopard darters *Percina pantherina.* However, this population occurs above the Broken Bow Reservoir, approximately 34 miles upstream of the project's Mountain Fork River bridge crossing. Given the implementation of appropriate storm water and erosion control measures, the Service concurs that the proposed project is not likely to adversely affect the leopard darter.

The Service concurs that the proposed project is not likely to adversely affect the American alligator *Alligator mississippiensis* given the mobility of the species and appropriate storm water and erosion control measures.

The Service agrees that the appropriate effects determination and mitigation measures proposed for the American burying beetle *Nicrophorus americanus* will be addressed in the programmatic biological assessment and conservation strategy, and formalized in a Memorandum of Understanding among the Federal Highway Administration, Oklahoma Department of Transportation (ODOT), and the Service, prior to May 20, 2008.

Migratory Birds

Migratory bird species are protected under the MBTA (16 U.S.C. 703-712: Ch. 128 *as amended*). The MBTA prohibits the take of any migratory bird without authorization from the Service. Because riparian areas often provide important breeding and nesting habitat for migratory birds, we recommend that construction be scheduled prior to or after the migratory bird nesting season. For most species in Oklahoma, nesting activity typically commences in April and continues through July. If proposed actions would occur during the nesting season, we recommend you survey for the presence of nesting migratory birds. If active nests are found, a buffer should be established around the nest and activities within the buffer cease until nesting activity concludes.

Wetlands and Other Important Fish and Wildlife Resources

According to the Service's National Wetland Inventory and findings provided in your Biological Evaluation, no wetlands occur within the project area. However, Little Blue Creek is classified as a perennial stream. Wetlands, streams and riparian zone habitat provide cover, breeding and foraging areas for native species of birds, mammals, amphibians and reptiles. Riparian vegetation serves as a buffer to protect the watercourse from non-point source pollution by filtering sediments and capturing and breaking down nutrients and water pollutants, and increases soil strength and stability (FISRWG, 1998). Riparian areas also provide shade for the stream channel and serve as important movement corridors for wildlife.

We suggest you contact the U.S. Army Corps of Engineers (Corps) (918/669-7400) concerning any Section 404 permit requirements associated with this project. Before submitting a 404 permit application to the Corps, we recommend that all practicable alternatives be assessed and included in any permit application. We strongly recommend any proposed project utilize the least environmentally damaging alternative. The Service likely will seek mitigation for unavoidable impacts to wetlands and other important fish and wildlife habitats.

The Service also recommends the ODOT specify in the project plans that the applicable standard environmental measures, as dictated by Federal regulation and ODOT's 1999 Standard Specifications for Highway Construction, be implemented. During our review of your proposed projects, the Service assumes that all applicable standard environmental measures will be utilized during the construction process. Implementation of these measures often ensures that environmental impacts are avoided or minimized. For all future proposed projects submitted to

the Service for review, reference to implementation of the applicable standard environmental measures should be stated in the project plans.

Please provide the Service with a copy of all final decision documents associated with this project. Final decision documents include the issued permit or license, final environmental impact statement, record of decision, and integrated natural resource management plan or similar document. These decision documents advise the Service of the final specifications of the proposed projects and should indicate which of the measures recommended for the protection of fish and wildlife resources are to be implemented. We also request that if any of the Service's recommended measures are not to be implemented, you provide us with a written narrative explaining why these measures were not implemented.

We appreciate the opportunity to provide comments. If you have any questions or need additional assistance with this project, please contact Angela Brown of this office at 918/581-7458.

Sincerely,

Jerry J. Brabander
Field Supervisor

References

FISRWG. 1998. Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U. S. Government). GPO item No. 0120.A; SupDocs No. A 57.6/2:EN 3/PT.653. ISBN-0-934213-59-3.

AGB:plh:2008-I-0153 ODOT improvements to US-70

WATERS OF THE U.S. FINDINGS REPORT

U.S. 70 five miles east of Broken Bow, OK to
Arkansas State Line
McCurtain County, Oklahoma

Introduction

This field study has been written in support of and in compliance with 23 CFR 771, 777 and FHWA Technical Advisory T6640.8A for the Oklahoma Department of Transportation (ODOT).

The proposed project will expand an existing two-lane highway (U.S. 70) into a four-lane divided highway with a center median (**Appendix A, Exhibit 1**). This project will provide improvements to the capacity, operation, circulation and safety along the highway. The proposed expansion would require the acquisition of additional right-of-way (ROW).

Methodology

Carter and Burgess, Inc. (Carter & Burgess) biologists, Tracy Gwaltney, Lee Nichols and Todd Hutson, conducted surveys in May 2004, to identify and delineate potential waters of the U.S.

Waters of the U.S. include rivers, streams (including perennial, intermittent, and ephemeral), bogs, sloughs, lakes, ponds (including stock tanks connected to other jurisdictional waters), and wetlands.

The jurisdictional area of lakes, ponds, rivers, and streams are identified at the ordinary high water mark (OHWM). The length and average width between the OHWM was recorded to establish a total area for the streams within the project site. The OHWM is defined as:

> "...that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed in the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas (33 CFR 328.3)."

Wetlands are those "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions [as defined by the U.S. Army Corps of Engineers (USACE) and U.S. Environmental Protection Agency]." One herbaceous wetland and 3 ephemeral streams were identified within the project boundary that met the criteria presented in the 1987 USACE manual (USACE 1987). According to the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual, a given area must contain three parameters to be identified as a wetland. These three criteria include the presence of (1) hydric soils, (2) hydrophytic vegetation and (3) wetland hydrology.

Prior to the fieldwork for this project, Carter & Burgess biologists reviewed applicable materials in the office to determine those portions along the right-of-way (ROW) where waters of the U.S. could occur. These materials included the McCurtain County soil survey, U.S. Fish and Wildlife Service's National Wetland Inventory (NWI) Maps, U.S. Geological Survey topographic maps, Federal Emergency Management Agency (FEMA) floodplain maps, and aerial photographs. The NWI Maps for McCurtain County did not show any wetland features within the project area. The

FEMA maps showed floodplain areas extending 9,000 linear feet along the existing highway around Mountain Fork River and 600 linear feet along the highway at Rock Creek within the project ROW.

Two alternative corridors were evaluated for the presence of waters of the U.S., including wetlands. Alternative 1 extended 150-feet north of the existing U.S. 70 and Alternative 2 extended 150-feet south of U.S. 70.

Results

The two alternatives were evaluated for potential waters of the U.S. Each alternative consisted of a 150-foot wide corridor. Alternative 1 was to the north of the existing U.S. 70, while Alternative 2 was to the south. A total of 22 crossings of potential waters of the U.S. were identified (including wetlands, streams and open water features) along the project ROW as shown in **Appendix A, Exhibits 2 and 3, Sheets 1-4** and included in **Table 1**. Seventeen ephemeral streams, three intermittent streams, two perennial streams, and one wetland were identified for Alternative 1. For Alternative 2, 17 ephemeral streams, three intermittent streams, two perennial streams, one wetland, and one pond were identified. **Appendix A, Exhibits 2 and 3, Sheet 1** displays the location of the potential wetlands and pond.

Final determinations regarding potential waters of the U.S. are subject to verification by the USACE.

Table 1. Jurisdictional Waters within the Project Corridor

Alternative	Jurisdictional Water Type	Average OHWM (feet)*	Length (feet)**	Area (acres)**	PCN Required
Crossing 1					
1	Ephemeral Stream	2	366	0.0154	No
2		1	103	0.0024	No
Crossing 2					
1	Perennial Stream	192	151	0.6673	Potential
2		236	150	0.8140	Potential
Crossing 3					
1	Ephemeral Stream	5	145	0.0166	No
2		5	130	0.0149	No
Crossing 4					
1	Intermittent Stream	20	255	0.1171	Potential
2		9	244	0.0723	No
Crossing 5					
1	Intermittent Stream	4	127	0.0134	No
2		12	165	0.0454	No
Crossing 6					
1	Ephemeral Stream	1	25	0.0006	--
	Wetland	N/A	N/A	0.2658	--
	Total Jurisdictional Waters	**--**	**--**	**0.2664**	Potential
2	Ephemeral Stream	15	149	0.0512	--
	Wetland	N/A	N/A	0.2593	--
	Pond	N/A	N/A	0.0168	--
	Total Jurisdictional Waters	**--**	**--**	**0.3273**	Potential
Crossing 7					
1	Ephemeral Stream	None	None	None	No
2		2	158	0.0068	No
Crossing 8					
1	Ephemeral Stream	2	154	0.0062	No
2		1	219	0.0050	No
Crossing 9					
1	Ephemeral Stream	10	139	0.0319	No
2		7	112	0.0191	No
Crossing 10					
1	Ephemeral Stream	1	313	0.0072	No
2		6	182	0.0251	No
Crossing 11					
1	Ephemeral Stream	1	343	0.0079	No
2		5	291	0.0145	No
Crossing 12					
1	Ephemeral Stream	3	167	0.0115	No
2		10	116	0.0221	No
Crossing 13					
1	Ephemeral Stream	2	133	0.0061	No
2		1	211	0.0048	No

Alternative	Jurisdictional Water Type	Average OHWM (feet)*	Length (feet)**	Area (acres)**	PCN Required
Crossing 14					
1	Ephemeral Stream	3	543	0.0439	No
2		6	158	0.0196	No
Crossing 15					
1	Ephemeral Stream	4	159	0.0146	No
2		4	172	0.0148	No
Crossing 16					
1	Ephemeral Stream	4	160	0.0147	No
2		5	125	0.0168	No
Crossing 17					
1	Intermittent Stream	12	178	0.0490	No
2		10	139	0.0350	No
Crossing 18					
1	Ephemeral Stream	None	None	None	No
2		2	184	0.0085	No
Crossing 19					
1	Ephemeral Stream	5	173	0.0198	No
2		5	125	0.0143	No
Crossing 20					
1	Ephemeral Stream	6	165	0.0228	No
2		5	170	0.0169	No
Crossing 21					
1	Ephemeral Stream	2	147	0.0067	No
2		2	149	0.0068	No
Crossing 22					
1	Perennial Stream	100	151	0.3459	Potential
2		100	150	0.3449	Potential

The wetlands at Crossing 6 were approximately 7.0 miles east of Broken Bow, OK. These sites drained into each other through a culvert under U.S. 70. These sites were not identified on the Broken Bow, OK National Wetland Inventory Quadrangle. The soil series mapped for this site is Guyton silt loam.

There was approximately 0.266 acres of potential wetland for Alternative 1 and 0.259 acres for Alternative 2. Wetland determination sheets for these areas were completed on May 5, 2004 (**Appendix B, Wetland Determination Sheet 1 and 2**) Data sheets for one upland comparison point is also included (**Appendix B, Upland Comparison Sheet 1**). Results from the wetland determination sheets are summarized below. Photographs at the site are included in **Appendix C**.

Dominant plant species at the Alternative 1 wetland were soft rush, dewberry, hop sedge, willow baccharris, sycamore, sweetgum and American elm. Dominant plant species at the Alternative 2 wetland include soft rush, dewberry, hop sedge, honeysuckle, sweetgum, American elm, water oak and willow oak. The *1987 Corps of Engineers Wetlands Delineation Manual*, Part III-35a. states that "hydrophytic vegetation is present on a site when more than 50% of the dominant species are OBL, FACW, or FAC on lists of plant species that occur in wetlands. A national interagency panel has prepared a National List of Plant Species that Occur in Wetlands." The dominant plant species observed at Site 1 and 2, and their indicator status according to the *National List of Plant Species that Occur in Wetlands,* are listed in **Table 2**.

Table 2. Dominant Plant Species at Site 1 and Site 2

Common Name	Scientific Name	Stratum	Region 6 Indicator Status	National Indicator Status
Duckweed	*Lemna* sp.*	Other[1]	OBL	OBL
Hop sedge	*Carex lupulina*	Herb	OBL	FACW+, OBL
Soft rush	*Juncus effusus*	Herb	OBL	FACW+, OBL
Dewberry	*Rubus trivialis*	Wood Vine	FAC	FACU, FAC
Honeysuckle	*Lonicera japonica*	Wood Vine	FAC	FACU, FAC+
American elm	*Ulmus americana*	Tree	FAC	FAC, FACW
False-willow[2]	*Baccharris salicina*	Tree	FAC	FAC
Sweetgum	*Liquidamber styraciflua*	Tree	FAC	FAC, FACW
Sycamore	*Platanus occidentalis*	Tree	FAC+	FAC, FACW
Water oak	*Quercus nigra*	Tree	FAC+	FAC, FACW
Willow oak	*Quercus phellos*	Tree	FACW	FAC+, FACW

[1]Free floating macrophyte [2]Observed in Site 1
*Species identified to the genus level due to level of specimen development

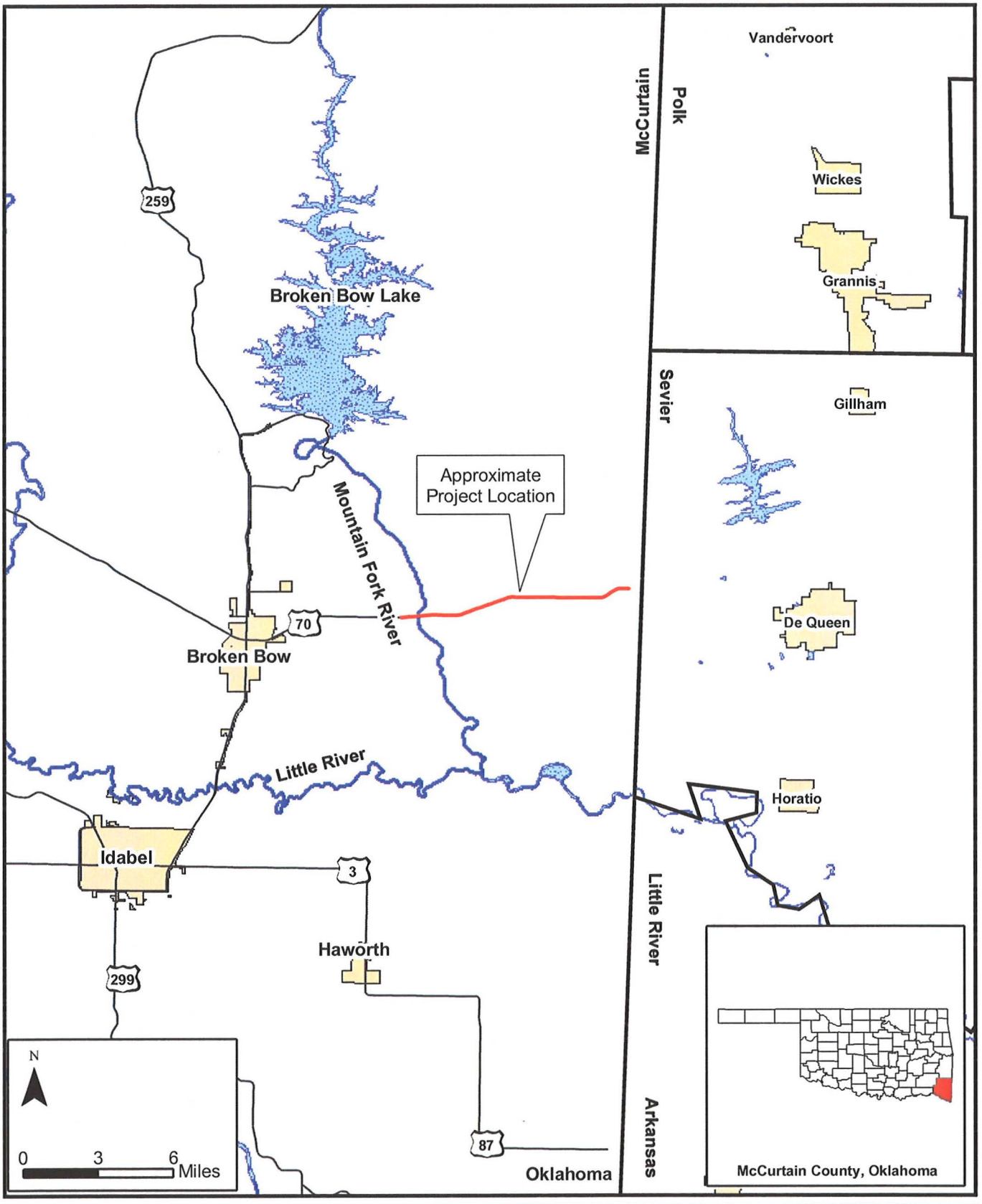
The *1987 Corps of Engineers Wetlands Delineation Manual*, Part III-46 states that "wetland hydrology encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an over-riding influence on characteristics of vegetation and soils due to anaerobic and reducing conditions, respectively." Part III-49 of the *1987 Wetlands Delineation Manual* lists indicators of wetland hydrology as including, but not limited to: drainage patters, drift lines, sediment deposition, watermarks, stream gauge data and flood predictions, historic records, visual observation of saturated soils, and visual observation of inundation. Indicators of wetland hydrology at the Alternative 1 wetland included inundation, soil saturated in the upper 12 inches, drainage patterns in wetlands and water stained leaves during the May 5, 2004, site visit. Hydrology indicators at the Alternative 2 wetland included soil saturated in the upper 12 inches, drainage patterns in wetlands, oxidized root channels in upper 12 inches, water stained leaves and the FAC-Neutral test during the May 5, 2004, site visit.

A hydric soil is defined by the U.S. Department of Agriculture Soil Conservation Service and National Technical Committee for Hydric soils as a soil that is saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that favor the growth and regeneration of hydrophytic vegetation. The *1987 Wetlands Delineation Manual*, Part III-44f defines the use of colors of various soil components as diagnostic indicators of hydric soils. Included in these diagnostic indicators are soils with bright mottles and/or low matrix colors, and the presence of iron and manganese concretions. Soils at both wetlands sites had low Munsell chroma colors (i.e. 1 and 2). Both soil profiles sampled had bright mottles (i.e. chroma of 4 to 8). Few iron concretions were observed in the soil profile at depths greater than 17 centimeters of Site 2.

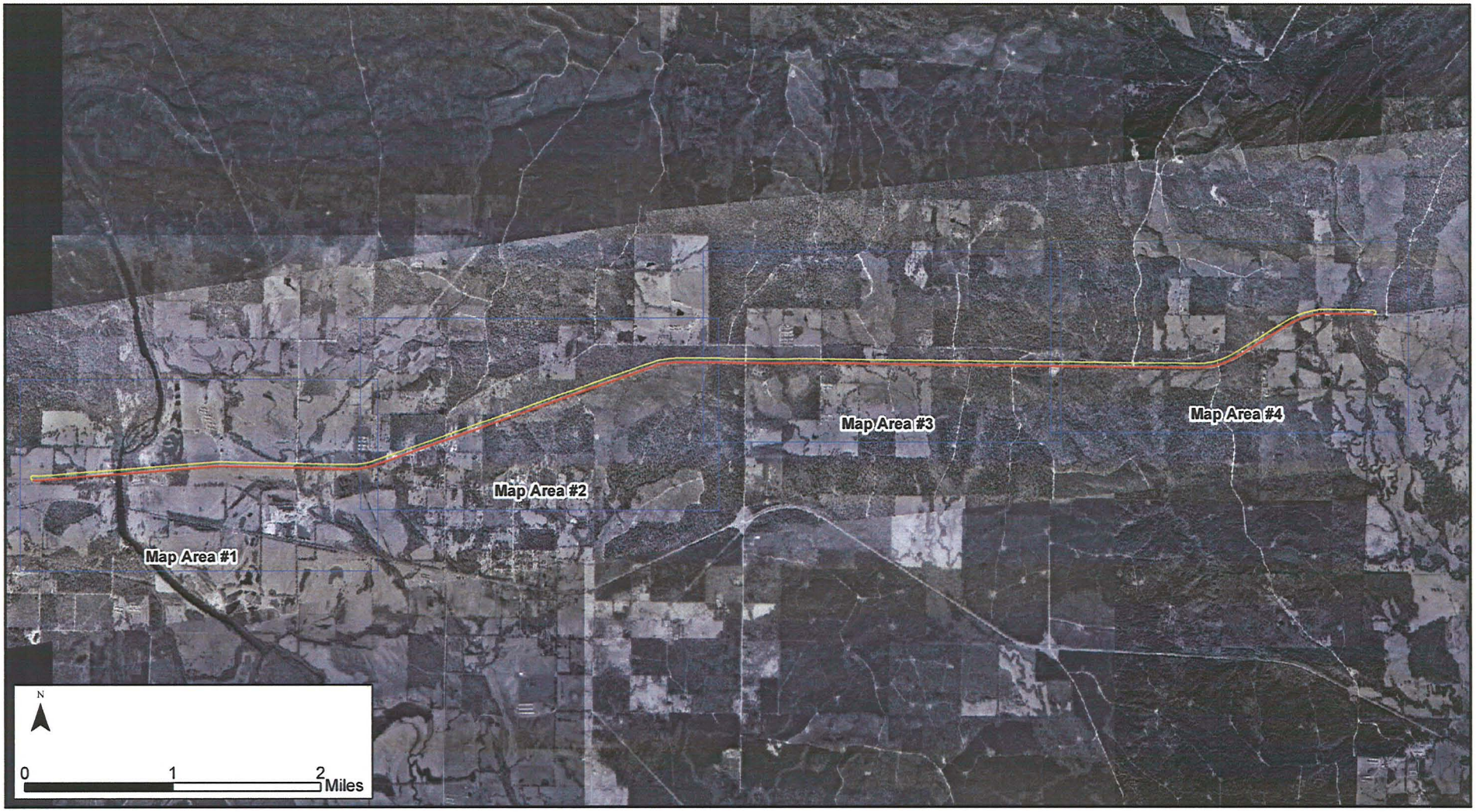
Alternative 1 and 2 wetlands had characteristics of a hydrophytic vegetative community, wetland hydrology and hydric soils, in accordance with the *1987 Corps of Engineers Wetlands Delineation Manual*.

APPENDIX A

Site Maps



Carter::Burgess	**Vicinity Map** US 70 McCurtain County, Oklahoma C&B Project No. 022094.010	Source: Oklahoma Department of Transportaion, University of Oklahoma and ESRI	**Exhibit** **1**



Carter Burgess

Jurisdictional Waters
Alternative #1

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Legend

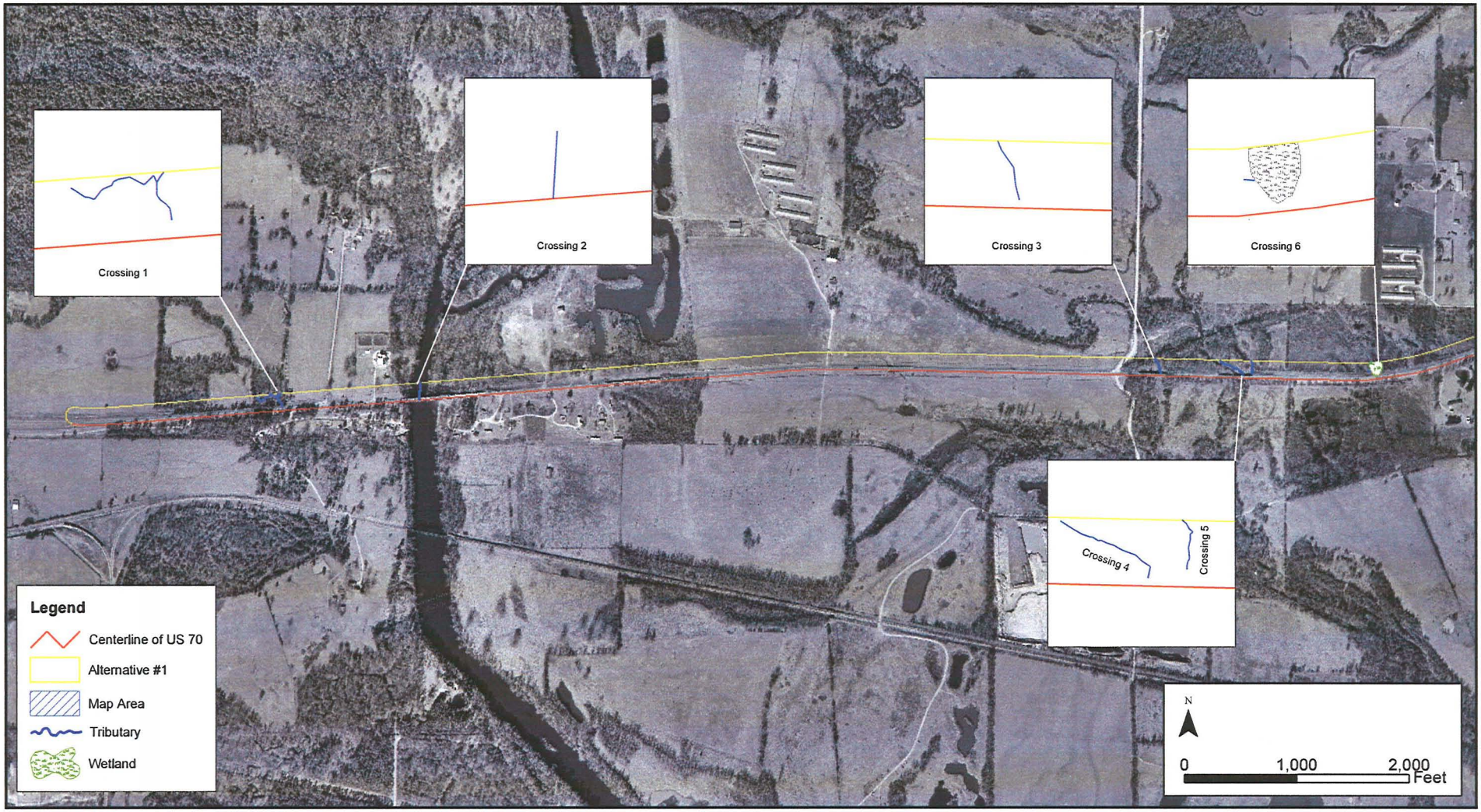
- Centerline of US 70
- Alternative #1
- Map Area

Source: Oklahoma Department of Transportation

Exhibit

2

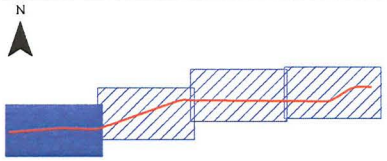
Key Sheet



Carter::Burgess

Jurisdictional Waters
Alternative #1

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

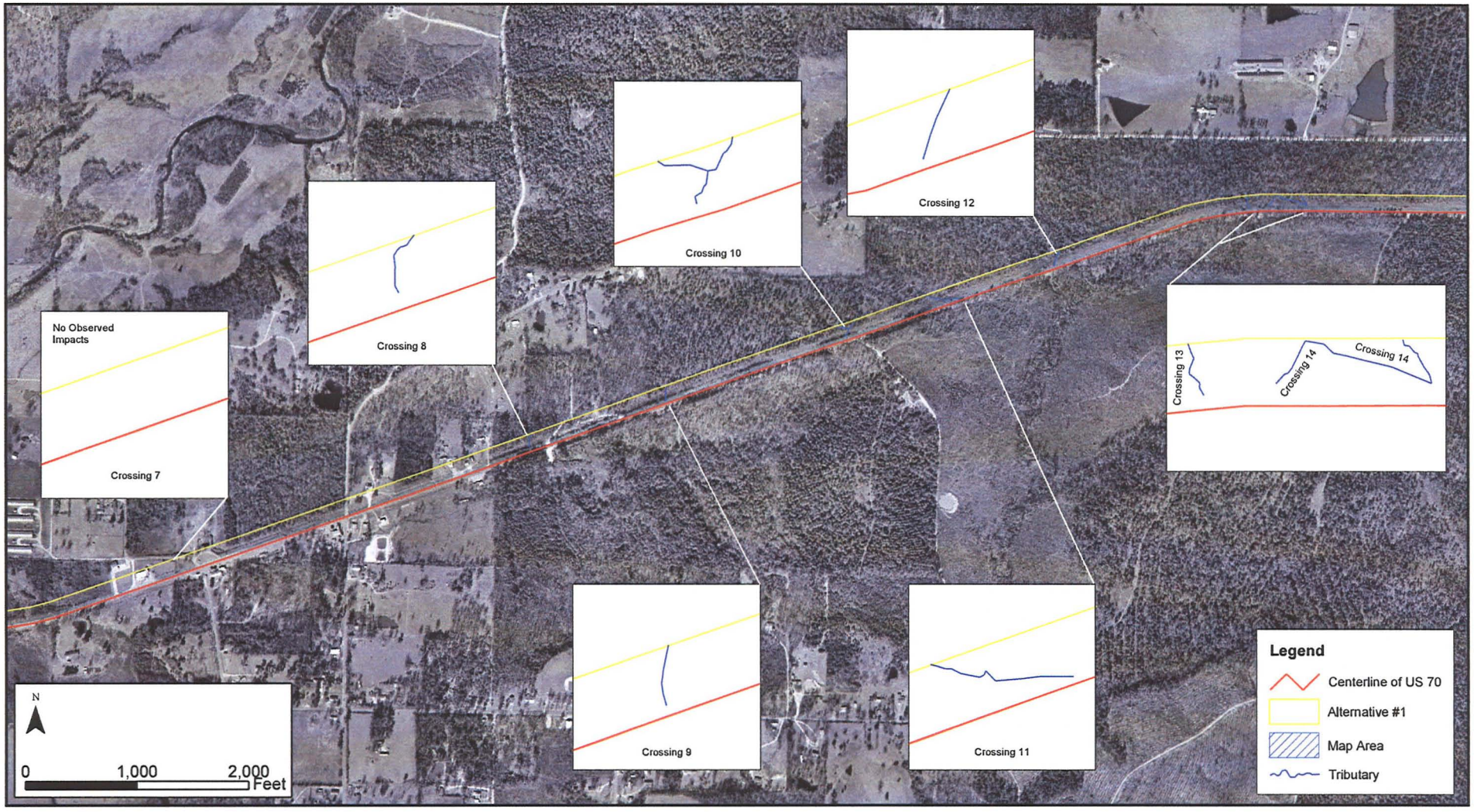


Source: Oklahoma Department of Transportation

Exhibit

2

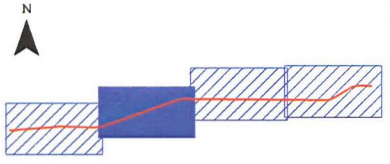
Sheet 1 of 4



Carter::Burgess

Jurisdictional Waters
Alternative #1

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

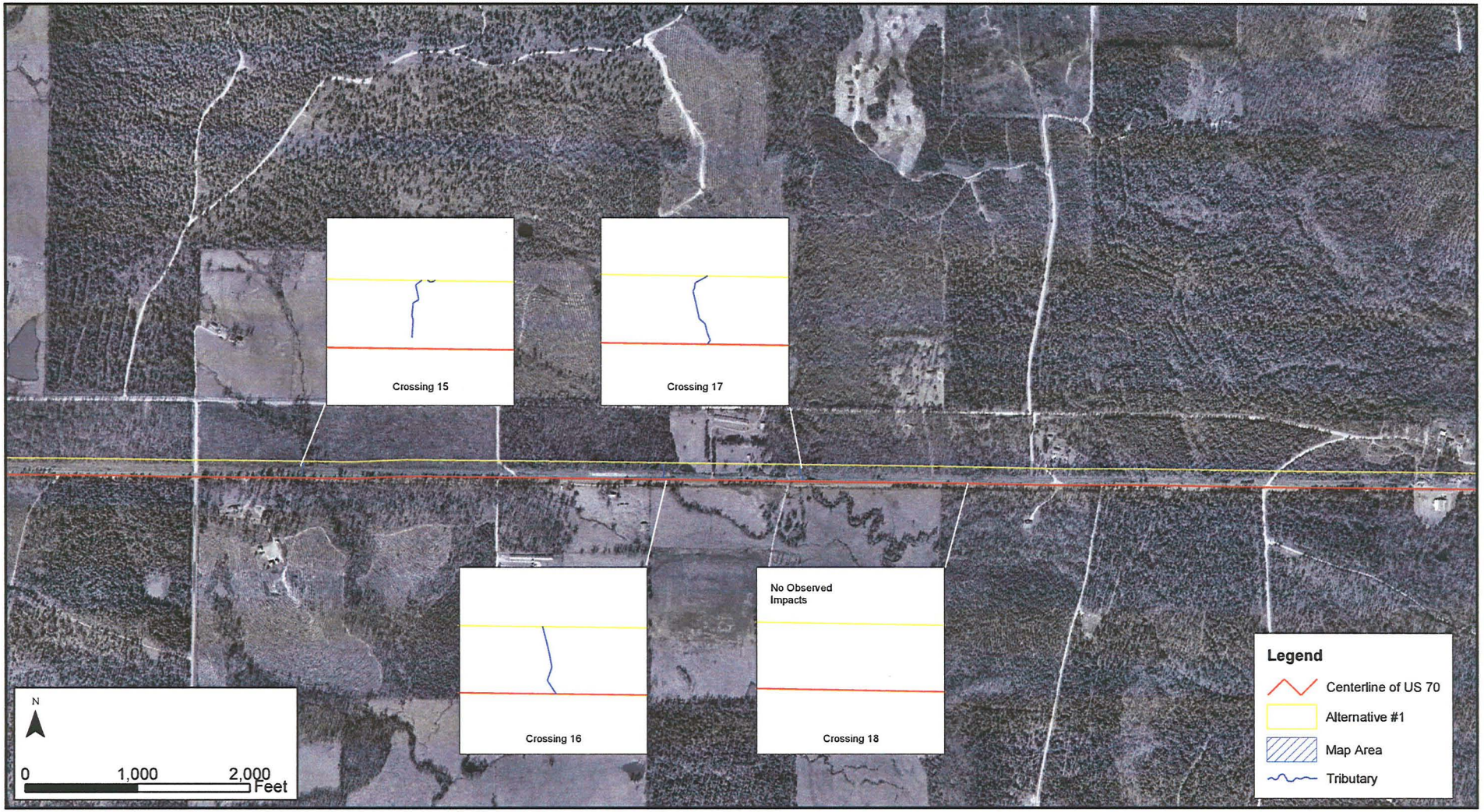


Source: Oklahoma Department of Transportation

Exhibit

2

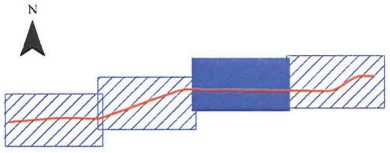
Sheet 2 of 4



Carter::Burgess

Jurisdictional Waters
Alternative #1

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

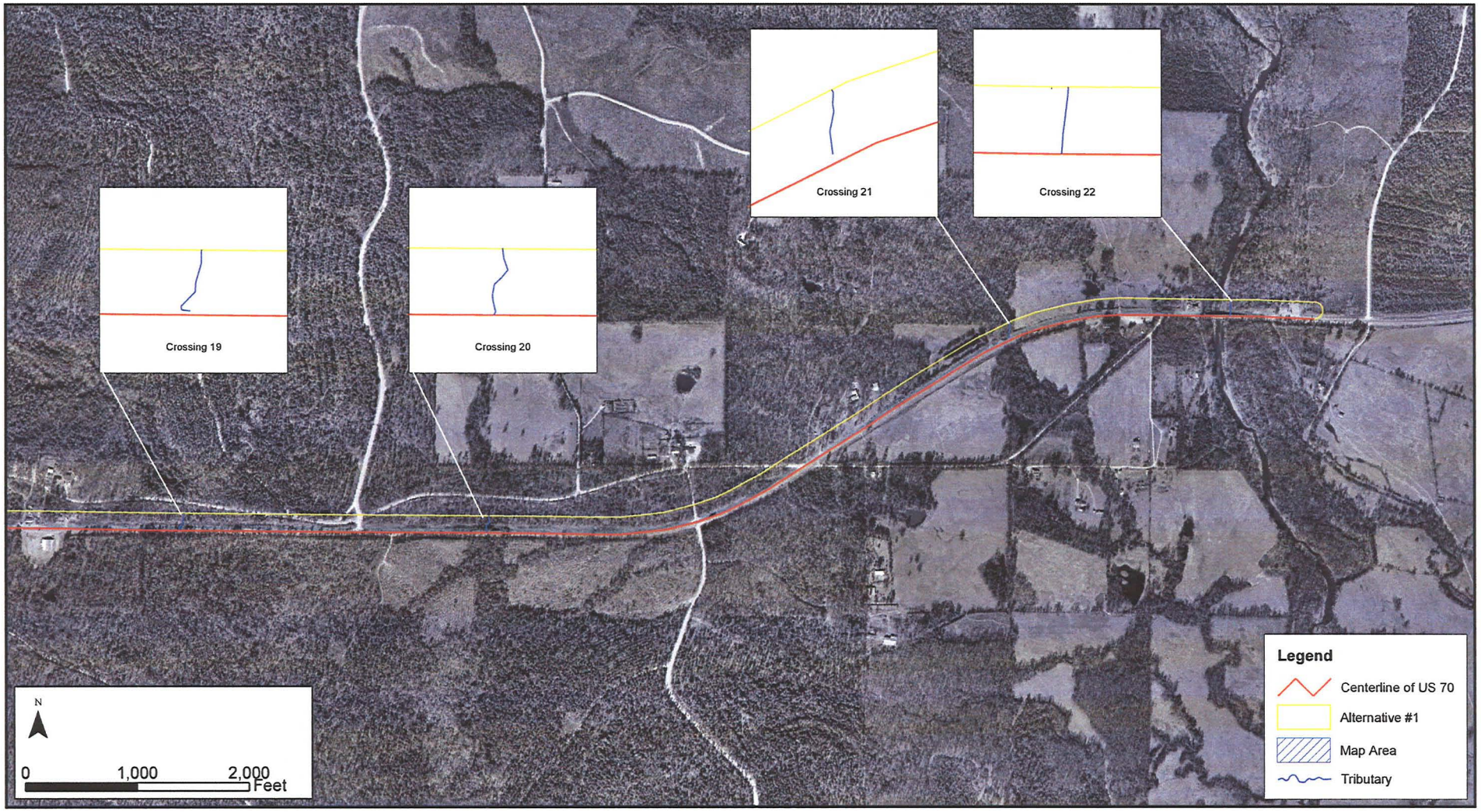


Source: Oklahoma Department of Transportation

Exhibit

2

Sheet 3 of 4



Carter::Burgess

Jurisdictional Waters
Alternative #1

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

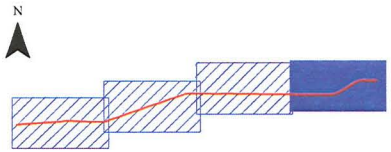


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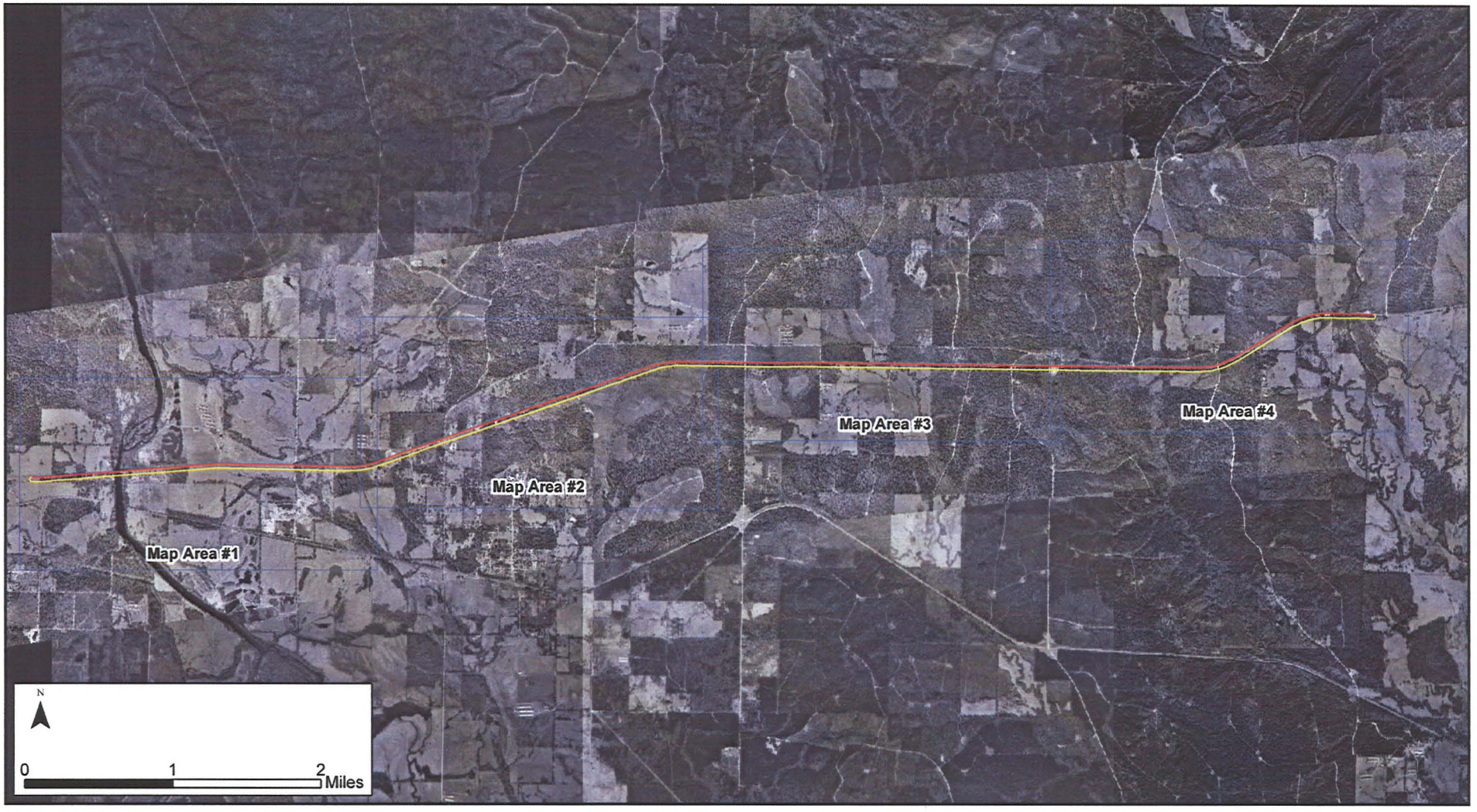
Exhibit

2

Sheet 4 of 4



Carter Burgess

Jurisdictional Waters
Alternative #2

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Legend

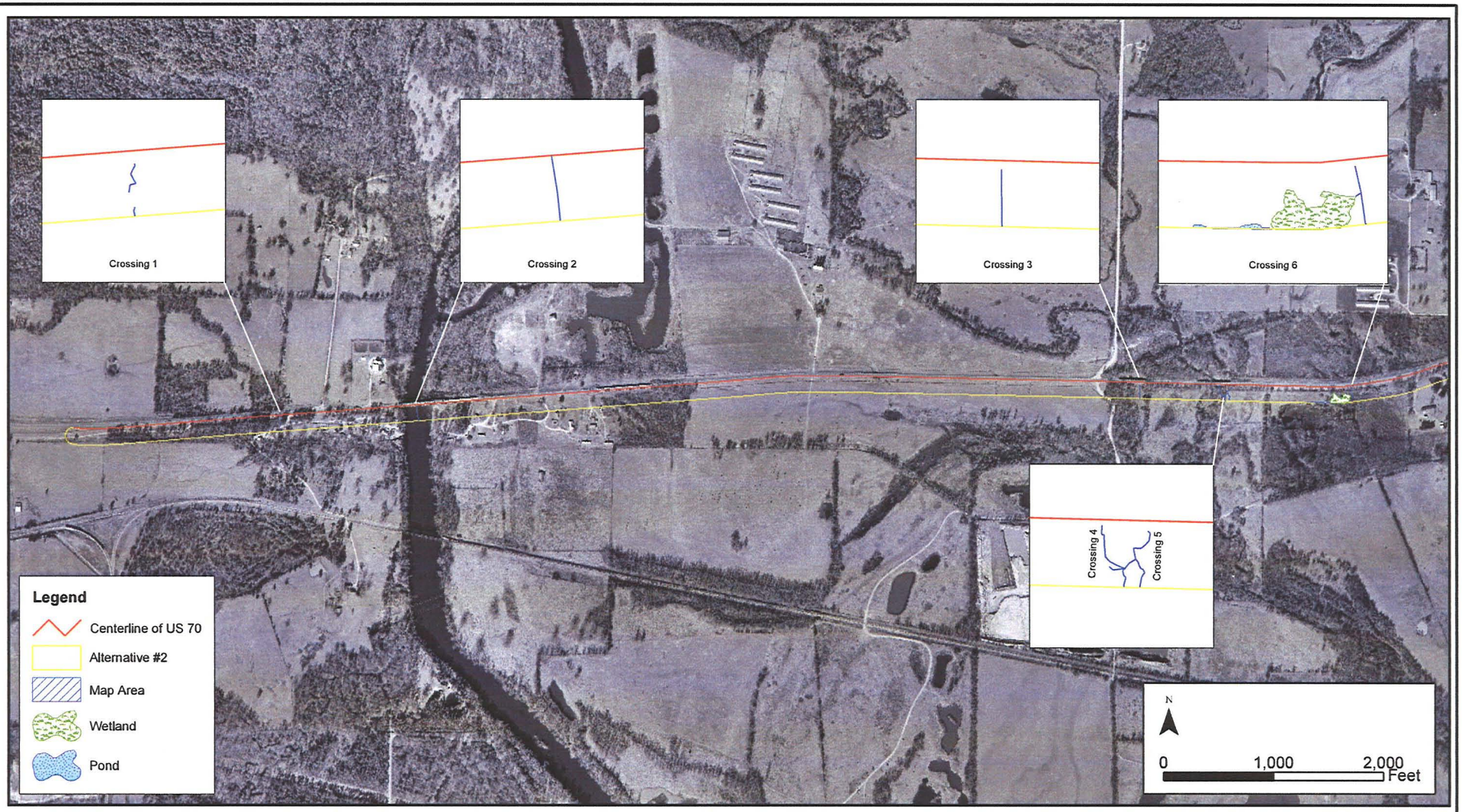
- Centerline of US 70
- Alternative #2
- Map Area

Source: Oklahoma Department of Transportation

Exhibit

3

Key Sheet



Carter::Burgess

Jurisdictional Waters
Alternative #2

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

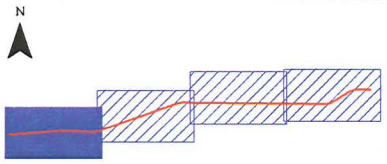


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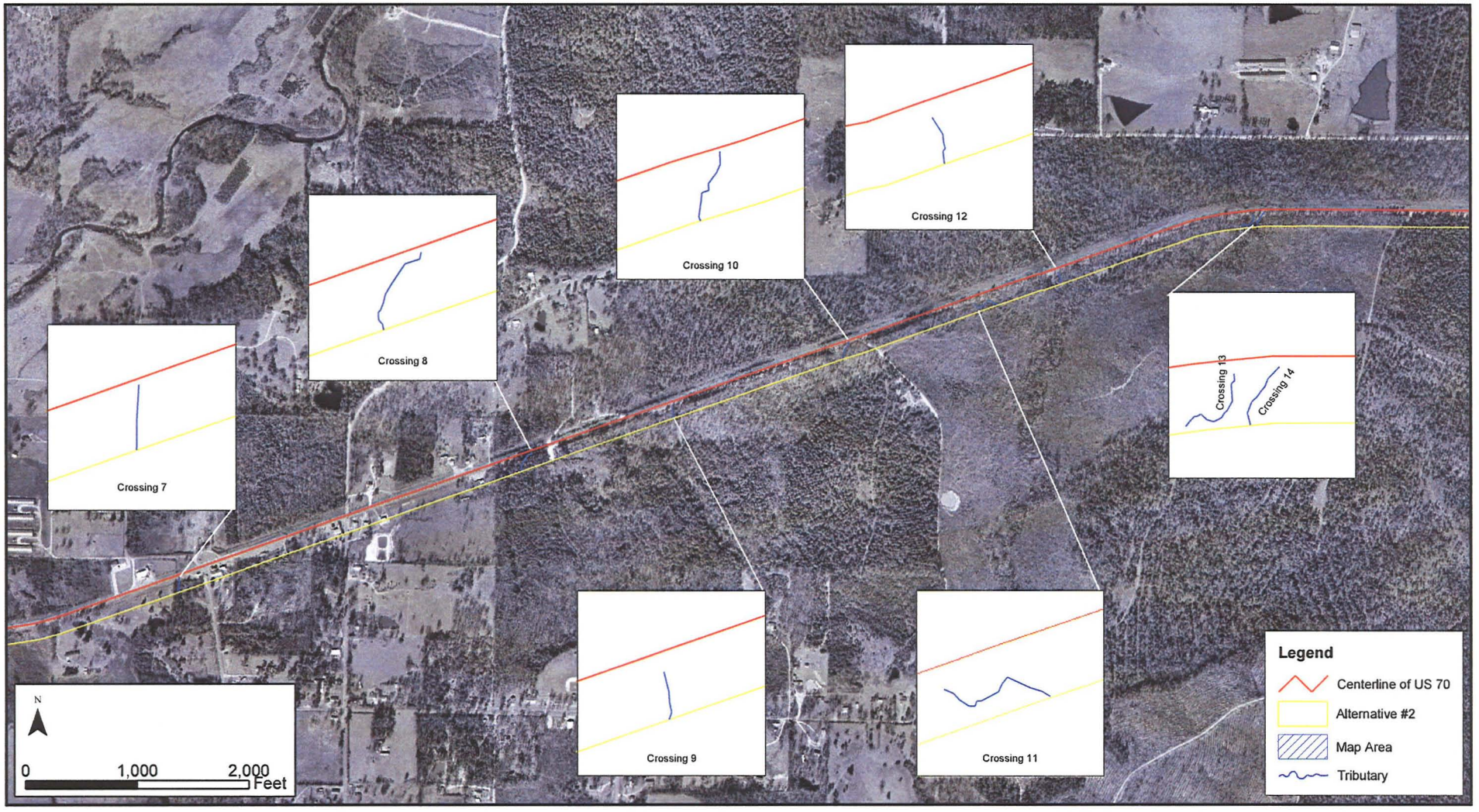
Exhibit

3

Sheet 1 of 4



Carter::Burgess

Jurisdictional Waters
Alternative #2

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

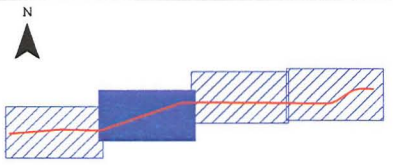


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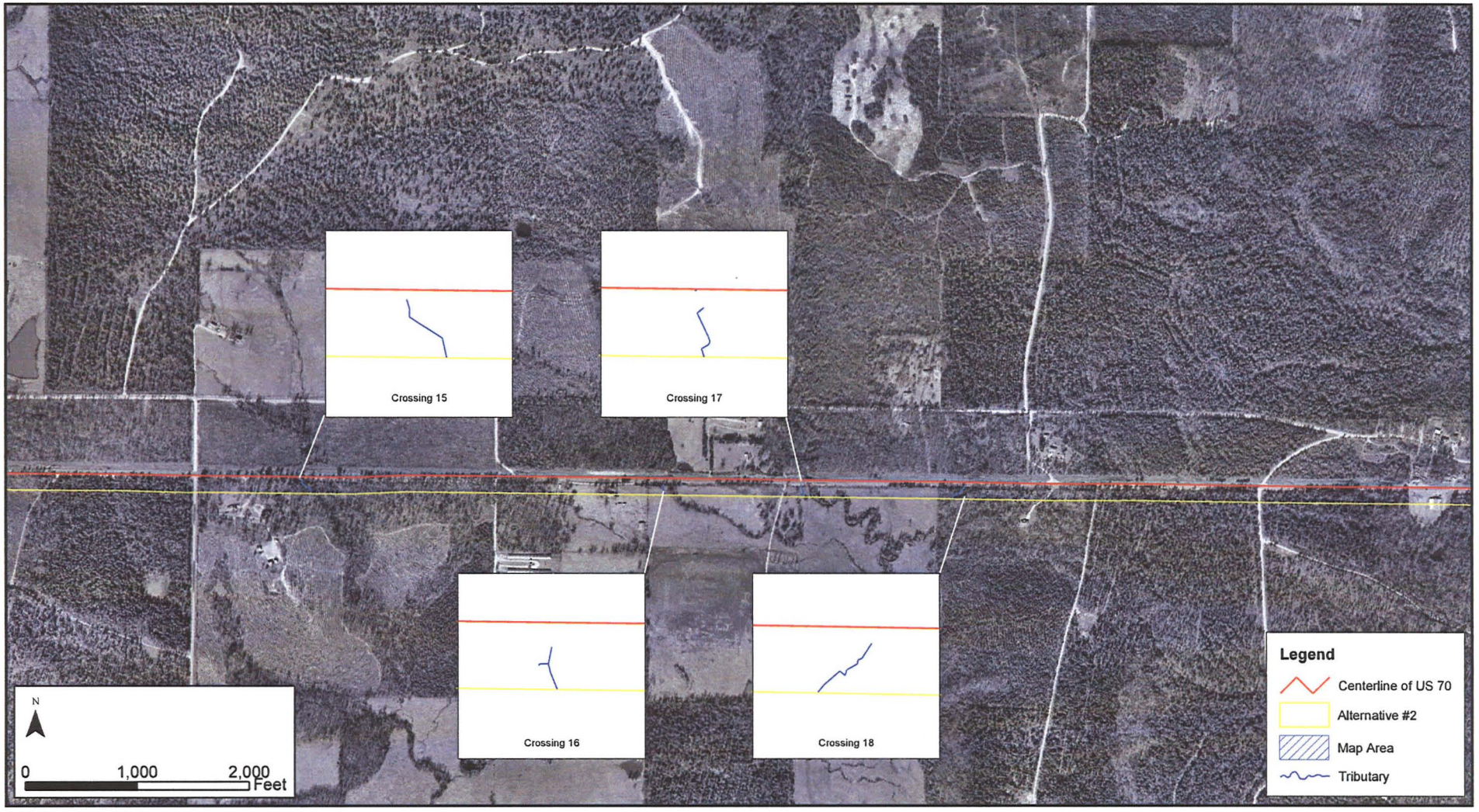
Exhibit

3

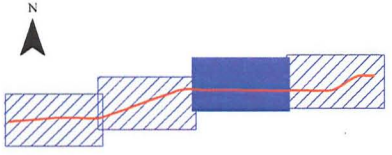
Sheet 2 of 4



Carter::Burgess

Jurisdictional Waters
Alternative #2

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

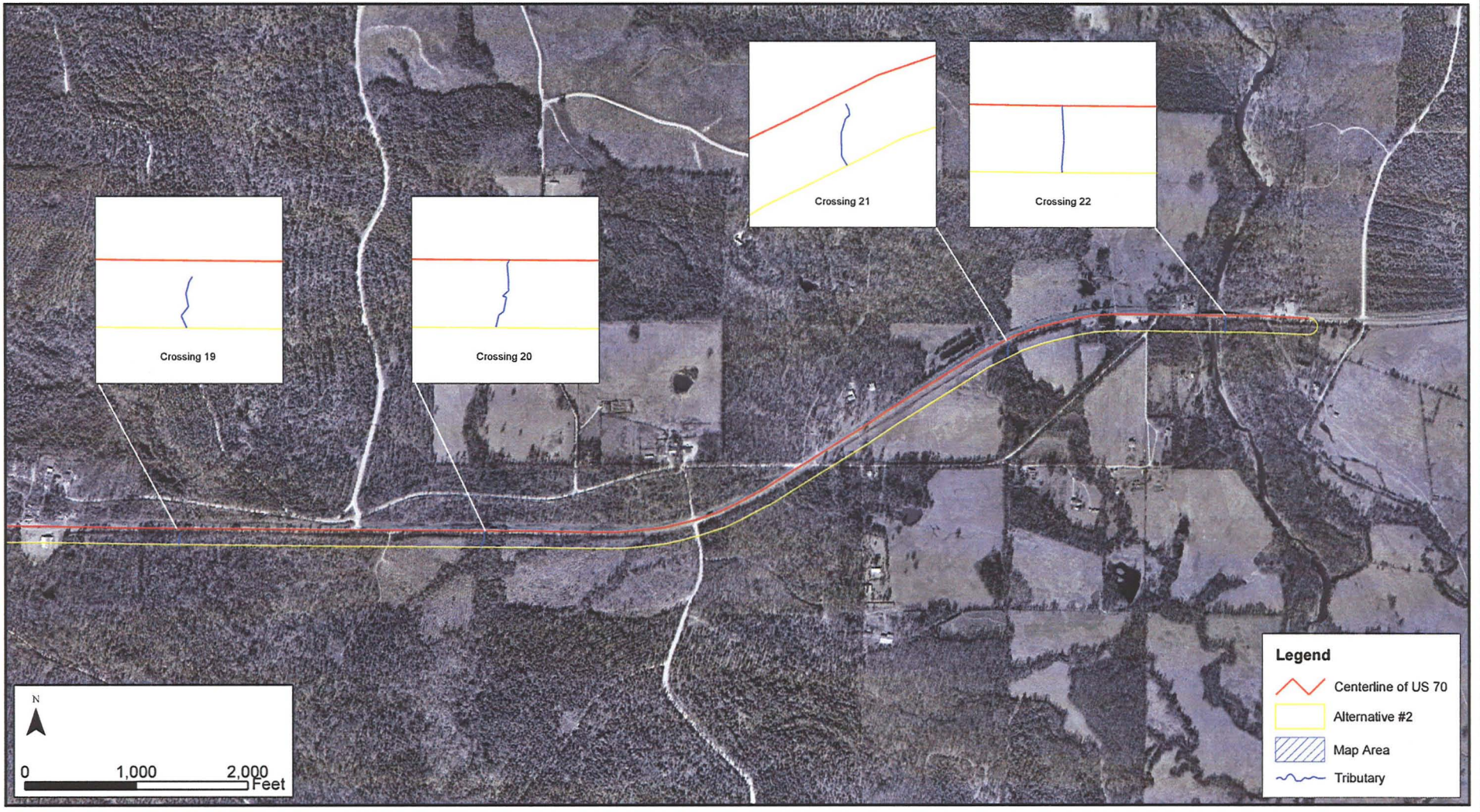


Source: Oklahoma Department of Transportation

Exhibit

3

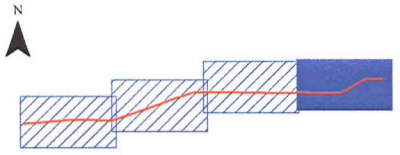
Sheet 3 of 4



Carter Burgess

Jurisdictional Waters
Alternative #2

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010



Source: Oklahoma
Department of Transportation

Exhibit

3

Sheet 4 of 4

APPENDIX B

Wetland Determination Sheets

ROUTINE WETLAND DETERMINATION DATA FORM

Wetland Delineation Sheet 2

Project Site: ODOT: U.S. 70 — Date: 5/5/04
Applicant/Owner: — County: McCurtain
Investigator: T.Gwaltney, L..Nichols, R.T. Hutson — State: Oklahoma

			Community ID:	Juncus-Rubus wetland
Do Normal Circumstances exist on the site?	X Yes	No		
Is the site significantly disturbed (Atypical Situation)?	Yes	X No	Transect ID:	
Is the area a potential Problem Area?	Yes	X No	Plot ID:	Crossing 6 (Alternative 2)
(If needed, explain on reverse.)				

VEGETATION

	Dominant Plant Species	Indicator	Stratum		Dominant Plant Species	Indicator	Stratum
1.	*Juncus effusus*	OBL	Herb	9.			
2.	*Rubus trivialis*	FAC	Herb/WV	10.			
3.	*Carex lupulina*	OBL	Herb	11.			
4.	*Lonicera japonica*	FAC	Herb	12.			
5.	*Liquidamber styracifula*	FAC	Tree	13.			
6.	*Ulmus americana*	FAC	Tree	14.			
7.	*Quercus phellos*	FAC+	Tree	15.			
8.	*Quercus nigra*	FACW	Tree	16.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 8/8 = 100%
Remarks:

HYDROLOGY

_____ Recorded Data Available (Describe in Remarks):
_____ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water	0 to 2	(in.)
Depth to Free Water in Pit:	None to 12	(in.)
Depth to Saturated Soil:	1 to 2	(in.)

Remarks: Few iron concretions, approximately, 3 millimeters, in size were observed at depths greater than 12 centimeters.

Wetland Hydrology Indicators:
Primary Indicators:
_____ Inundated
X Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
X Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves

_____ Local Soil Survey Data
X FAC-Neutral Test 2:1
_____ Other (Explain in Remarks)

SOILS

Map Unit Name: Guyton — Series & Phase: Silt loam — Drainage Class: Poorly drained
Taxonomy Subgroup: Udic Pellusterts — Field Observations Confirm Map Type? _____ Yes _____ No
Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle Colors	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 6/2	10YR4/6	Few/ Fine/ Distinct	Silty clay
12+		10YR 6/1	5YR 4/6, 5YR 5/8, 10YR5/4	Many/ Common/ Prominent	Silty clay

Hydric Soil Indicators:
_____ Histosol
_____ Histic Epipedon
_____ Sulfidic Odor
_____ Aquic Moisture Regime
_____ Reducing Conditions
_____ Gleyed

X Low-Chroma Colors
X Concretions (Fe)
_____ High Organic Content in Surface Layer in Sandy Soils
_____ Organic Streaking in Sandy Soils
_____ Listed on Local Hydric Soils List
_____ Listed on National Hydric Soils List
_____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes	_____	No			
Wetland Hydrology Present?	X	Yes	_____	No	Is this Sampling Point within a Wetland?	X Yes	_____ No
Hydric Soils Present?	X	Yes	_____	No			

Remarks:

Wet Side

ROUTINE WETLAND DETERMINATION DATA FORM

Upland Comparison Sheet 1

Project Site: ODOT: U.S. 70
Applicant/Owner:
Investigator: T.Gwaltney, L..Nichols, R.T. Hutson

Date: 5/5/04
County: McCurtain
State: Oklahoma

Do Normal Circumstances exist on the site?	X	Yes		No
Is the site significantly disturbed (Atypical Situation)?		Yes	X	No
Is the area a potential Problem Area? (If needed, explain on reverse.)		Yes	X	No

Community ID: Herbaceous Upland
Transect ID:
Plot ID: SC 4

VEGETATION

	Dominant Plant Species	Indicator	Stratum		Dominant Plant Species	Indicator	Stratum
1.	*Bromus japonicus*	FAC	H	9.			
2.	*Engelmannia pinnatifida*	NL*	H	10.			
3.	*Lepidium virginicum*	FAC-	H	11.			
4.	*Cynodon dacctylon*	FACU+	H	12.			
5.				13.			
6.				14.			
7.				15.			
8.				16.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 1/4=25%
Remarks: * NL= Not enough information available

HYDROLOGY

_____ Recorded Data Available (Describe in Remarks):
_____ Aerial Photographs
_____ Other
_____ No Recorded Data Available

Field Observations:

Depth of Surface Water	0	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Remarks:

Wetland Hydrology Indicators:
Primary Indicators:
_____ Inundated
_____ Saturated in Upper 12 inches
_____ Water Marks
_____ Drift Lines
_____ Sediment Deposits
_____ Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
_____ Oxidized Root Channels in Upper 12 inches
_____ Water-Stained Leaves
_____ Local Soil Survey Data
_____ FAC-Neutral Test
_____ Other (Explain in Remarks)

SOILS

Map Unit Name: Guyton
Series & Phase: Silt loam
Drainage Class: Poorly drained
Taxonomy Subgroup: Udic Pellusterts
Field Observations Confirm Map Type? _____ Yes _____ No
Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle Colors	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-8		10YR 5/4			Silty loam
8-16		10YR 6/1	7.5YR 5/6, 7.5 YR 4/6	Many/ Common/ Prominent	Silty loam

Hydric Soil Indicators:
_____ Histosol
_____ Histic Epipedon
_____ Sulfidic Odor
_____ Aquic Moisture Regime
_____ Reducing Conditions
_____ Gleyed
X Low-Chroma Colors
_____ Concretions
_____ High Organic Content in Surface Layer in Sandy Soils
_____ Organic Streaking in Sandy Soils
_____ Listed on Local Hydric Soils List
_____ Listed on National Hydric Soils List
_____ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?		Yes	x	No	
Wetland Hydrology Present?		Yes	X	No	Is this Sampling Point within a Wetland? _____ Yes X No
Hydric Soils Present?	X	Yes		No	

Remarks:

Upland Side

ROUTINE WETLAND DETERMINATION DATA FORM

Wetland Delineation Sheet 1

Project Site: ODOT: U.S. 70
Applicant/Owner:
Investigator: T.Gwaltney, L..Nichols, R.T. Hutson

Date: 5/5/04
County: McCurtain
State: Oklahoma

			Community ID:	Juncus-Rubus wetland
Do Normal Circumstances exist on the site?	X Yes	___ No		
Is the site significantly disturbed (Atypical Situation)?	___ Yes	X No	Transect ID:	
Is the area a potential Problem Area?	___ Yes	X No	Plot ID:	Crossing 6 (North side)

(If needed, explain on reverse.)

VEGETATION

	Dominant Plant Species	Indicator	Stratum		Dominant Plant Species	Indicator	Stratum
1.	*Juncus effusus*	OBL	Herb	9.	*Lemna* sp.	H	OBL
2.	*Rubus trivialis*	FAC	Herb/WV	10.			
3.	*Carex lupulina*	OBL	Herb	11.			
4.	*Baccharis salicina*	FAC	Shrub/Sapl.	12.			
5.	*Platanus occidentalis*	FAC+	Shrub/Sapl.	13.			
6.	*Liquidamber styraciflua*	FAC	Tree	14.			
7.	*Ulmus americana*	FAC	Tree	15.			
8.	*Platanus occidentalis*	FAC+	Tree	16.			

Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-): 9/9=100%

HYDROLOGY

___ Recorded Data Available (Describe in Remarks):
___ Aerial Photographs
___ Other
___ No Recorded Data Available

Field Observations:

Depth of Surface Water	6	(in.)
Depth to Free Water in Pit:	0	(in.)
Depth to Saturated Soil:	0	(in.)

Remarks:

Wetland Hydrology Indicators:
Primary Indicators:
X Inundated
X Saturated in Upper 12 inches
___ Water Marks
___ Drift Lines
___ Sediment Deposits
X Drainage Patterns in Wetlands
Secondary Indicators (2 or more required):
___ Oxidized Root Channels in Upper 12 inches
X Water-Stained Leaves
___ Local Soil Survey Data
___ FAC-Neutral Test
___ Other (Explain in Remarks)

SOILS

Map Unit Name: Guyton
Series & Phase: Silt loam
Drainage Class: Poorly drained
Taxonomy Subgroup: Udic Pellusterts
Field Observations Confirm Map Type? ___ Yes ___ No
Profile Description:

Depth (in.)	Horizon	Matrix Color	Mottle Colors	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.
0-12		10YR 6/1	7.5YR 3/4	Common/ Many/ Distinct	Silty loam

Hydric Soil Indicators:
___ Histosol
___ Histic Epipedon
___ Sulfidic Odor
___ Aquic Moisture Regime
___ Reducing Conditions
___ Gleyed
X Low-Chroma Colors
___ Concretions
___ High Organic Content in Surface Layer in Sandy Soils
___ Organic Streaking in Sandy Soils
___ Listed on Local Hydric Soils List
___ Listed on National Hydric Soils List
___ Other (Explain in Remarks)

Remarks:

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	X	Yes	___	No			
Wetland Hydrology Present?	X	Yes	___	No	Is this Sampling Point within a Wetland?	X Yes	___ No
Hydric Soils Present?	X	Yes	___	No			

Remarks:

Wet Side

APPENDIX C

Site Photographs

Photograph #1– View of Site 1 (Crossing 6) on north side of U.S. 70 (May 5, 2004).

Photograph #2– View of Site 2 (Crossing 6) on south side of U.S. 70 (May 5, 2004).

Photograph #3– View of Site 2 (Crossing 6) on south side of U.S. 70 (May 5, 2004).

Photograph #4– View of channel adjacent to Site 2 on the south side of U.S. 70 (May 5, 2004).

APPENDIX D

Reference

REFERENCES

United States Army Corp of Engineers. 1987. Corps of Engineers Wetland Delineation Manual. U.S. Corps of Engineers Waterways Experiment Station. Wetlands Research Program Technical Report Y-87-1.

VEGETATION AND WILDLIFE FIELD STUDY

U.S. 70 five miles east of Broken Bow, OK to
Arkansas State Line
McCurtain County, Oklahoma

Introduction

This field study has been written in support of and in compliance with 23 CFR 771, 777 and FHWA Technical Advisory T6640.8A for the Oklahoma Department of Transportation (ODOT) of the results of a survey for vegetation and wildlife along the above-referenced project.

The proposed project will expand an existing two-lane highway into a divided four-lane highway with center median. This project will provide improvements to the capacity, operation, circulation and safety along the highway. The proposed expansion would require the acquisition of additional right-of-way (ROW).

Two alternatives were assessed for impacts on vegetation and wildlife. Alternative #1 encompassed an area extending 150 feet north of existing U.S. 70 while Alternative #2 encompassed an area extending 150 feet south of existing U.S. 70 **(Appendix A, Exhibit 1, Sheets 1-4).**

Vegetation

The proposed project lies within the Oak and Bluestem Parkland section of the Prairie Parkland Province (Bailey 1995). This province ranges from the Texas Gulf Coast up the eastern side of the Great Plains to the southern end of Lake Michigan. It is defined by gently rolling to flat plains of prairies and savannas. It is part of the grassland-forest transition area of the central United States. This area is dominated by various short and medium-to-tall grasses with a few hardy tree species. This vegetation makeup is likely due to the amount of rainfall, fire frequency, and grazing. Trees in this province are typically evergreen and widely spaced with soil type being a key determiner of local distribution. Fine, heavy soils generally support grassland vegetation, while coarse, lighter soils result in a predominance of savanna. Within the province, bluestems are the principal grasses.

Within the Oak and Bluestem Parkland ecosystem, the project area was more specifically located in the Quachita Mountain ecoregion (Department of Oklahoma Wildlife Conservation-Oklahoma 2005). Predominant vegetation in this ecoregion consists of loblolly and shortleaf pine. Lesser areas of a shortleaf-oak type (southern red, scarlet, black, post, and blackjack oaks) and oak-hickory (black, scarlet, post, and white oaks and pignut and mockernut hickories) occur within this ecoregion (McNab and Avers 1994).

A site visit was conducted in May 5 and 6, 2004 to determine the type and composition of plant communities within the proposed project corridor. The site visit was also conducted to survey the corridor for the presence or absence of rare plants. No rare plant species or plant communities were observed within the corridor. Grasses and annual forbs dominated vegetation along the existing ROW. The wooded corridor consisted mainly of mature pine trees and hardwoods. Range and pasture fields were also observed along parts of the ROW. **Table 1** presents a list of the typical plant species identified along the ROW.

Vegetation Impacts

The project has the potential to impact vegetation through clearing, grading, and paving during construction. Vegetation along the project corridor would be directly impacted by ROW construction and expansion associated with the proposed improvements. Approximately 135 acres of vegetation would be impacted by either alternative. Approximately 65 acres of wooded area and 70 acres of grassland/pasture would be impacted by Alternative #1, while Alternative #2 would impact 90 acres of wooded habitat and 40 acres of grassland/pasture. Although disturbed areas that are not paved will be revegetated with grasses, these areas would be routinely maintained (i.e., mowed). Therefore, loss of wooded areas would be permanent as woody vegetation will not be allowed to reestablish in the right-of-way.

Table 1. Plant Species Identified within the US 70 Expansion Project Corridor

Common Name (Classification*)	Scientific Name	Common Name (Classification*)	Scientific Name
American elm (T)	*Ulmus americana*	Little bluestem (H)	*Schizachyrium scoparium*
Bald Cypress (T)	*Taxodium distichum*	Loblolly Pine (T)	*Pinus taeda*
Bedstraw (H)	*Galium* sp.	Narroleaf woodoats (H)	*Chasmanthium laxum*
Black willow (T)	*Salix nigra*	Plantain (H)	*Plantago* sp.**
Bois d'arc (T)	*Maclura pomifera*	Poision ivy (V)	*Toxicodendron radicans*
Boxelder (T)	*Acer negundo*	Post Oak (T)	*Quercus stellata*
Broadleaf woodoats (H)	*Chasmanthium latifolium*	Redbud (T)	*Cercis canadensis*
Chinkapin Oak (T)	*Quercus muelenbergii*	Ryegrass (H)	*Lolium perenne*
Cottonwood (H)	*Populus deltoides*	Shorleaf pine (T)	*Pinus echinata*
Dandelion (H)	*Taraxacum officinale*	Shumard's Oak (T)	*Quercus shumardii*
Dewberry (S)	*Rubus trivialis*	Silverleaf nightshade (H)	*Solanum elaegnifolium*
Dotted gayfeather (H)	*Liatris punctata*	Singletary pea (H)	*Lathyrus hirsutus*
Engelmann daisy (H)	*Engelmannia pinnatifida*	Spikerush (H)	*Eleocharis* sp.**
Flameleaf sumac (T)	*Rhus copallinum*	Sumpweed (H)	*Iva annua*
Fox sedge (H)	*Carex vulpinoidea*	Sunflower (H)	*Helianthus annuus*
Frog fruit (H)	*Phyla lanceolata*	Sweetgum (T)	*Liquidambar styraciflua*
Giant ragweed (H)	*Ambrosia trifida*	Sycamore (T)	*Platanus occidentalis*
Goldenrod (H)	*Solidago* sp.	Texas bluegrass (H)	*Poa arachnifera*
Greenbrier (H/V)	*Smilax bona-nox*	Texas thistle (H)	*Cirsium texanum*
Hackberry (T)	*Celtis occidentalis*	Thin-scale sedge (H)	*Carex hyalinolepis*
Hairy vetch (H)	*Vicia villosa*	Vervain (H)	*Verbena halei*
Honey locust (T)	*Gleditsia triacanthos*	Virginia wildrye (H)	*Elymus virginicus*
Honeysuckle (V)	*Lonicera* sp.	Water Oak (T)	*Quercus nigra*
Hop sedge (H)	*Carex lupulina*	Wild carrot (H)	*Daucus* sp.**
India mustard (H)	*Brassica juncea*	Wild onion (H)	*Allium* spp.**
Japanese brome (H)	*Bromus japonicus*	Willow baccharris (S)	*Baccharis salicina*
Johnsongrass (H)	*Sorghum halepense*	Willow oak (T)	*Quercus phellos*
Little barley (H)	*Hordeum pussillum*		

*T=Tree, S=Shrub, V=Vine, H=Herbaceous
**Species identified to the genus level due to level of specimen development.

Minimization of Impacts to Vegetation

Minimization of vegetation impacts will consist of removing only the amount of vegetation required for construction, to the extent possible. Additionally, implementation of erosion and sediment control measures, as required in the Oklahoma Pollution Discharge Elimination System (OPDES) General Permit for Construction Activities, will reduce the impacts of the project on vegetation communities. Disturbed areas that are not paved will be re-vegetated following construction.

Wildlife

According to Bailey (1995), no bird or mammal species is uniquely abundant in this province. However, whitetail deer, nine-banded armadillo, ringtail, raccoon, fox squirrel, wild turkey, mourning dove, bobwhite quail, and several species of hawks and owls can be expected to be seen within the province. Predominant fauna within the Ouachita Mountain ecoregion includes of white-tailed deer, black bear, bobcat, gray fox, raccoon, gray squirrel, fox squirrel, eastern chipmunk, white-footed mouse, pine vole, short-tailed shrew, and cotton mouse. The turkey bobwhite, and mourning dove are game birds in various parts of this Section. Songbirds include the red-eyed vireo, cardinal, tufted titmouse, wood thrush, summer tanager, blue-gray gnatcatcher, hooded warbler, and Carolina wren. The herpetofauna include the box turtle, common garter snake, and timber rattlesnake. Endemics are Fourche Mountain salamander, Caddo Mountain salamander, Rich Mountain salamander, Ouachita madtom, Ouachita Mountain shiner, Kiamichi shiner, Ouachita darter, peppered shiner, and Rich Mountain slitmouth snail.

Table 2 contains a list of wildlife species observed, visually or by sign, along the project corridor during surveys by biologists conducted in May 2004.

Table 2. Wildlife Species Observed in the Vicinity of the Project Corridor

Common Name	Scientific Name
Birds	
American Crow	*Corvus brachyrhynchos*
Blue Jay	*Cyanocitta cristata*
Cattle Egret	*Bubulcus ibis*
Great Blue Heron	*Ardea herodias*
Mallard	*Anas platyrhynchos*
Mourning Dove	*Zenaida macroura*
Turkey Vulture	*Cathartes aura*
Mammals	
Eastern Cottontail	*Sylvilagus floridanus*
Raccoon	*Procyon lotor*
White-tailed Deer	*Odocoileus virginianus*

The Endangered Species Act of 1973 prohibits the taking of listed wildlife and the destruction of habitats critical to the survival of federally listed species. A listed species is a species that appears on the Secretary of the Interior's list of species that appear in danger of extinction across part or all of their range. The designation of endangered indicates that the entire species appears to be in danger of extinction. A designation of threatened indicates a species for which protective measures appear to be required in order to prevent it from becoming endangered.

Table 3 contains federally listed species for McCurtain County, Oklahoma. None of the federally listed threatened or endangered species listed in McCurtain County were observed along the

project corridor during the field survey. Potential impacts to the species listed in Table 3, along with the appropriate effects determinations, are presented in the following paragraphs.

Table 3. Federal Listed Threatened and Endangered Species of McCurtain County. Oklahoma.

Common Name	Scientific Name	Federal Status	Effect Statement
American Burying Beetle	*Nicrophorus americanus*	Endangered	[1]
Interior Least Tern	*Sterna antillarum*	Endangered	No Effect
Ouachita Rock Pocketbook Mussel	*Arkansia wheeleri*	Endangered	May Effect, Unlikely to Adversely Affect[2]
Piping Plover	*Chadradrius melodus*	Threatened	No Effect – lack of habitat
Red-Cockaded Woodpecker	*Picoides borealis*	Endangered	No Effect – lack of habitat
Scaleshell mussel	*Leptodea leptodon*	Endangered	May Effect, Unlikely to Adversely Affect[2]
Winged Mapleleaf Mussel	*Quadrula fragosa*	Endangered	May Effect, Unlikely to Adversely Affect[2]
American Alligator	*Alligator mississippiensis*	Threatened, Similarity of Appearance	No Effect – lack of habitat
Leopard Darter	*Percina pantherina*	Threatened	May Effect, Unlikely to Adversely Affect[2]
Leopard Darter Critical Habitat			No Effect

[1]The appropriate effects determination and mitigation measures proposed for the American burying beetle will be addressed in the programmatic biological assessment and conservation strategy, and formalized in a Memorandum of Understanding and through conclusion of formal consultation among the Federal Highway Administration, ODOT and the U.S. Fish and Wildlife Service, prior to May 20, 2008.
[2]No effect anticipated due to use of appropriate BMPs during construction. Bridges would be replaced with bridges and culverts would be replaced with culverts that allow flows in the stream to continue as they currently do.

Source: *Oklahoma Natural Heritage Inventory. 2003. Federal and State Endangered, Threatened, and Candidate Species in Oklahoma by County. Oklahoma Natural Heritage Inventory, Oklahoma Biological Survey. Norman, Oklahoma. Website Accessed February 29, 2008. (http://www.biosurvey.ou.edu/heritage/info.html)*
U.S. Fish and Wildlife Service. 2008. County Lists of Threatened and Endangered Species for Oklahoma. U.S. Fish and Wildlife Service, Southwest Region Ecological Services. Albuquerque, New Mexico. Website accessed February 29, 2008. (http://ifw2es.fws.gov/EndangeredSpecies/lists/ListSpecies.cfm).

Habitat requirements for the **American burying beetle** (*Nicrophorus americanus*), appear to be variable. This species has been found in several habitat types including oak-pine woodlands, open fields, oak-hickory forest, open grasslands, and edge habitat. In Oklahoma the beetle is currently known to occur in 22 counties, including McCurtain County. Given that habitats within the corridor appear to be suitable for this beetle, the potential to affect this species exists and consultation with the USFWS appears necessary. The appropriate effects determination and mitigation measures proposed for the American burying beetle will be addressed in the programmatic biological assessment and conservation strategy, and formalized in a Memorandum of Understanding and through conclusion of formal consultation among the Federal Highway Administration, ODOT, and the U.S. Fish and Wildlife Service, prior to May 20, 2008.

Interior Least Terns (*Sterna antillarum*) favor islands or sandbars along large rivers for nesting. The sand must be mostly clear of vegetation. They prefer shallow, relatively clear water for fishing. In Oklahoma, it is known to nest along most of the larger rivers. Suitable nesting habitat for this species is not present in the study corridor. Likewise, there are no records in the

Oklahoma Biological Survey database for Interior Least Terns in McCurtain County (Oklahoma Biological Survey 2007). No impacts to this species are expected due to the fact that the birds would be able to feed, uninterrupted, areas far away from the proposed project. Operation or use of the finished roadway is not expected to change over the current conditions in the corridor. Additionally, no Interior least tern habitat is present within the proposed right-of-way. Therefore, no impacts related to operation of the roadway are expected.

The **Ouachita rock pocketbook mussel** (*Arkansia wheeleri*) inhabits pools, backwaters, and side channels of certain rivers and large creeks in or near the southern slope of the Ouachita Uplift. The species occupies stable substrates containing gravel, sand, and other materials and always occurs within large mussel beds containing a diversity of mussel species. Recent surveys have found it in small sections of the Little River in Oklahoma, at one locality in the Ouachita River in Arkansas, and within an 88-mile section of the Kiamichi River upstream from Hugo Reservoir (USFWS 2007l). Given that known habitat is present within the project area, Little River (Mountain Fork), the potential to affect this species exist and consultation with the USFWS appears necessary for this species. However, it is assumed that, through consultation impacts to the species can be avoided using sensitive construction techniques and appropriate BMPs to project water quality.

Piping Plovers (*Charadrius melodus*) nest on sandy beaches of the ocean or lakes. Along rivers, they use the bare areas of islands or sandbars. During the winter, they use algal, mud, and sand flats along the Gulf Coast. Piping Plovers migrate through Oklahoma each spring and fall (USFWS 2007g). There are no records in the Okalahoma Biological Survey database for Piping Plover in McCurtain county and no suitable habitat exists for them within the project corridor (Oklahoma Biological Survey 2007). Therefore, no impacts to this species are anticipated.

Red-cockaded Woodpeckers (*Picoides borealis*) live in old-growth loblolly, shortleaf, and especially slash and longleaf pine forests. Nesting and roosting are made only in living pine trees over 60 years old. Ideal colony sites are located in park-like stands of pines with little or no understory growth. In Oklahoma, they have been restricted to the shortleaf pine areas of southeastern Oklahoma. The Red-cockaded Woodpecker once occupied Bryan, Latimer, LeFlore, McCurtain, Pittsburg, and Pushmataha counties. The current distribution in Oklahoma includes only limited areas of McCurtain and Pushmataha counties (USFWS 2007h). Within the project corridor, there is no suitable habitat (i.e., no old-growth stands of pine with open understory). Therefore, no impacts to this species are foreseen.

Scaleshell mussels (*Leptodea leptodon*) live in medium-sized and large rivers with stable channels and good water quality. They historically occurred across most of the eastern U.S. However, during the last 50 years they have become increasingly rare within their reduced range. Of the 55 historical populations, 14 remain within the Mississippi River basin in Arkansas, Missouri, and Oklahoma (USFWS 2007m). The scaleshell mussel is only found in the Kiamichi and Little River systems in Oklahoma. Suitable habitat may be present at the larger stream crossings, also known habitat is present within the project area, Little River (Mountain Fork). The potential to affect this species exist and consultation with the USFWS appears necessary for this species. However, it is assumed that, through consultation impacts to the species can be avoided using sensitive construction techniques and appropriate BMPs to project water quality.

Winged mapleleaf mussels (*Quadrula fragosa*) are found in riffles, with clean gravel, sand, or rubble bottoms and in clear, high quality water. In the past, this species may also have been found in large rivers and streams on mud, mud-covered gravel, and gravel bottoms. The range

of this species once included 13 states where it was found in large streams that flow into the Mississippi River and in one river that flows into the Missouri River. Today it is found in the St. Croix River in Minnesota and Wisconsin, the Ouachita and Saline Rivers in Arkansas, and the Bourbeuse River in Missouri. The winged mapleleaf mussel has been observed in the Kiamichi River in Oklahoma, and in August 2005, a population of what is believed to be this species was discovered in the Little River (Vaughn 2005). Some of the habitat at the stream crossings in the corridor could be suitable for this species, and the project crosses a river with a recorded population (Little River, Mountain Fork). Consultation with the USFWS should be conducted for this species since habitats in the corridor (i.e., at the larger stream crossings) match the description of habitat for this species and the project crosses a stream with a known population. However, it is assumed that, through consultation impacts to the species can be avoided using sensitive construction techniques and appropriate BMPs to project water quality.

American alligators (*Alligator mississippiensis*) inhabit rivers, swamps, estuaries, lakes, and marshes. Oklahoma represents the northwestern-most reaches of their range. The historic distribution in Oklahoma was limited to the Red River and Little River drainages in southeastern Oklahoma. Currently, they are considered occasional visitors along the Red River in McCurtain County. The American alligator is also found in the Little River drainage and on the Little River National Wildlife Refuge. Given that the American alligator is known to exist within the Little River drainage system, and habitat occurs within the project corridor, but that the species' mobility would likely preclude any impacts, the proposed project may affect, not likely to adversely affect, this species.

The **leopard darter** (*Percina pantherina*) is found in intermediate to larger streams. They are typically not found in smaller, headwater streams. From May to February, they prefer large, quiet pools with rubble and boulder substrates. Spawning occurs on gravel substrates; however, the dominant riffle substrate may be gravel, rubble, boulder, and bedrock. In Oklahoma, it occurs within the Little River drainage (Mountain Fork, Glover, and Little Rivers) in LeFlore, McCurtain, and Pushmataha counties. Designated critical habitat exists for this species in McCurtain and Pushmataha counties. The closest critical habitat to the project is the Glover River, approximately 25 miles from the project area. Because the project crosses a river that contains a known population (Little River, Mountain Fork) of leopard darters, the potential to affect this species exists and consultation with the USFWS appears necessary for this species. However, it is assumed that, through consultation, impacts to the species can be avoided using sensitive construction techniques and appropriate BMPs to protect water quality. Since designated critical habitat does not occur within or near the project area, the proposed project will have no effect on leopard darter critical habitat.

Wildlife Impacts

The project could result in impacts to wildlife and wildlife habitat along the corridor due to the operation of the existing and/or proposed roadways (i.e., collisions between wildlife and vehicles, disturbance from presence/noise, etc.) and the construction (i.e., removal and/or alteration of habitat). However, these impacts would be minor and limited to the ROW corridor.

Construction and operation of the proposed interchange will result in minor impacts to wildlife and wildlife habitat in the project corridor. Construction activities will result in indirect impacts to wildlife from destruction of habitat along the ROW, noise and human activity/presence. Animals may be temporarily or permanently displaced as a result of construction activities. However, similar habitats are available adjacent to those that would be affected by construction. Existing U.S. 70 has already fragmented habitats within the proposed project area. Mammals and reptiles/amphibians would be particularly susceptible to impacts from additional habitat

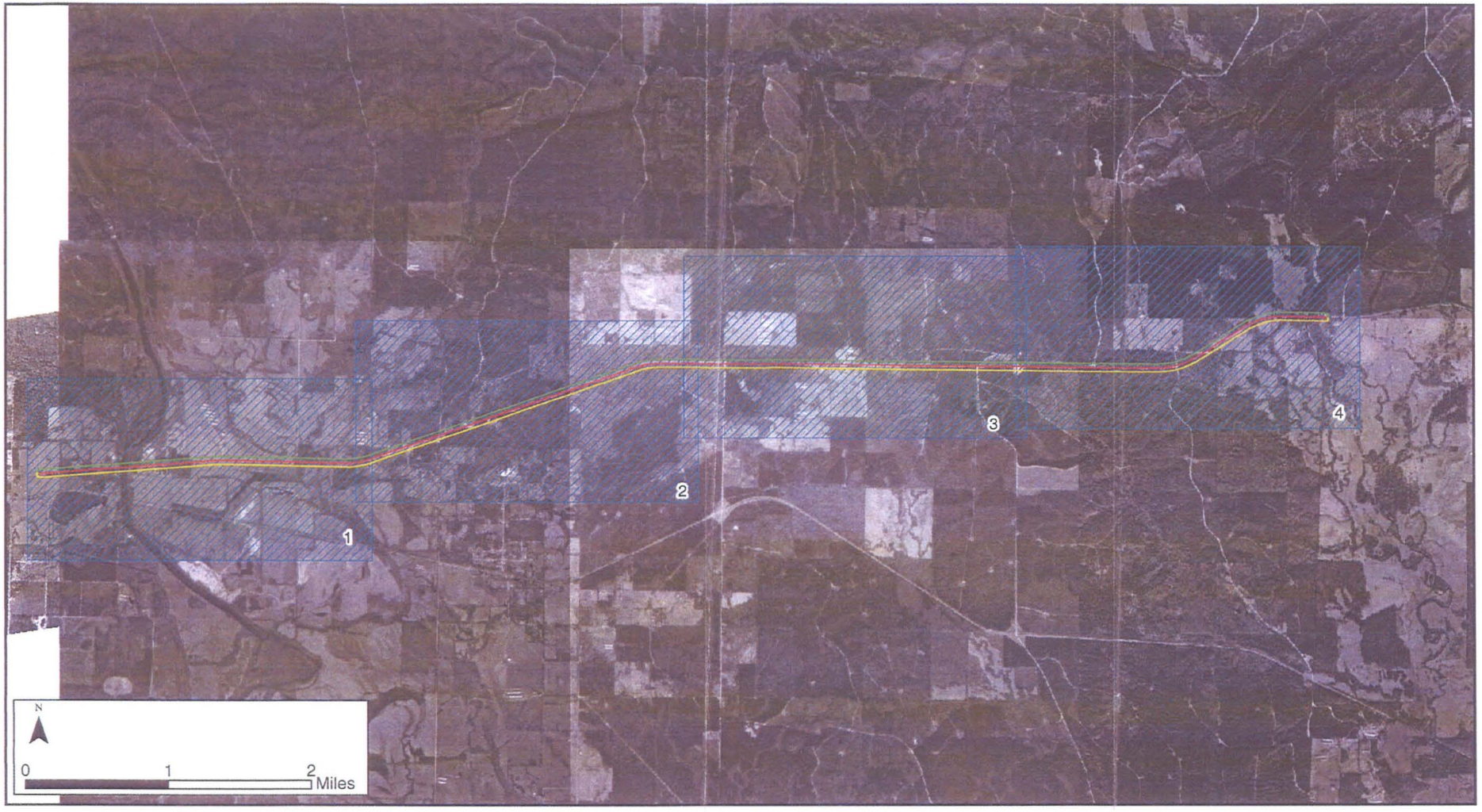
fragmentation. It is likely that these effects would be lessened somewhat by the presence of culverts or bridges at the water crossings. Animals tend to concentrate near water sources and these structures would allow movement by the animals across the roadway at these key locations.

Minimization of Impacts to Wildlife

As with impacts to vegetation, impacts to wildlife would be minimized by limiting the disturbed area to the extent necessary for construction. As noted above, effects of the project on listed species could occur as a result of the project.

APPENDIX A

Site Maps



Carter::Burgess

Aerial Photograph

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Legend

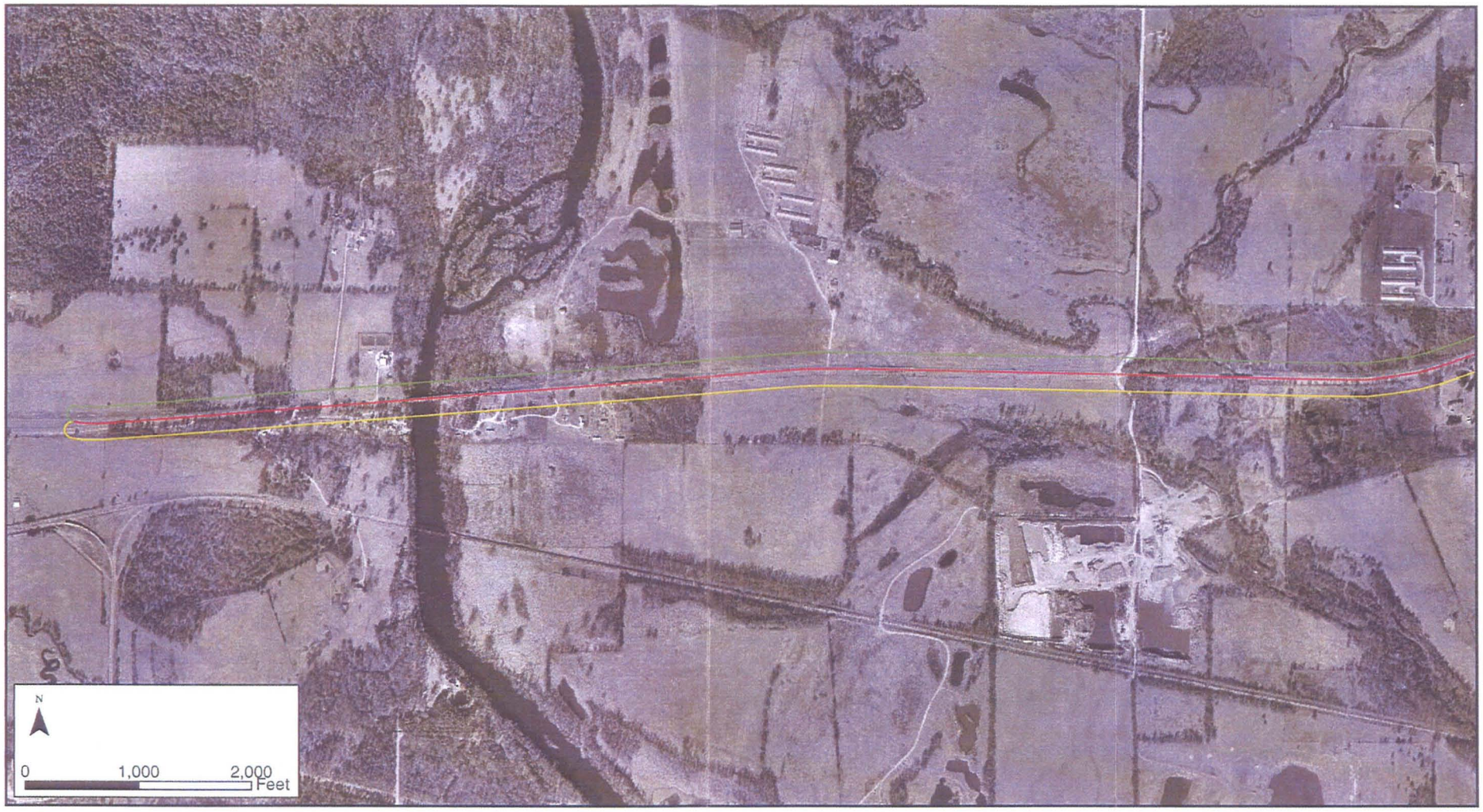
Map Area
US 70
Alternative 1
Alternative 2

Source: Oklahoma Department of Transportation

Exhibit

1

Key Sheet

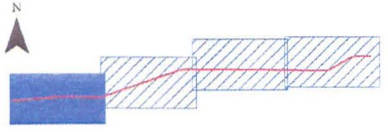


Carter::Burgess

Aerial Photograph

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Source: Oklahoma
Department of Transportaion



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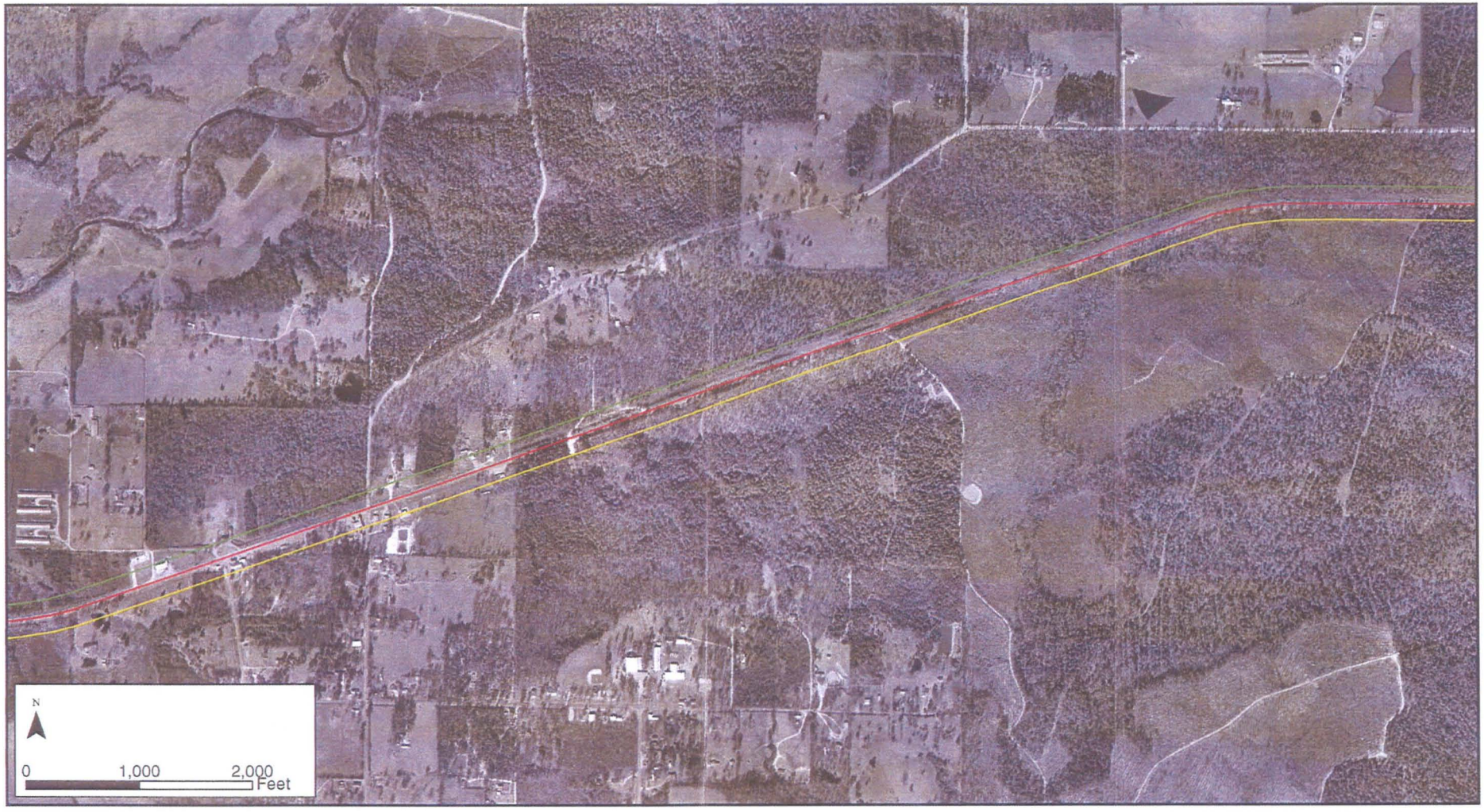
- Approximate Project Location
- Alternative 1
- Alternative 2
- Map Area

Exhibit

1

Sheet 1 of 4

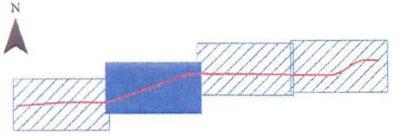


Carter Burgess

Aerial Photograph

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Source: Oklahoma
Department of Transportaion



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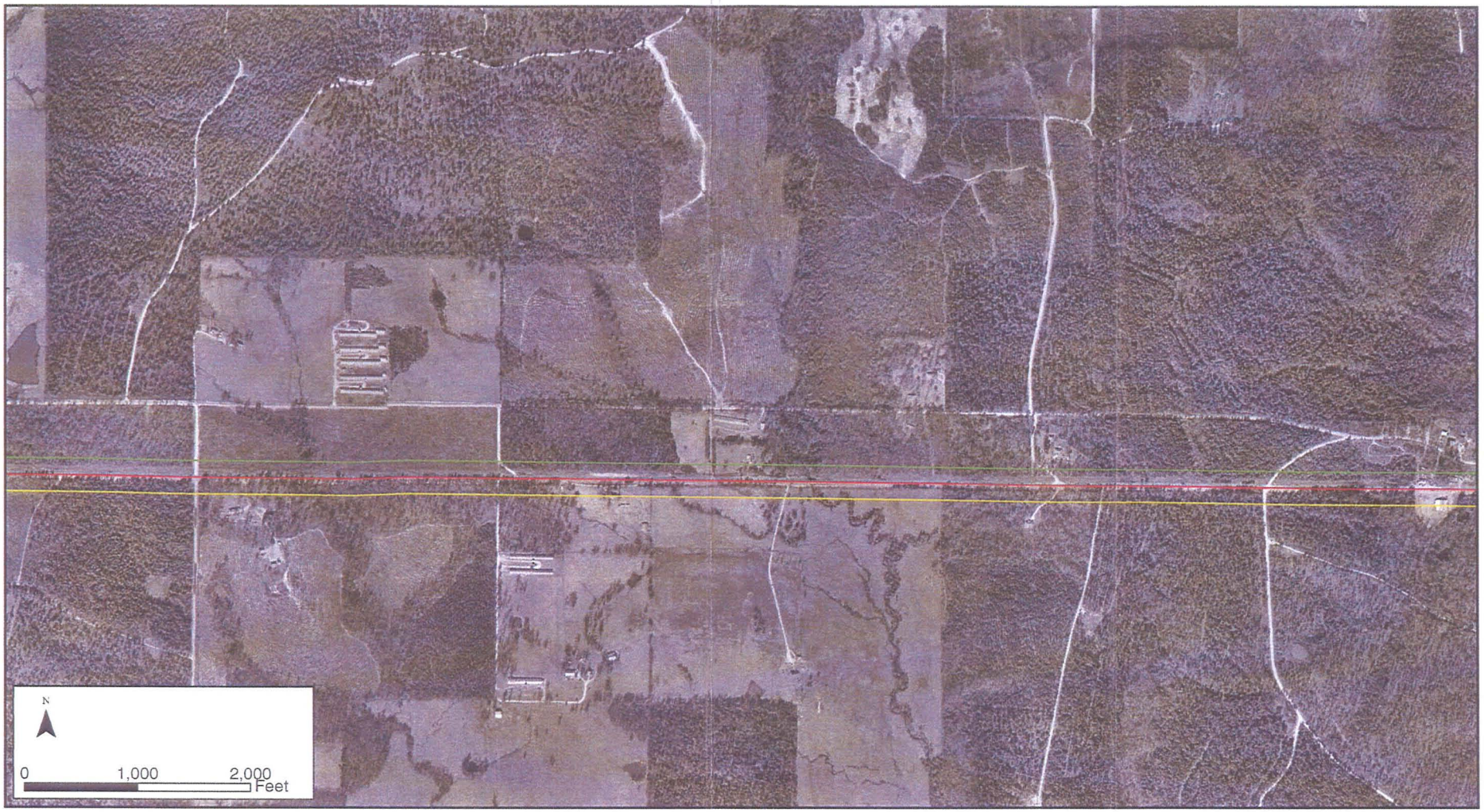
- Approximate Project Location
- Map Area
- Alternative 1
- Alternative 2

Exhibit

1

Sheet 2 of 4

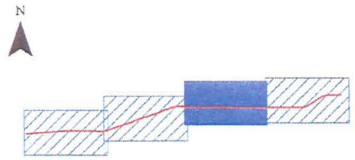


Carter Burgess

Aerial Photograph

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Source: Oklahoma
Department of Transportaion



Legend

- Approximate Project Location
- Alternative 1
- Alternative 2
- Map Area

Exhibit

1

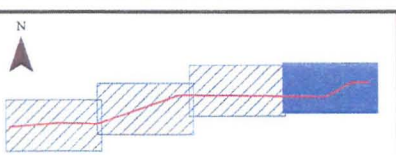
Sheet 3 of 4

Carter Burgess

Aerial Photograph

US 70
McCurtain County, Oklahoma
C&B Project No. 022094.010

Source: Oklahoma
Department of Transportaion



Legend

- Approximate Project Location
- Map Area
- Alternative 1
- Alternative 2

Exhibit

1

Sheet 4 of 4

Appendix 6: Hazardous Materials Initial Site Assessment

Oklahoma Department of Transportation

Planning & Research Division Office 521-2704 Fax 521-6917

DATE: **March 25, 2008**

TO: Joan Lindley, NEPA Coordinator

FROM: Greg Worrell, Hazardous Waste Coordinator

SUBJECT: **Review of Hazardous Waste/LUST Study Submitted by Carter-Burgess for Proposed Reconstruction of US-70 from 6.4 miles East of Broken Bow to the Arkansas State Line in McCurtain County. JP# 17427(04)**

An Initial Site Assessment (ISA), dated August 13, 2004, was performed by Carter-Burgess for US-70 from SH-3 in Broken Bow eastward to the Arkansas State Line. The ISA found no Recognized Environmental Concerns for the subject project. No mitigation measures are necessary at this time.

GAW

Xc: Bill Simon, Project Management Division

INITIAL SITE ASSESSMENT

for

US 70: From SH 3 in Broken Bow to the Oklahoma/Arkansas State Line McCurtain County, Oklahoma

Preliminary Engineering Project No. HPPY-1031(002)HP
Job Piece No. 17427(05)

Prepared for:

OKLAHOMA DEPARTMENT OF TRANSPORTATION

Prepared by:

Carter-Burgess

7950 Elmbrook Drive
Suite 250
Dallas, Texas 75247
(214) 638-0145

C&B PROJECT NO. 02209401

AUGUST 2004

INITIAL SITE ASSESSMENT
US 70: From SH 3 in Broken Bow to the Oklahoma/Arkansas State Line Project McCurtain County, Oklahoma

Preliminary Engineering Project No. HPPY-1031(002)HP
Job Piece No. 17427(05)

August 13, 2004

Prepared by Carter & Burgess, Inc.

Lee Nichols
Environmental Scientist

Sandra Williams
Environmental Scientist

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FIGURES

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APPENDICES

INTRODUCTION

Carter & Burgess, Inc. has completed an Initial Site Assessment (ISA) for the US 70 project in McCurtain County, Oklahoma. The proposed limits of the project begin 6.4 miles east of the junction of SH 3 in Broken Bow and extends east to the Oklahoma/Arkansas state line. The proposed project would upgrade US 70 from a two-lane undivided roadway facility to a four-lane divided roadway facility with shoulders. This ISA was performed in accordance with the request and authorization of the Okalahoma Department of Transportation (ODOT).

Purpose

The purpose of the ISA was to evaluate current and past uses of the proposed project corridor area and its surroundings, assessing the potential for recognized adverse environmental conditions that could be the result of current or historical activities within and along the boundaries of the proposed project corridor. Specifically, the objective of the ISA was to identify potential sites, as well as any conditions that might indicate an existing release, a past release, or a material threat of release of any hazardous substances or petroleum products into the ground, groundwater, surface water within the vicinity of the proposed corridor and surrounding properties. The descriptions of these conditions will reflect the reporting of secondary information sources used to inspect potential sites and identify unlisted sites (if any).

Special Terms and Conditions

This ISA is qualitative in nature, based on available existing information, record search, and field observations. Field observations were limited to a windshield survey of adjacent properties. This assessment did not include the collection or analysis of soil, air, water, or material samples. No oil and gas, and water well database searches were conducted as a part of this scope of services. In addition and as specified by ODOT, a 50 year chain-of-title search identifying property ownership, easements, leases, recorded waste management units, and environmental liens was not conducted as a part of this scope of services.

Methodology Used

A search of federal and state regulatory agency databases was performed to identify potential hazardous/regulated materials sites and facilities located within and along the boundaries of the proposed corridor. The data and facilities information was supplied by GeoSearch of Austin, Texas. Additional sources such as the Internet, city maps, and city directories were also used to identify potential sites.

Note that this database search should be considered as an initial screening type assessment to indicated areas of potential concern for further study or precautionary actions. These limitations should be recognized when consideration is given to various alternatives for future actions.

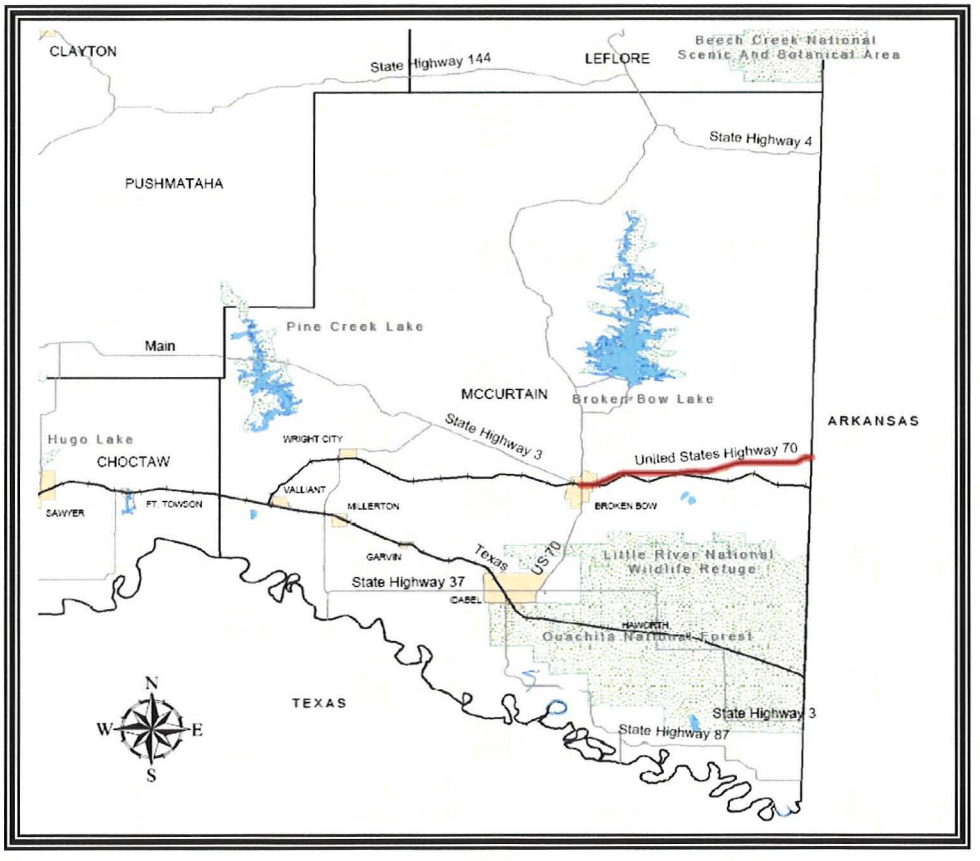
PREVIOUS ENVIRONMENTAL ASSESSMENTS

This ISA did not reveal the existence of any previously conducted ISAs, environmental site assessments, or preliminary site assessments for the proposed corridor.

PROJECT SETTING

The proposed project corridor is located within McCurtain County, Oklahoma between Broken Bow and the Arkansas state line along US 70. McCurtain County borders the Texas state line to the south and Arkansas state line to the east in southeastern Oklahoma. Broken Bow is located in southeastern Oklahoma in McCurtain County along US Highway 70/259 south of Broken Bow Lake and the Ouachita National Forest. Figure 1.1 shows the location of the corridor study area.

Figure 1.1 Corridor Study Area



HISTORICAL REVIEW

The historical use of the proposed project corridor was reviewed using available aerial photographs. Recent aerial photographs were reviewed to assist in reconstructing the history of the site and surrounding area. No historic maps (Sanborn fire insurance map) were reviewed for this project.

Aerial Photographs

The aerial photographs depicts the existing US 70 roadway facility beginning just east of the junction of SH 3 in Broken Bow and extending towards the Oklahoma/Arkansas state line. Surrounding properties along the US 70 appeared to be mostly undeveloped (pastureland and woody vegetation) with sparsely scattered residences and small businesses along the US 70 corridor boundaries.

REGULATORY DATABASE REVIEW

This ISA provides a hazardous materials (soil contamination, product storage, hazardous waste sites, or other potential liabilities) inventory of potential hazardous/regulated sites and their locations within the vicinity of the US 70 project corridor.

Environmental records for the proposed project and surrounding properties were investigated by reviewing records maintained by the U.S. Environmental Protection Agency (EPA), Oklahoma Department of Environmental Quality (DEQ), the Oklahoma Water Resources Board (OWRB), and the Oklahoma Corporation Commission (OCC).

At the national level, the EPA oversees control of hazardous materials. The EPA maintains several databases of information regarding hazardous materials sites to aid in classification, prioritization, and cleanup of the identified facilities. For this project, EPA databases were reviewed for facilities providing notification of hazardous waste activity under the Resources Conservation and Recovery Information System (RCRIS) to include RCRIS Corrective Actions Sites (CORRACTS). EPA databases were also reviewed for sites on the Comprehensive and Liability Act (CERCLA) National Priorities List (NPL), potential or abandoned hazardous waste sites maintained on the CERCLA Information System (CERCLIS), No Further Remedial Action Planned (NFRAP), and spill incidents reported on the Emergency Response Notification System (ERNS).

The DEQ, OWRD, and the OCC have authority under the EPA for facilities operating and managing various hazardous waste activities within the state of Oklahoma. These state agencies maintain the databases to aid in management of these facilities. For this project, the DEQ databases were reviewed for hazardous and solid waste management facilities, State Equivalent Priority List (SPL), State Equivalent CERCLIS List (SCL), municipal solid waste landfills, brownfields, air quality records, toxic release inventory, and spill incident reports. The OCC's existing databases were reviewed for aboveground petroleum storage tanks (AST) and underground petroleum storage tanks (LUST), and oil and gas wells activities. The database for existing state groundwater wells were obtained through the OWRB.

The location of all known or potential hazardous materials/waste sites were mapped illustrating their relationship to the proposed project corridor as shown in Appendix A. Database information for each site identified is also included in Appendix A.

Survey of Oil and Gas Activities
No evidence of oil and gas well activities located within the boundaries of the proposed project area was determined during the field survey (i.e., dry holes, abandoned locations, disposal, injection). Additional assessment (database search) may be required for confirmation of these findings.

Water Well Search
No evidence of water wells was identified within the boundaries of the proposed project area during the field survey (i.e., domestic or water supply wells). Prior to any planned construction, a more detailed search (database) may be required to supplement this assessment. Before 1973, the OWRB did not require water well drillers to submit well logs on any wells drilled in Oklahoma. Beginning in 1983, well logs on domestic wells were required. In the early 1990's, monitoring wells were added to the list of wells requiring submittal of logs. It is estimated that approximately 30 to 50 percent of all wells logs are submitted for all wells drilled in the state of Oklahoma.

Hazardous Material Data Base Search
A hazardous material/waste data search and survey of pre-existing hazardous waste sites within the study corridor was conducted to identify potentially contaminated areas located with the boundaries of the proposed project corridor.

The record search revealed no CERCLIS, NPL, CORRACTS, RCRA-TSD, SPL, SCL, SWLF listings within the boundaries of the proposed project. The listings identified within the records search boundaries are as follows:

Underground Storage Tanks
Review of the underground storage tank (UST) listing revealed seventeen UST facilities located within 0.25 mile of the proposed project corridor. Only a slight potential exists that contamination from these facilities could impact soil or groundwater within the proposed project corridor area. The facilities are listed as:

- FFP # 526, 605 Martin Luther King Drive Highway 70 East, Broken Bow, Oklahoma 74728 – Facility Identification # 4510445

- Thomason Lumber & Timber Company, Highway 70 East, Broken Bow, Oklahoma 74728 – Facility Identification # 4502995

- Jimmie Tucker Trucking, Inc., Highway 70 East, P.O. Box 428, Broken Bow, Oklahoma 74728 – Facility Identification # 4503093

- Larry's Garage, 220 Martin Luther King Boulevard, Broken Bow, Oklahoma 74728 – Facility Identification # 4513261
- Lewis Total, 200 East Craig Road, Broken Bow, Oklahoma 74728 – Facility Identification # 4504517
- K & K Country Store, Highway 70, 9 mile east of Broken Bow, Eagletown, Oklahoma 74734 – Facility Identification # 4511997
- Binger Oil Company Inc., 217 West Craig Road, Broken Bow, Oklahoma 74728 – Facility Identification # 4508878
- Tommy's Four Way Conoco, 217 West Craig Road, Broken Bow, Oklahoma 74728 – Facility Identification # 4508881
- Texas, Oklahoma and Eastern Railroad, 102 East Craig Road, Broken Bow, Oklahoma 74728 – Facility Identification # 4508441
- Tommy D. Rudisill, 101 East Craig, Broken Bow, Oklahoma 74728 – Facility Identification # 4512080
- Triple M Supply, 2.5 mile east of Broken Bow on Highway 7, Broken Bow, Oklahoma 74728 – Facility Identification # 4513492
- EZ Mart Store # 95, 305 Craig Road, Broken Bow, Oklahoma 74728 – Facility Identification # 4504498
- B B Truck Stop, 5 minutes north of Broken Bow on US 259, Broken Bow, Oklahoma 74728 – Facility Identification # 4508880
- Broken Bow Short Stop, 21 North Park, Broken Bow, Oklahoma 74728 – Facility Identification # 4500121
- Thomas Service Station, 6 mile east Highway 70, Broken Bow, Oklahoma 74728 – Facility Identification # 4501109
- EZ Mart Store # 3, 101 North Park Drive, Broken Bow, Oklahoma 74728 – Facility Identification # 4504485
- Broken Bow Office & Operation Center, 110 East 3rd, Broken Bow, Oklahoma 74728 – Facility Identification # 4508752

Leaking Underground Storage Tanks
Review of the leaking underground storage tank (LUST) listing revealed three LUST facilities within 0.50 mile of the proposed project corridor. Substance leaked and media affected for the three facilities were not reported. Remediation

for only one facility is reported as active. It is expected that only a slight potential exists that contamination from these facilities could impact soil or groundwater within the proposed project corridor area. The facilities are listed as:

- Stafford Grocery, 210 East Craig, Broken Bow, Oklahoma 74728 – Facility Identification # 4510567 – Case Status: Closed 08/92

- Broken Bow Short Stop, 21 North Park, Broken Bow, Oklahoma 74728 – Facility Identification # 4500121 – Case Status: Active Facility

- Burkes Convenience Store, 702 North Park Drive, Broken Bow, Oklahoma 74728 – Facility Identification # 4512044 – Case Status: Closed 3/18/97

Resource Conservation and Recovery Information System (RCRIS) – Corrective Action

Review of the RCRIS – Corrective Action database revealed two facilities located within 0.1 mile of the proposed project corridor. Both facilities are wood preservation operations requiring corrective action measures per their perspective compliance orders. Current status of both compliance orders was reported as having been met and no further remediation planned is required for either facility. Based on this formation, potential environmental impact to the proposed project corridor associated with the facilities is very low. The facilities are as follow:

- Thomason Lumber & Timber Company, Silvey Road Highway 70 East, Broken Bow, Oklahoma 74728 – EPA Identification # OKD007335524

- Huffman Wood Preserving Company Inc., Highway 70 East, Broken Bow, Oklahoma 74728 – EPA Identification # OKD053128492

Resource Conservation and Recovery Information System – Generator/Handler

Review of the RCRIS - Generator/Handler database revealed three registered facilities located within 0.25 mile of the proposed corridor. This includes: one large quantity generator of over 1000 kilograms per month (kg/mo) of hazardous wastes generated onsite; one small quantity generators of between 100 and 1000 kg/mo of hazardous wastes generated onsite; and one conditionally exempt small quantity generator of less than 100 kg/mo of hazardous wastes generated onsite. Only one facility, L D McFarland CO (large quantity generator) was listed in violation of the TSD-General Standards. This facility received an informal written enforcement on July 30, 2002. No other violations were noted. Based on this formation, potential environmental impact to the proposed project corridor associated with the facilities is very low. The facilities are as follows:

- L D McFarland Co., Silvey Road North Side of Property Highway 70, Broken Bow, Oklahoma 74728 – EPA Identification # ODR000018044

- Jimmy Tucker Trucking Inc., 0.25 mile east of Town on Highway 70 East, Broken Bow, Oklahoma 74728 – EPA Identification # OKD981900699

- Thomas Machine & Motor Supply, Highway 70 east 6 mile South Side Road, Broken Bow, Oklahoma 74728 – EPA Identification # OKD987085321

Emergency Response Notification System
Review of the ERNS database revealed one accidental release of hazardous substances (natural gas) into the environment (air release) within 0.25 mile of the proposed corridor. All releases were resolved. Based on the available information reviewed during this investigation, the potential environmental impacts to the proposed project corridor associated with the previously mentioned releases are very low to none. The facility associated with this response is:

- 204 East Third Street, Broken Bow, Oklahoma 74728 – Identification # 95292336.

UNMAPPED SITES

Table 1.1 is a list of unmapped sites that were identified outside the one mile linear boundary of the proposed corridor search. This list of sites are not expected to impact the proposed corridor but may be useful in identifying environmental and design constraints that could influence corridor development and route alignment as this project proceeds.

Table 1.1 Unmapped Sites

SITE NAME	SITE ADDRESS	CERCLIS /NFRAP	RCRISG	LUST	UST	AST	ERNS	NOTIFERS
Bailey-Mulkey Post Company	On US 70, About 5 mi East of Junction, Broken Bow, OK 74728	X						
Weyerhauser Co.	RTE 1 Box 516, Broken Bow, OK 74728		X					
Big Frank's Sports Center	Hwy 259 North, Broken Bow, OK 74728			X				
Piper's Little Super Market	N Park Drive, Broken Bow, OK 74728			X				
Broken Bow Truck Stop	E Craig Rd, Broken Bow, OK 74728			X				
OK Dept of Ag/Forestry Division	P.O. Box 40, Broken Bow, OK 74728			X				
Lake Pine Retreat (J. Reinhart)	Rt. 4 Box 36, Broken Bow, OK 74728				X			
Daryl Thomason Trucking, Inc.	Hwy 3 & 7 West, Broken Bow, OK 74728				X			
Big Frank's	Hwy 259 North, Broken Bow, OK 74728				X			
Glover Elementary School	Rt. 3 Box 385, Broken Bow, OK 74728				X			
Weyerhaeuser Company	Rt. 1 Box 618, Broken Bow, OK 74728				X			
Weyerhaeuser	Rt. 4 Box 34-2, Broken Bow, OK 74728				X			
Weyerhaeuser – Don Dale – Area	Star Route Box 520, Eagletown, OK 74734				X			
Holly Creek School	Rt. 2 Box 260, Broken Bow, OK 74728				X			
Broken Bow Self Serve # 17	Hwy 259 S, Broken Bow, OK 74728				X			
D – W Bait # 005	Hwy 259, Broken Bow, OK 74728				X			
Clark O. Stop	Hwy 70, Eagletown, OK 74734				X			
Broken Bow Lake	US Hwy 259A, Broken Bow, OK 74728				X			
City of Broken Bow	STR Dept, Broken Bow, OK 74728				X			
Eaglecash Grocery	Hwy 70, Eagletown, OK 74734				X			
Mt. Hermon Grocery	Hwy 70, Broken Bow, OK 74728				X			
Piper's Little Super Market	N Park Drive, Broken Bow, OK 74728				X			
Mountaineer Cabins	Hwy 259 N, Broken Bow, OK 74728				X			
Eagletown School	Address Unknown, Eagletown, OK 74734				X			
Broken Bow Truck Stop	E Craig Rd, Broken Bow, OK 74728				X			
OK Dept. of Ag/Forestry Division	P.O. Box 40, Broken Bow, OK 74728				X			
OK Dept. of Ag/Forestry Division	Rt. Battiest, Box 515, Broken Bow, OK 74728				X			
Stafford Grocery	Rt. 3 Box 350, Broken Bow, OK 74728				X			
Stateline Grocery	Star Rt. Box 360, Eagletown, OK 74734				X			
C & A Grocery	Box 539, Eagletown, OK 74734				X			
Lake Side Grocery	Address Unknown, Broken Bow, OK 74728				X			
Eagletown Hardware	Address Unknown, Eagletown, OK 74734				X			
Jot UM Down	Pickens Route Box 735, Broken Bow, OK 74728				X			
Lesperance Diamond Shamrock	Hwy 70 East, Broken Bow, OK 74728				X			
Eagletown School	P.O. Box 38, Eagletown, OK 74734				X			

SUMMARY

Based on the available information reviewed during this assessment, this ISA revealed no evidence of recognized adverse environmental conditions in connection with the proposed project corridor. The proposed project corridor appears to avoid most tracts that indicate a potential for environmental impact within the project area; however, the following potential concerns were noted:

- The proposed project may involve excavation at locations within the proposed project area, such as abandoned and/or existing railroad crossing, tracks, and ancillary equipment (such as crossties, switches, rail, trim, fasteners), utility relocations, and right of way easements, which may require further assessment to evaluate potential releases.

- No evidence of water wells was identified within the immediate vicinity of the proposed project area during the field survey (i.e., domestic or water supply wells). Prior to any planned construction, a more detailed search may be required to supplement this assessment.

- No evidence of oil and gas well activities located within the boundaries of the proposed project area was determined during the field survey (i.e., dry holes, abandoned locations, disposal, injection). Additional assessment may be required for confirmation of these findings.

Any unanticipated hazardous materials and/or petroleum contamination encountered during construction would be handled according to applicable federal and state regulation per ODOT Standard Specifications.

The contractor will respond appropriately to prevent, minimize, and control the spill of hazardous materials in the construction staging area. The use of construction equipment within sensitive areas will be minimized or eliminated. All construction materials used for this project will be removed as soon as work schedules permit.

APPENDIX A
REGULATORY DATABASE AND SITE MAPS

RADIUS REPORT

Property:

US 70 Study-McCurtain County

Prepared For:

Carter & Burgess - Dallas

Job #: 15696 / Date: 04/29/04

2705 Bee Caves Rd, Suite 330 · Austin, Texas 78746 · phone: 1-866-396-0042 · fax: 512-472-9967
www.geo-search.net

GeoSearch
DATABASE FINDINGS SUMMARY

DATABASE	ACRONYM	LOCA-TABLE	UNLOCA-TABLE	SEARCH RADIUS
FEDERAL				
NATIONAL PRIORITY LIST	NPL	0	0	1.000 mi
DELISTED NATIONAL PRIORITY LIST	DNPL	0	0	1.000 mi
RECORDS OF DECISION	RODS	0	0	1.000 mi
COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION & LIABILITY INFORMATION SYSTEM	CERCLIS	0	1	0.500 mi
NO FURTHER REMEDIAL ACTION PLANNED	NFRAP	2	0	0.500 mi
RESOURCE CONSERVATION & RECOVERY ACT INFORMATION SYSTEM - CORRECTIVE ACTION	RCRISC	2	0	0.100 mi
RESOURCE CONSERVATION & RECOVERY ACT INFORMATION SYSTEM - TREATMENT, STORAGE & DISPOSAL	RCRIST	0	0	0.500 mi
RESOURCE CONSERVATION & RECOVERY ACT INFORMATION SYSTEM - GENERATOR / HANDLER	RCRISG	3	1	0.250 mi
EMERGENCY RESPONSE NOTIFICATION SYSTEM	ERNS	1	0	0.250 mi
STATE				
VOLUNTARY CLEANUP PROGRAM	VCP	0	0	0.500 mi
SOLID WASTE FACILITIES	SWF	0	0	0.500 mi
LEAKING UNDERGROUND STORAGE TANKS	LUST	3	4	0.500 mi
UNDERGROUND STORAGE TANKS	UST	17	29	0.250 mi
TOTAL		28	35	

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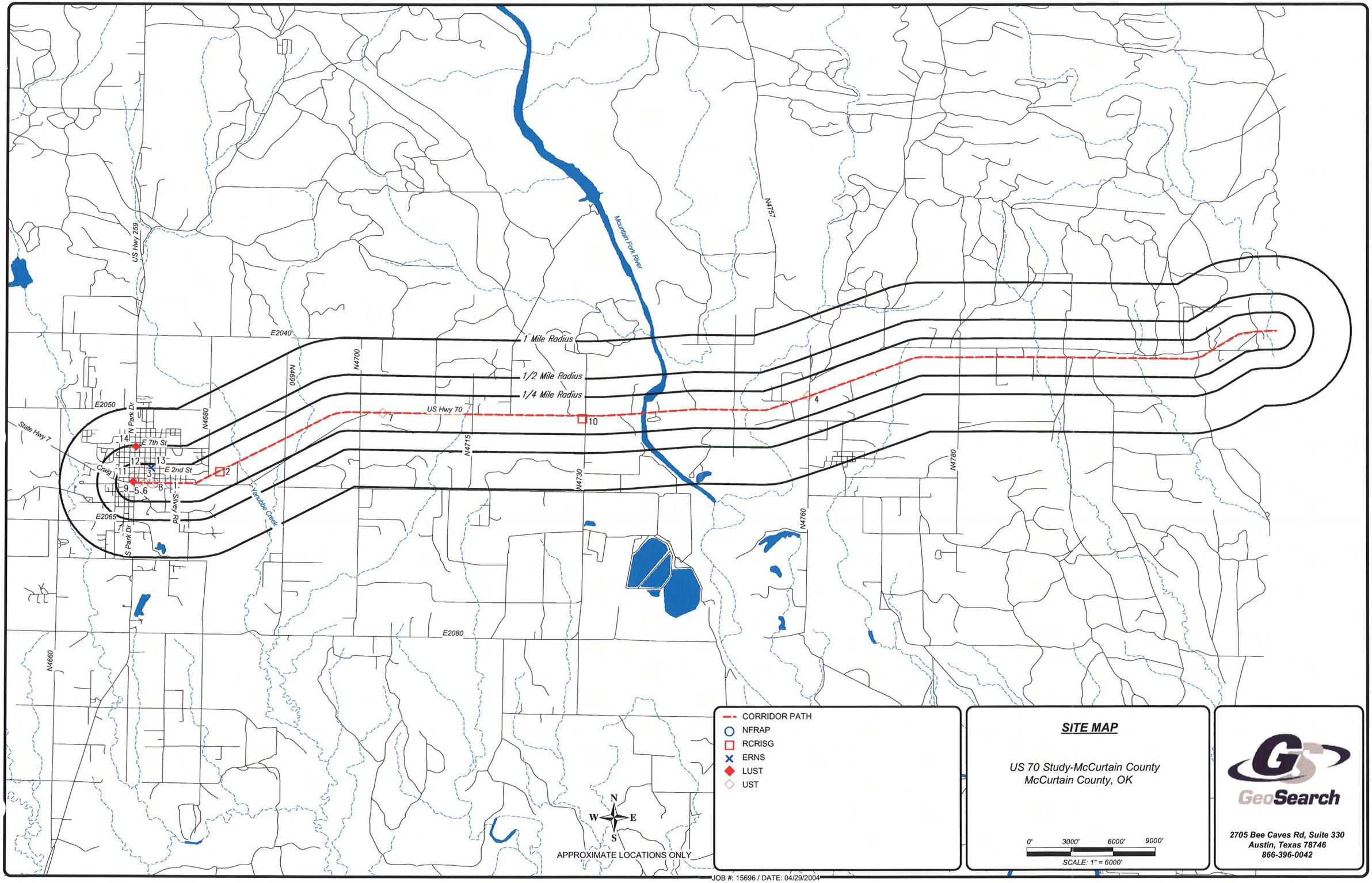
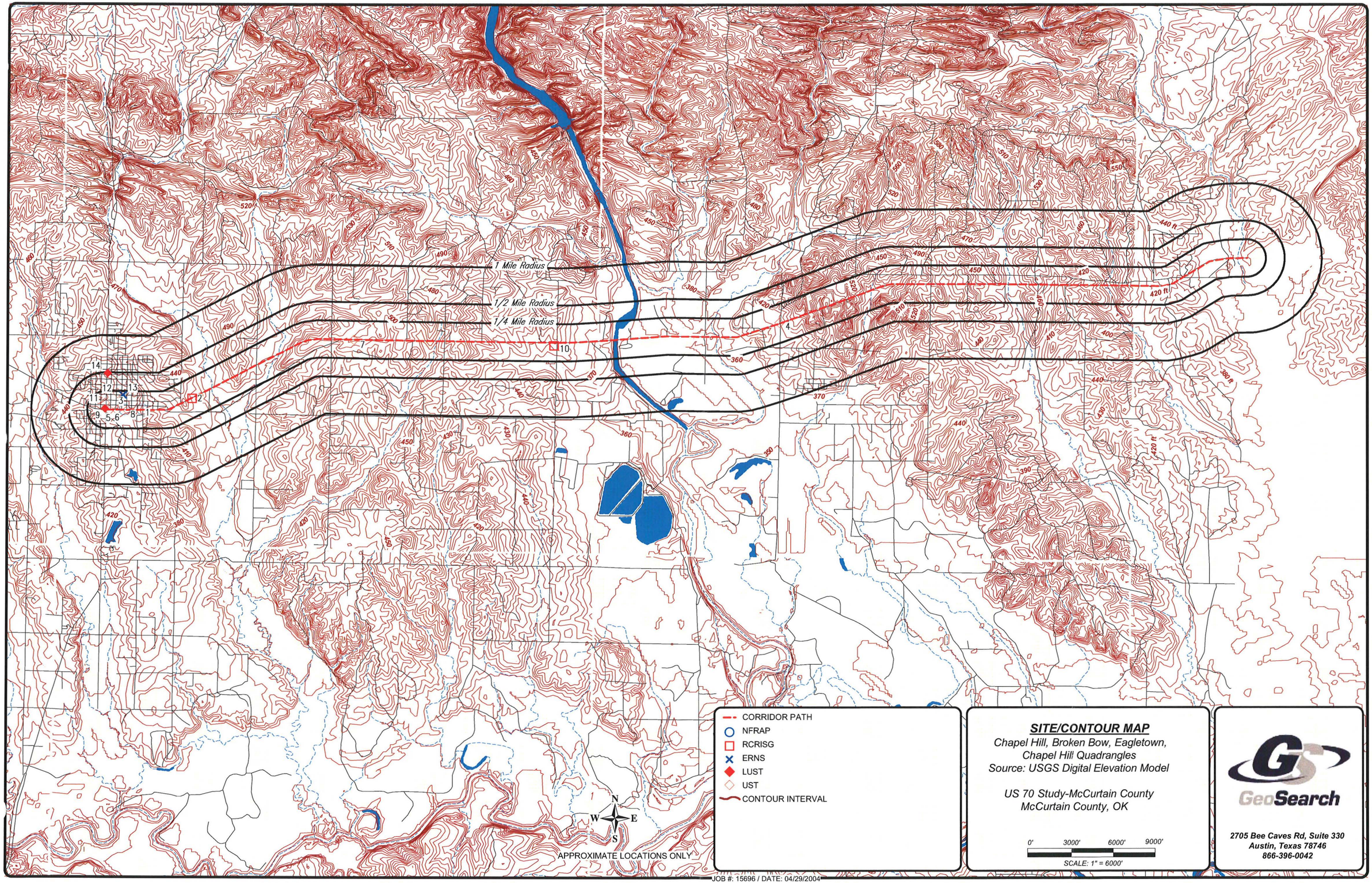

Mountain Fork River
US Hwy 259
N4757
E2040
1 Mile Radius
1/2 Mile Radius
1/4 Mile Radius
N4700
N4690
E2050
N4680
US Hwy 70
State Hwy 7
N Park Dr
E 7th St
E 2nd St
Craig
Silvey Rd
S Park Dr
E2065
Tenmile Creek
N4715
N4730
N4780
N4760
E2080
N4660
N
W
E
S
APPROXIMATE LOCATIONS ONLY
CORRIDOR PATH
NFRAP
RCRISG
ERNS
LUST
UST
SITE MAP
US 70 Study-McCurtain County
McCurtain County, OK
0'
3000'
6000'
9000'
SCALE: 1" = 6000'
GeoSearch
2705 Bee Caves Rd, Suite 330
Austin, Texas 78746
866-396-0042
JOB #: 15696 / DATE: 04/29/2004



SITE/CONTOUR MAP

Chapel Hill, Broken Bow, Eagletown, Chapel Hill Quadrangles
Source: USGS Digital Elevation Model

US 70 Study-McCurtain County
McCurtain County, OK

0' 3000' 6000' 9000'

SCALE: 1" = 6000'

GeoSearch
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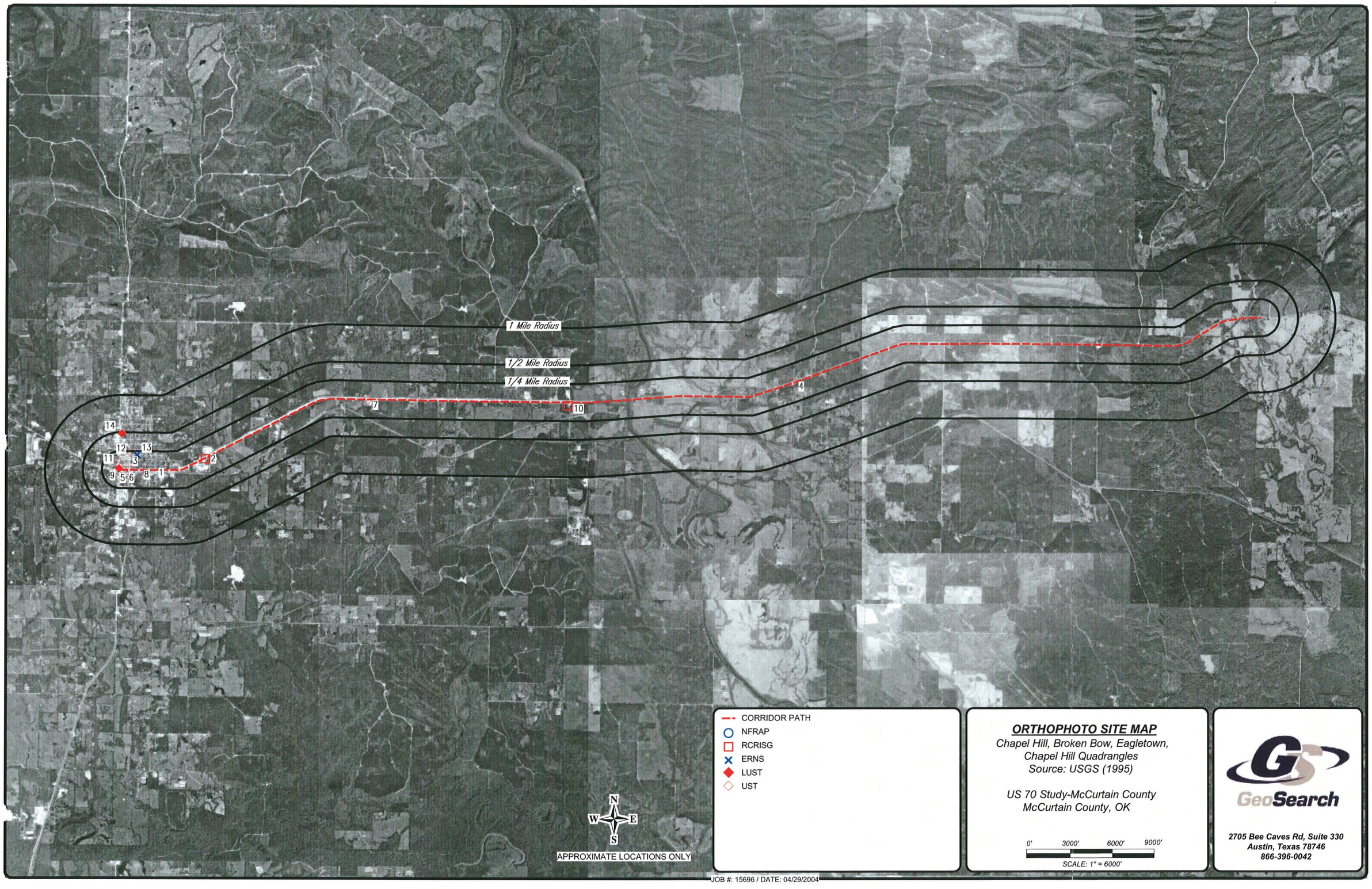
Austin, Texas 78746
866-396-0042

JOB #: 15696 / DATE: 04/29/2004



- CORRIDOR PATH
- NFRAP
- RCRISG
- ERNS
- LUST
- UST

ORTHOPHOTO SITE MAP

Chapel Hill, Broken Bow, Eagletown, Chapel Hill Quadrangles
Source: USGS (1995)

US 70 Study-McCurtain County
McCurtain County, OK

0' 3000' 6000' 9000'

SCALE: 1" = 6000'

GeoSearch
2705 Bee Caves Rd, Suite 330
Austin, Texas 78746
866-396-0042

JOB #: 15696 / DATE: 04/29/2004

GeoSearch

Environmental Data Services

REPORT SUMMARY OF LOCATABLE SITES

Appearing on the Location Map, these sites are referenced by Map ID #, Database Name, Site ID#, Site Name, Address, City, Zip Code and Distance from Site (miles).

MAP ID#:	DATABASE TYPE:	SITE ID#:	DISTANCE:	SITE NAME:	ADDRESS:	CITY:	ZIP CODE:
1	NFRAP	OKD007335524		THOMASON LUMBER CO	S OF HWY 70 ON HUFFMAN 1/2 MI	BROKEN BOW	74728
1	RCRISC	OKD007335524		THOMASON LUMBER & TIMBER CO	SILVEY ROAD HWY 70 EAST	BROKEN BOW	74728
1	RCRISG	OKR000018044		L D MCFARLAND CO	SILVEY ROAD N SIDE OF PROPERTY HWY	BROKEN BOW	74728
1	UST	4502995		THOMASON LUMBER & TIMBER CO	HWY 70 EAST	BROKEN BOW	74728
1	UST	4510445		FFP #526	605 MARTIN LUTHER KING DR	BROKEN BOW	74728
2	RCRISG	OKD981900699	0.01 W	JIMMY TUCKER TRUCKING INC.	.25M E OF TOWN ON HWY 70 E	BROKEN BOW	74728
2	UST	4503093	0.01 W	JIMMIE TUCKER TRUCKING, INC.	HWY 70 EAST P.O. BOX 428	BROKEN BOW	74728
3	LUST	4510567	0.01 NW	STAFFORD GRO	210 E CRAIG	BROKEN BOW	74728
3	NFRAP	OKD053128492	0.01 W	HUFFMAN WOOD PRESERVING CO INC-LAGOONS	1/4 MI E OF HWY 3 ON HWY 70	BROKEN BOW	74728
3	RCRISC	OKD053128492	0.01 W	HUFFMAN WOOD PRESERVING CO INC	HWY 70 E	BROKEN BOW	74728
3	UST	4513261	0.01 NW	LARRY'S GARAGE	220 MARTIN LUTHER KING BLVD	BROKEN BOW	74728
3	UST	4504517	0.02 NW	LEWIS TOTAL	200 E. CRAIG RD.	BROKEN BOW	74728
4	UST	4511997	0.01 W	K & K COUNTRY STORE	HWY 70 9 MI E OF BROKEN BOW	EAGLETOWN	74734
5	UST	4508878	0.02 SW	BINGER OIL CO, INC	215 W CRAIG RD	BROKEN BOW	74728
5	UST	4508881	0.02 SW	TOMMY'S FOUR WAY CONOCO	217 WEST CRAIG ROAD	BROKEN BOW	74728
6	UST	4508441	0.02 NW	TEXAS, OKLAHOMA AND EASTERN R.R	102 EAST CRAIG ROAD	BROKEN BOW	74728
6	UST	4512080	0.02 SW	TOMMY D. RUDISILL	101 E CRAIG	BROKEN BOW	74728

GeoSearch

Environmental Data Services

REPORT SUMMARY OF LOCATABLE SITES

Appearing on the Location Map, these sites are referenced by Map ID #, Database Name, Site ID#, Site Name, Address, City, Zip Code and Distance from Site (miles).

MAP ID#:	DATABASE TYPE:	SITE ID#:	DISTANCE:	SITE NAME:	ADDRESS:	CITY:	ZIP CODE:
7	UST	4513492	0.02 SW	TRIPLE M SUPPLY	2 1/2 M E OF BROKEN BOW ON HWY 7	BROKEN BOW	74728
8	UST	4504498	0.02 SW	EZ MART STORE#95	305 CRAIG RD.	BROKEN BOW	74728
9	LUST	4500121	0.03 NW	BROKEN BOW SHORT STOP	21 N PARK	BROKEN BOW	74728
9	UST	4500121	0.03 NW	BROKEN BOW SHORT STOP	21 N PARK	BROKEN BOW	74728
9	UST	4508880	0.03 NW	B B TRUCK STOP	5 MI N OF BROKEN BOW ON US 259	BROKEN BOW	74728
10	RCRISG	OKD987085321	0.03 SW	THOMAS MACHINE & MOTOR SUPPLY	HWY 70 E 6 M S SIDE RD	BROKEN BOW	74728
10	UST	4501109	0.03 SW	THOMAS SERVICE STATION	6 MI E HWY 70	BROKEN BOW	74728
11	UST	4504485	0.09 NW	EZ MART STORE#3	101 N PARK DR	BROKEN BOW	74728
12	UST	4508752	0.22 N	BROKEN BOW OFFICE & OPER CTR	110 E 3RD	BROKEN BOW	74728
13	ERNS	95292336	0.22 N		204 EAST THIRD STREET	BROKEN BOW	
14	LUST	4512044	0.49 N	BURKES CONVENIENCE STORE	702 N. PARK DRIVE	BROKEN BOW	74728

NO FURTHER REMEDIATION PLANNED (NFRAP)

MAPID# 1

SITE INFORMATION

EPA ID#: **OKD007335524**
NAME: **THOMASON LUMBER CO**
ADDRESS: **S OF HWY 70 ON HUFFMAN 1/2 MI**
BROKEN BOW, OK 74728
CONTACT/ PHONE: **NOT REPORTED**
NON NPL STATUS: **NF - NFRAP**
FEDERAL FACILITY CODE **N - Not a Federal Facility**
OWNERSHIP TYPE CODE: **OH - Other**

SITE DESCRIPTION

NOT REPORTED

ACTIONS

TYPE: **DS - DISCOVERY**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **NOT REPORTED**
COMPLETION DATE: **11/01/1980**

TYPE: **PA - PRELIMINARY ASSESSMENT**
RESPONSIBLE ORGANIZATION: **S - State, Fund Financed**
START DATE: **09/01/1980**
COMPLETION DATE: **09/01/1980**

TYPE: **SI - SITE INSPECTION**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **12/01/1980**
COMPLETION DATE: **12/01/1980**

TYPE: **VS - ARCHIVE SITE**
RESPONSIBLE ORGANIZATION: **EP - EPA In-House**
START DATE: **NOT REPORTED**
COMPLETION DATE: **09/29/1994**

MAPID# 3

Distance from Property: 0.01 mi. W

SITE INFORMATION

EPA ID#: **OKD053128492**
NAME: **HUFFMAN WOOD PRESERVING CO**
ADDRESS: **1/4 MI E OF HWY 3 ON HWY 70**
BROKEN BOW, OK 74728
CONTACT/ PHONE: **NOT REPORTED**
NON NPL STATUS: **NF - NFRAP**
FEDERAL FACILITY CODE **N - Not a Federal Facility**
OWNERSHIP TYPE CODE: **OH - Other**

SITE DESCRIPTION

NOT REPORTED

ACTIONS

TYPE: **DS - DISCOVERY**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **NOT REPORTED**
COMPLETION DATE: **11/01/1980**

NO FURTHER REMEDIATION PLANNED (NFRAP)

TYPE: **PA - PRELIMINARY ASSESSMENT**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **12/01/1980**
COMPLETION DATE: **12/01/1980**

TYPE: **SI - SITE INSPECTION**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **05/06/1986**
COMPLETION DATE: **05/06/1986**

TYPE: **SI - SITE INSPECTION**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **NOT REPORTED**
COMPLETION DATE: **01/26/1999**

TYPE: **VS - ARCHIVE SITE**
RESPONSIBLE ORGANIZATION: **EP - EPA In-House**
START DATE: **NOT REPORTED**
COMPLETION DATE: **01/26/1999**

MAPID# 1

FACILITY INFORMATION

EPA ID#: **OKD007335524**
NAME: **THOMASON LUMBER & TIMBER CO**
ADDRESS: **SILVEY ROAD HWY 70 EAST**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **WOOD PRESERVATION**
GENERATOR TYPE: **NOT A GENERATOR**
TSD INDICATOR: **TSD**
TRANSPORTER INDICATOR: **TRANSPORTER**

COMPLIANCE, MONITORING AND ENFORCEMENTS

EVALUATIONS

DATE	TYPE
11/13/1985	OTHER EVALUATION
11/13/1985	COMPLIANCE EVALUATION INSPECTION ON-SITE
04/21/1987	COMPLIANCE EVALUATION INSPECTION ON-SITE
09/27/1988	COMPLIANCE EVALUATION INSPECTION ON-SITE
08/24/1989	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/18/1989	NON-FINANCIAL RECORD REVIEW
09/28/1990	COMPLIANCE EVALUATION INSPECTION ON-SITE
09/30/1991	COMPLIANCE EVALUATION INSPECTION ON-SITE
08/19/1992	COMPLIANCE EVALUATION INSPECTION ON-SITE
09/30/1993	COMPLIANCE EVALUATION INSPECTION ON-SITE
02/28/1996	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/30/1996	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/30/1997	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/29/1998	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/30/1999	COMPLIANCE EVALUATION INSPECTION ON-SITE
03/22/2000	OTHER EVALUATION
06/07/2000	SAMPLING INSPECTION
09/29/2003	COMPLIANCE EVALUATION INSPECTION ON-SITE

VIOLATIONS

DATE	TYPE
11/13/1985	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
11/13/1985	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
11/13/1985	TSD-OTHER REQUIREMENTS (OVERSIGHT)
04/21/1987	TSD-OTHER REQUIREMENTS (OVERSIGHT)
04/21/1987	TSD-OTHER REQUIREMENTS (OVERSIGHT)
09/27/1988	TSD-OTHER REQUIREMENTS (OVERSIGHT)
09/27/1988	TSD-OTHER REQUIREMENTS (OVERSIGHT)
08/19/1992	TSD-GENERAL STANDARDS
09/30/1993	TSD-GENERAL STANDARDS
09/30/1993	TSD-GENERAL STANDARDS
09/30/1993	GENERATOR-GENERAL REQUIREMENTS
09/30/1993	GENERATOR-GENERAL REQUIREMENTS
09/30/1993	GENERATOR-GENERAL REQUIREMENTS
09/30/1993	TSD-OTHER REQUIREMENTS
09/30/1993	TSD-OTHER REQUIREMENTS
09/30/1993	TSD-OTHER REQUIREMENTS

09/30/1993	TSD-OTHER REQUIREMENTS
09/30/1993	GENERATOR-GENERAL REQUIREMENTS
02/28/1996	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
02/28/1996	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
02/28/1996	GENERATOR-RECORDKEEPING REQUIREMENTS
02/28/1996	TSD-LANDFILLS REQUIREMENTS
02/28/1996	TSD-LANDFILLS REQUIREMENTS
02/28/1996	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
02/28/1996	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
02/28/1996	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
02/28/1996	TSD-GOUNDWATER MONITORING REQUIREMENTS
12/30/1996	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
12/30/1996	GENERATOR-GENERAL REQUIREMENTS
12/30/1997	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
12/30/1997	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
12/30/1997	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
12/31/1997	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
12/30/1999	TSD-GENERAL STANDARDS
12/30/1999	GENERATOR-PRE-TRANSPORT REQUIREMENTS
06/07/2000	TSD-GENERAL STANDARDS
06/07/2000	TSD-GENERAL STANDARDS
06/07/2000	TSD-GENERAL STANDARDS
06/07/2000	TSD-GENERAL STANDARDS
09/29/2003	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
09/29/2003	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
09/29/2003	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
09/29/2003	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)
09/29/2003	GENERATOR-ALL REQUIREMENTS (OVERSIGHT)

ENFORCEMENTS

DATE	TYPE
02/24/1986	INITIAL 3008(A) COMPLIANCE ORDER
12/31/1986	FINAL 3008(A) COMPLIANCE ORDER
07/07/1987	WRITTEN INFORMAL
10/27/1988	WRITTEN INFORMAL
02/22/1989	FINAL 3008(A) COMPLIANCE ORDER
10/20/1992	WRITTEN INFORMAL
10/18/1993	WRITTEN INFORMAL
04/05/1996	WRITTEN INFORMAL
02/14/1997	WRITTEN INFORMAL
02/10/1998	WRITTEN INFORMAL
02/10/2000	WRITTEN INFORMAL
09/04/2000	WRITTEN INFORMAL
09/29/2003	WRITTEN INFORMAL

CORRECTIVE ACTIONS

EVENTS

DATE	TYPE

09/16/1988	RFA COMPLETED
02/24/1992	CA PRIORITIZATION-MEDIUM CA PRIORITY
09/09/1997	RFI IMPOSITION
03/03/1999	RFI WORKPLAN APPROVED

MAPID# 3 Distance from Property: 0.01 mi. W

FACILITY INFORMATION

EPA ID#: **OKD053128492**
NAME: **HUFFMAN WOOD PRESERVING CO INC**
ADDRESS: **HWY 70 E**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **WOOD PRESERVATION**
GENERATOR TYPE: **NOT A GENERATOR**
TSD INDICATOR: **TSD**
TRANSPORTER INDICATOR: **NOT A TRANSPORTER**

COMPLIANCE, MONITORING AND ENFORCEMENTS

EVALUATIONS

DATE	TYPE
01/10/1987	NON-FINANCIAL RECORD REVIEW
03/21/1988	COMPLIANCE EVALUATION INSPECTION ON-SITE
10/17/1988	NON-FINANCIAL RECORD REVIEW
11/14/1988	FINANCIAL RECORD REVIEW
03/28/1989	COMPLIANCE EVALUATION INSPECTION ON-SITE
05/22/1989	FINANCIAL RECORD REVIEW
02/13/1990	COMPLIANCE EVALUATION INSPECTION ON-SITE
12/06/1990	COMPLIANCE EVALUATION INSPECTION ON-SITE
11/02/1993	COMPLIANCE EVALUATION INSPECTION ON-SITE
02/28/1996	COMPLIANCE EVALUATION INSPECTION ON-SITE

VIOLATIONS

DATE	TYPE
01/10/1987	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
01/10/1987	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
01/10/1987	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
01/10/1987	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
11/14/1988	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
05/22/1989	TSD-FINANCIAL RESPONSIBILITY REQUIREMENTS
11/02/1993	TSD-GENERAL STANDARDS
11/02/1993	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	GENERATOR-RECORDKEEPING REQUIREMENTS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-GENERAL STANDARDS
02/28/1996	TSD-CLOSURE/POST-CLOSURE REQUIREMENTS
02/28/1996	TSD-GOUNDWATER MONITORING REQUIREMENTS
02/28/1996	TSD-GOUNDWATER MONITORING REQUIREMENTS

ENFORCEMENTS

DATE	TYPE
01/13/1987	WRITTEN INFORMAL
05/21/1987	INITIAL 3008(A) COMPLIANCE ORDER
11/29/1988	WRITTEN INFORMAL
02/05/1991	FINAL 3008(A) COMPLIANCE ORDER
12/20/1993	WRITTEN INFORMAL
03/29/1996	WRITTEN INFORMAL

CORRECTIVE ACTIONS

EVENTS

DATE	TYPE
08/12/1987	RFA COMPLETED
02/24/1992	CA PRIORITIZATION-LOW CA PRIORITY
09/28/1992	CA PRIORITIZATION-HIGH CA PRIORITY
03/11/1993	STABILIZATION MEASURES EVALUATION-FACILITY IS AMENABLE TO STABILIZATION
01/01/1998	REFERRED TO A NON-RCRA AUTHORITY-OTHER

RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM (RCRIS)
GENERATOR/HANDLER

MAPID# 1

FACILITY INFORMATION

EPA ID#: **OKR000018044**
NAME: **L D MCFARLAND CO**
ADDRESS: **SILVEY ROAD N SIDE OF PROPERTY HWY 70**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **NOT REPORTED**
GENERATOR TYPE: **LARGE QUANTITY GENERATOR**
TSD INDICATOR: **NOT A TSD**
TRANSPORTER INDICATOR: **NOT A TRANSPORTER**

COMPLIANCE, MONITORING AND ENFORCEMENTS

EVALUATIONS

DATE	TYPE
03/27/2002	COMPLIANCE EVALUATION INSPECTION ON-SITE

VIOLATIONS

DATE	TYPE
03/27/2002	TSD-GENERAL STANDARDS
03/27/2002	TSD-GENERAL STANDARDS

ENFORCEMENTS

DATE	TYPE
07/30/2002	WRITTEN INFORMAL

MAPID# 2 Distance from Property: 0.01 mi. W

FACILITY INFORMATION

EPA ID#: **OKD981900699**
NAME: **JIMMY TUCKER TRUCKING INC.**
ADDRESS: **.25M E OF TOWN ON HWY 70 E**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **NOT REPORTED**
GENERATOR TYPE: **SMALL QUANTITY GENERATOR**
TSD INDICATOR: **NOT A TSD**
TRANSPORTER INDICATOR: **NOT A TRANSPORTER**
VIOLATIONS: **NO VIOLATIONS**

MAPID# 10 Distance from Property: 0.03 mi. SW

FACILITY INFORMATION

EPA ID#: **OKD987085321**
NAME: **THOMAS MACHINE & MOTOR SUPPLY**
ADDRESS: **HWY 70 E 6 M S SIDE RD**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **NOT REPORTED**
GENERATOR TYPE: **NOT A GENERATOR**
TSD INDICATOR: **NOT A TSD**
TRANSPORTER INDICATOR: **NOT A TRANSPORTER**
VIOLATIONS: **NO VIOLATIONS**

EMERGENCY RESPONSE NOTIFICATION SYSTEM (ERNS)

MAPID# 13 **Distance from Property: 0.22 mi. N**

INCIDENT INFORMATION

ID#: **95292336**
DISCHARGE DATE: **05/20/95**
DISCHARGE SOURCE: **/ ,**
DISCHARGE LOCATION: **204 EAST THIRD STREET**
BROKEN BOW, OK
MATERIAL RELEASED/AMOUNT: **NATURAL GAS / 0 NONE**
AFFECTED WATERWAY:

MAPID# 3 Distance from Property: 0.01 mi. NW

FACILITY INFORMATION
FACILITY ID#: **4510567**
NAME: **STAFFORD GRO**
ADDRESS: **210 E CRAIG**
BROKEN BOW, OK 74728-4144
CASE #:: **064-ZG**
DATE REPORTED: **5/30/1986**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **CLOSED 08-92**

OWNER INFORMATION
NAME: **MRS OKEMAH BROADIE**

MAPID# 9 Distance from Property: 0.03 mi. NW

FACILITY INFORMATION
FACILITY ID#: **4500121**
NAME: **BROKEN BOW SHORT STOP**
ADDRESS: **21 N PARK**
BROKEN BOW, OK 74728-3959
CASE #:: **064-1389**
DATE REPORTED: **3/28/1995**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **ACTIVE**

OWNER INFORMATION
NAME: **POTEAU PETROLEUM PRODUCTS, INC**

MAPID# 14 Distance from Property: 0.49 mi. N

FACILITY INFORMATION
FACILITY ID#: **4512044**
NAME: **BURKES CONVENIENCE STORE**
ADDRESS: **702 N. PARK DRIVE**
BROKEN BOW, OK 74728-2144
CASE #:: **064-1803**
DATE REPORTED: **10/21/1996**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **CLOSED 3-18-97 WAS 6E-1018**

OWNER INFORMATION
NAME: **RONNIE BURKES**

UNDERGROUND STORAGE TANKS (UST)

MAPID# 1

FACILITY INFORMATION
FACILITY ID#: **4510445**
NAME: **FFP #526**
ADDRESS: **605 MARTIN LUTHER KING DR HWY 70 E**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **FFP OPERATING PARTNERS, L. P.**
ADDRESS: **2801 GLENDA AVE - ATTN: PENNY MAYNO**
FORT WORTH, TX 76117

MAPID# 1

FACILITY INFORMATION
FACILITY ID#: **4502995**
NAME: **THOMASON LUMBER & TIMBER CO**
ADDRESS: **HWY 70 EAST**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **THOMASON LUMBER & TIMBER CO**
ADDRESS: **DRAWER 278**
BROKEN BOW, OK 74728

MAPID# 2 **Distance from Property: 0.01 mi. W**

FACILITY INFORMATION
FACILITY ID#: **4503093**
NAME: **JIMMIE TUCKER TRUCKING, INC.**
ADDRESS: **HWY 70 EAST P.O. BOX 428**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **JIMMIE TUCKER TRUCKING, INC.**
ADDRESS: **HWY 70 EAST PO BOX 428**
BROKEN BOW, OK 74728

MAPID# 3 **Distance from Property: 0.01 mi. NW**

FACILITY INFORMATION
FACILITY ID#: **4513261**
NAME: **LARRY'S GARAGE**
ADDRESS: **220 MARTIN LUTHER KING BLVD**
BROKEN BOW, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **AMERICAN STATE BANK**
ADDRESS: **P.O. BOX 280**
BROKEN BOW, OK 74728

MAPID# 3 **Distance from Property: 0.02 mi. NW**

FACILITY INFORMATION
FACILITY ID#: **4504517**
NAME: **LEWIS TOTAL**
ADDRESS: **200 E. CRAIG RD.**
BROKEN BOW, OK
OF TANKS: **6**

OWNER INFORMATION
NAME: **YOUNG OIL CO**
ADDRESS: **1010 S CENTRAL**
IDABEL, OK 74745

MAPID# 4 Distance from Property: 0.01 mi. W

FACILITY INFORMATION
FACILITY ID#: **4511997**
NAME: **K & K COUNTRY STORE**
ADDRESS: **HWY 70 9 MI E OF BROKEN BOW**
EAGLETOWN, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **K & K COUNTRY STORE**
ADDRESS: **PO BOX 10 - HWY 70**
EAGLETOWN, OK 74734

MAPID# 5 Distance from Property: 0.02 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4508878**
NAME: **BINGER OIL CO, INC**
ADDRESS: **215 W CRAIG RD**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **BINGER OIL COMPANY INC**
ADDRESS: **PO BX 98**
BROKEN BOW, OK 74728

MAPID# 5 Distance from Property: 0.02 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4508881**
NAME: **TOMMY'S FOUR WAY CONOCO**
ADDRESS: **217 WEST CRAIG ROAD**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **BINGER OIL COMPANY INC**
ADDRESS: **PO BX 98**
BROKEN BOW, OK 74728

MAPID# 6 Distance from Property: 0.02 mi. NW

FACILITY INFORMATION
FACILITY ID#: **4508441**
NAME: **TEXAS, OKLAHOMA AND EASTERN R.R**
ADDRESS: **102 EAST CRAIG ROAD**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **TEXAS OKLAHOMA AND EASTERN RR**
ADDRESS: **412 E LOCKESBURG**
DE QUEEN, AR 71832

MAPID# 6 Distance from Property: 0.02 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4512080**
NAME: **TOMMY D. RUDISILL**
ADDRESS: **101 E CRAIG**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **TOMMY D RUDISILL**
ADDRESS: **101 E CRAIG**
BROKEN BOW, OK 74728

MAPID# 7 Distance from Property: 0.02 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4513492**
NAME: **TRIPLE M SUPPLY**
ADDRESS: **2 1/2 M E OF BROKEN BOW ON HWY 7**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **AUBREY DICKERSON**
ADDRESS: **RT 1, BX 849**
BROKEN BOW, OK 74728

MAPID# 8 Distance from Property: 0.02 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4504498**
NAME: **EZ MART STORE#95**
ADDRESS: **305 CRAIG RD.**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **EZ MART STORES INC**
ADDRESS: **PO BOX 1426 - 602 FALVEY ATTEN: DAVID**
MCKAMIE - ENV DIR
TEXARKANA, TX 75504

MAPID# 9 Distance from Property: 0.03 mi. NW

FACILITY INFORMATION
FACILITY ID#: **4508880**
NAME: **B B TRUCK STOP**
ADDRESS: **5 MI N OF BROKEN BOW ON US 259**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **BINGER OIL COMPANY INC**
ADDRESS: **PO BX 98**
BROKEN BOW, OK 74728

MAPID# 9 Distance from Property: 0.03 mi. NW

FACILITY INFORMATION
FACILITY ID#: **4500121**
NAME: **BROKEN BOW SHORT STOP**
ADDRESS: **21 N PARK**
BROKEN BOW, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **POTEAU PETROLEUM PRODUCTS, INC**
ADDRESS: **BOX 590 1302 N BROADWAY**
POTEAU, OK 74953

MAPID# 10 Distance from Property: 0.03 mi. SW

FACILITY INFORMATION
FACILITY ID#: **4501109**
NAME: **THOMAS SERVICE STATION**
ADDRESS: **6 MI E HWY 70**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **JANICE FAYE THOMAS**
ADDRESS: **2803 N BROADWAY**
POTEAU, OK 74953

UNDERGROUND STORAGE TANKS (UST)

MAPID# 11 Distance from Property: 0.09 mi. NW

FACILITY INFORMATION

FACILITY ID#: **4504485**
NAME: **EZ MART STORE#3**
ADDRESS: **101 N PARK DR**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION

NAME: **EZ MART STORES INC**
ADDRESS: **PO BOX 1426 - 602 FALVEY ATTEN: DAVID MCKAMIE - ENV DIR**
TEXARKANA, TX 75504

MAPID# 12 Distance from Property: 0.22 mi. N

FACILITY INFORMATION

FACILITY ID#: **4508752**
NAME: **BROKEN BOW OFFICE & OPER CTR**
ADDRESS: **110 E 3RD**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION

NAME: **PUBLIC SERVICE CO OF OKLAHOMA**
ADDRESS: **212 E 6TH ST**
TULSA, OK 74102

GeoSearch

Environmental Data Services

REPORT SUMMARY OF UNLOCATABLE SITES

The list below identifies sites that are found to be unlocatable due to vague or incomplete location information. Sites on this list may or may not be located within the area searched for this report.

DATABASE TYPE	SITE ID#	SITE NAME	ADDRESS	CITY	ZIP CODE
CERCLIS	OKD987096211	BAILEY -MULKEY POST COMPANY	ON US 70, ABOUT 5MI.EAST OF JUNCTIO	BROKEN BOW	74728
RCRISG	OKD007335516	WEYERHAUSER CO	RTE 1 BOX 516	BROKEN BOW	74728
LUST	4501682	BIG FRANK'S SPORTS CENTER	HWY 259 NORTH	BROKEN BOW	
LUST	4508936	PIPER'S LITTLE SUPER MARKET	N PARK DRIVE	BROKEN BOW	
LUST	4509931	BROKEN BOW TRUCK STOP	E CRAIG RD	BROKEN BOW	
LUST	4510251	OKLA DEPT OF AG./FORESTRY DIV	PO BOX 40	BROKEN BOW	74728-0040
UST	4500245	LAKE PINE RETREAT (J. REINHART)	RT. 4, BOX 36	BROKEN BOW	74728
UST	4501663	DARYL THOMASON TRUCKING, INC.	HWY 3 & 7 WEST	BROKEN BOW	74728
UST	4501682	BIG FRANK'S	HWY 259 NORTH	BROKEN BOW	74728
UST	4502003	GLOVER ELEMENTARY SCHOOL	RT. 3, BOX 385	BROKEN BOW	74728
UST	4502412	WEYERHAEUSER COMPANY	RT 1 BOX 618	BROKEN BOW	74728
UST	4502457	WEYERHAEUSER	RT 4 BOX 34-2	BROKEN BOW	74728
UST	4503787	WEYERHAEUSER - DON DALE - AREA	STAR ROUTE BOX 520	EAGLETOWN	74734
UST	4504306	HOLLY CREEK SCHOOL	RT 2 BOX 260	BROKEN BOW	74728
UST	4504516	BROKEN BOW SELF SERVE #17	HWY 259 S	BROKEN BOW	74728
UST	4504519	D-W BAIT #005	HIWAY 259	BROKEN BOW	74728
UST	4504522	CLARK O. STOP	HIWAY 70	EAGLETOWN	74734
UST	4507616	BROKEN BOW LAKE	US HWY 259A	BROKEN BOW	74728
UST	4508886	CITY OF BROKEN BOW	STR DEPT	BROKEN BOW	74728
UST	4508930	EAGLECASH GROCERY	HWY 70	EAGLETOWN	74734
UST	4508935	MT HERMAN GROC	HWY 70	BROKEN BOW	74728
UST	4508936	PIPER'S LITTLE SUPER MARKET	N PARK DRIVE	BROKEN BOW	74728
UST	4509764	MOUNTAINEER CABINS	HWY 259 N	BROKEN BOW	74728
UST	4509874	EAGLETOWN SCHOOL	ADDRESS UNKNOWN	EAGLETOWN	74734
UST	4509931	BROKEN BOW TRUCK STOP	E CRAIG RD	BROKEN BOW	74728
UST	4510251	OKLA DEPT OF AG./FORESTRY DIV	PO BOX 40	BROKEN BOW	74728
UST	4510252	OKLA DEPT OF AG./FORESTY DIV	RT BATTIEST, BOX 515	BROKEN BOW	74728
UST	4510567	STAFFORD GRO	RT 3 BOX 350	BROKEN BOW	74728
UST	4510568	STATELINE GRO.	STAR RT, BOX 360	EAGLETOWN	74734
UST	4510571	C & A GROCERY	BOX 539	EAGLETOWN	74734
UST	4510572	LAKE SIDE GRO.	ADDRESS UNKNOWN	BROKEN BOW	74728
UST	4511598	EAGLETOWN HARDWARE	ADDRESS UNKNOWN	EAGLETOWN	74734
UST	4511870	JOT UM DOWN	PICKENS ROUTE BOX 735	BROKEN BOW	74728
UST	4512535	LESPERANCE DIAMOND SHAMROCK	HWY 70 EAST	BROKEN BOW	74728

GeoSearch

Environmental Data Services

REPORT SUMMARY OF UNLOCATABLE SITES

The list below identifies sites that are found to be unlocatable due to vague or incomplete location information. Sites on this list may or may not be located within the area searched for this report.

DATABASE TYPE	SITE ID#	SITE NAME	ADDRESS	CITY	ZIP CODE
UST	4513165	EAGLETOWN SCHOOL	PO BX 38	EAGLETOWN	74734

RESOURCE CONSERVATION AND RECOVERY INFORMATION SYSTEM (RCRIS)
GENERATOR/HANDLER

FACILITY INFORMATION

EPA ID#: **OKD007335516**
NAME: **WEYERHAUSER CO**
ADDRESS: **RTE 1 BOX 516**
BROKEN BOW, OK 74728

ACTIVITY INFORMATION

BUSINESS TYPE: **NOT REPORTED**
GENERATOR TYPE: **NOT A GENERATOR**
TSD INDICATOR: **NOT A TSD**
TRANSPORTER INDICATOR: **NOT A TRANSPORTER**
VIOLATIONS: **NO VIOLATIONS**

LEAKING UNDERGROUND STORAGE TANKS (LUST)

FACILITY INFORMATION
FACILITY ID#: **4501682**
NAME: **BIG FRANK'S SPORTS CENTER**
ADDRESS: **HWY 259 NORTH**
BROKEN BOW, OK
CASE #:: **064-1110**
DATE REPORTED: **5/31/1994**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **ACTIVE**

OWNER INFORMATION
NAME: **GWEN PARKER**

FACILITY INFORMATION
FACILITY ID#: **4508936**
NAME: **PIPER'S LITTLE SUPER MARKET**
ADDRESS: **N PARK DRIVE**
BROKEN BOW, OK
CASE #:: **6E-775**
DATE REPORTED: **7/7/1994**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **CLOSED 08-94**

OWNER INFORMATION
NAME: **COPELAND OIL CO**

FACILITY INFORMATION
FACILITY ID#: **4509931**
NAME: **BROKEN BOW TRUCK STOP**
ADDRESS: **E CRAIG RD**
BROKEN BOW, OK
CASE #:: **064-1338**
DATE REPORTED: **2/15/1995**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **ACTIVE**

OWNER INFORMATION
NAME: **HARRY HOUSTON OIL CO INC**

FACILITY INFORMATION
FACILITY ID#: **4510251**
NAME: **OKLA DEPT OF AG./FORESTRY DIV**
ADDRESS: **PO BOX 40**
BROKEN BOW, OK 74728-0040
CASE #:: **6E-251**
DATE REPORTED: **10/30/1992**
INVESTIGATOR: **JOE THACKER**
CASE STATUS: **CLOSED 01-93**

OWNER INFORMATION
NAME: **OKLA DEPT OF AG/FORESTRY DIV**

UNDERGROUND STORAGE TANKS (UST)

FACILITY INFORMATION
FACILITY ID#: **4510568**
NAME: **STATELINE GRO.**
ADDRESS: **STAR RT, BOX 360**
EAGLETOWN, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **BERRY ENERGY**
ADDRESS: **220 W. CRAIG RD**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4510571**
NAME: **C & A GROCERY**
ADDRESS: **BOX 539**
EAGLETOWN, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **BERRY ENERGY**
ADDRESS: **220 W. CRAIG RD**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4510572**
NAME: **LAKE SIDE GRO.**
ADDRESS: **ADDRESS UNKNOWN**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **BERRY ENERGY**
ADDRESS: **220 W. CRAIG RD**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4508886**
NAME: **CITY OF BROKEN BOW**
ADDRESS: **STR DEPT 3RD & BOCK**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **BROKEN BOW, CITY OF**
ADDRESS: **MAIN STREET**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4504306**
NAME: **HOLLY CREEK SCHOOL**
ADDRESS: **RT 2 BOX 260**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **COPELAND OIL CO**
ADDRESS: **P O BOX 659, 259 JUMPER BYPASS**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4508935**
NAME: **MT HERMAN GROC**
ADDRESS: **HWY 70**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **COPELAND OIL CO**
ADDRESS: **P O BOX 659, 259 JUMPER BYPASS**
IDABEL, OK 74745

UNDERGROUND STORAGE TANKS (UST)

FACILITY INFORMATION
FACILITY ID#: **4508936**
NAME: **PIPER'S LITTLE SUPER MARKET**
ADDRESS: **N PARK DRIVE**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **COPELAND OIL CO**
ADDRESS: **P O BOX 659, 259 JUMPER BYPASS**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4501663**
NAME: **DARYL THOMASON TRUCKING, INC.**
ADDRESS: **HWY 3 & 7 WEST**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **DARYL THOMASON TRUCKING, INC.**
ADDRESS: **PO BOX 219**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4507616**
NAME: **BROKEN BOW LAKE**
ADDRESS: **US HWY 259A**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **DEPT OF THE ARMY-TULSA DIST ENG**
ADDRESS: **ATTN; CESWT-OD-RR (JIM HARRIS) BOX PO BOX 61**
TULSA, OK 74121

FACILITY INFORMATION
FACILITY ID#: **4513165**
NAME: **EAGLETOWN SCHOOL**
ADDRESS: **PO BX 38**
EAGLETOWN, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **EAGLETOWN SCHOOL**
ADDRESS: **PO BX 38**
EAGLETOWN, OK 74734

FACILITY INFORMATION
FACILITY ID#: **4511870**
NAME: **JOT UM DOWN**
ADDRESS: **PICKENS ROUTE BOX 735**
BROKEN BOW, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **ELENE SCARBERRY**
ADDRESS: **HC 72 BOX 735**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4508930**
NAME: **EAGLECASH GROCERY**
ADDRESS: **HWY 70**
EAGLETOWN, OK
OF TANKS: **7**

OWNER INFORMATION
NAME: **FUEL MANAGERS, INC**
ADDRESS: **10711 E 11TH, STE 3**
TULSA, OK 74128

UNDERGROUND STORAGE TANKS (UST)

FACILITY INFORMATION
FACILITY ID#: **4502003**
NAME: **GLOVER ELEMENTARY SCHOOL**
ADDRESS: **RT. 3, BOX 385**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **GLOVER ELEMENTARY SCHOOL**
ADDRESS: **RT. 3, BOX 385**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4501682**
NAME: **BIG FRANK'S**
ADDRESS: **HWY 259 NORTH RT 4 BOX 82**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **GWEN PARKER**
ADDRESS: **5250 SOUTH RAINBOW BLVD # 1061**
LAS VEGAS, NV 89118

FACILITY INFORMATION
FACILITY ID#: **4509874**
NAME: **EAGLETOWN SCHOOL**
ADDRESS: **ADDRESS UNKNOWN**
EAGLETOWN, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **HARRY HOUSTON OIL CO INC**
ADDRESS: **PO BOX 1257 3511 N TEXAS**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4509931**
NAME: **BROKEN BOW TRUCK STOP**
ADDRESS: **E CRAIG RD**
BROKEN BOW, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **HARRY HOUSTON OIL CO INC**
ADDRESS: **PO BOX 1257 3511 N TEXAS**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4511598**
NAME: **EAGLETOWN HARDWARE**
ADDRESS: **ADDRESS UNKNOWN**
EAGLETOWN, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **HARRY HOUSTON OIL CO INC**
ADDRESS: **PO BOX 1257 3511 N TEXAS**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4500245**
NAME: **LAKE PINE RETREAT (J. REINHART)**
ADDRESS: **RT. 4, BOX 36**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **LAKE PINE RETREAT (J. REINHART)**
ADDRESS: **RT 4 BOX 36**
BROKEN BOW, OK 74728

UNDERGROUND STORAGE TANKS (UST)

FACILITY INFORMATION
FACILITY ID#: **4509764**
NAME: **MOUNTAINEER CABINS**
ADDRESS: **HWY 259 N**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **LOVEDAY INC**
ADDRESS: **P O BOX 508,**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4512535**
NAME: **LESPERANCE DIAMOND SHAMROCK**
ADDRESS: **HWY 70 EAST**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **LOVEDAY INC**
ADDRESS: **P O BOX 508,**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4510567**
NAME: **STAFFORD GRO**
ADDRESS: **RT 3 BOX 350**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **MRS OKEMAH BROADIE**
ADDRESS: **RT 3 BOX 350**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4510251**
NAME: **OKLA DEPT OF AG./FORESTRY DIV**
ADDRESS: **PO BOX 40**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **OKLA DEPT OF AG/FORESTRY DIV**
ADDRESS: **2800 N LINCOLN BLVD**
OKLAHOMA CITY, OK 73105

FACILITY INFORMATION
FACILITY ID#: **4510252**
NAME: **OKLA DEPT OF AG./FORESTY DIV**
ADDRESS: **RT BATTIEST, BOX 515**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **OKLA DEPT OF AG/FORESTRY DIV**
ADDRESS: **2800 N LINCOLN BLVD**
OKLAHOMA CITY, OK 73105

FACILITY INFORMATION
FACILITY ID#: **4502457**
NAME: **WEYERHAEUSER**
ADDRESS: **RT 4 BOX 34-2**
BROKEN BOW, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **WEYERHAEUSER**
ADDRESS: **RT 4 BOX 34-2**
BROKEN BOW, OK 74728

UNDERGROUND STORAGE TANKS (UST)

FACILITY INFORMATION
FACILITY ID#: **4502412**
NAME: **WEYERHAEUSER COMPANY**
ADDRESS: **RT 1 BOX 618**
BROKEN BOW, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **WEYERHAEUSER CO**
ADDRESS: **RT 1 BOX 618**
BROKEN BOW, OK 74728

FACILITY INFORMATION
FACILITY ID#: **4503787**
NAME: **WEYERHAEUSER - DON DALE - AREA**
ADDRESS: **STAR ROUTE BOX 520**
EAGLETOWN, OK
OF TANKS: **1**

OWNER INFORMATION
NAME: **WEYERHAEUSER DON DALE AREA MGR**
ADDRESS: **STAR RTE BOX 520**
EAGLETOWN, OK 74734

FACILITY INFORMATION
FACILITY ID#: **4504516**
NAME: **BROKEN BOW SELF SERVE #17**
ADDRESS: **HWY 259 S**
BROKEN BOW, OK
OF TANKS: **2**

OWNER INFORMATION
NAME: **YOUNG OIL CO**
ADDRESS: **1010 S CENTRAL**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4504519**
NAME: **D-W BAIT #005**
ADDRESS: **HIWAY 259**
BROKEN BOW, OK
OF TANKS: **4**

OWNER INFORMATION
NAME: **YOUNG OIL CO**
ADDRESS: **1010 S CENTRAL**
IDABEL, OK 74745

FACILITY INFORMATION
FACILITY ID#: **4504522**
NAME: **CLARK O. STOP**
ADDRESS: **HIWAY 70**
EAGLETOWN, OK
OF TANKS: **3**

OWNER INFORMATION
NAME: **YOUNG OIL CO**
ADDRESS: **1010 S CENTRAL**
IDABEL, OK 74745

COMPREHENSIVE ENVIRONMENTAL RESPONSE AND LIABILITY INFORMATION SYSTEM (CERCLIS)

SITE INFORMATION

EPA ID#: **OKD987096211**
NAME: **BAILEY -MULKEY POST COMPANY**
ADDRESS: **ON US 70, ABOUT 5MI.EAST OF JUNCTION 70**
BROKEN BOW, OK 74728
CONTACT/ PHONE: **NOT REPORTED**
NON NPL STATUS: **NF - NFRAP**
FEDERAL FACILITY CODE **N - Not a Federal Facility**
OWNERSHIP TYPE CODE: **PR - Private**

SITE DESCRIPTION

THE SITE IS A FORMER WOOD TREATMENT FACILITY AND IS CURRENTLY USED AS A LUMBERYARD NAMED 'BAILEY LUMBER COMPANY'.

ACTIONS

TYPE: **DS - DISCOVERY**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **NOT REPORTED**
COMPLETION DATE: **08/20/1992**

TYPE: **PA - PRELIMINARY ASSESSMENT**
RESPONSIBLE ORGANIZATION: **S - State, Fund Financed**
START DATE: **NOT REPORTED**
COMPLETION DATE: **06/04/1993**

TYPE: **SI - SITE INSPECTION**
RESPONSIBLE ORGANIZATION: **F - EPA Fund-Financed**
START DATE: **06/19/1996**
COMPLETION DATE: **01/07/2000**

ENVIRONMENTAL RECORDS DEFINITIONS - FEDERAL

CERCLIS	Comprehensive Environmental Response, Compensation & Liability Information System	(3/2004)	ASTM

CERCLIS is the repository for site and non-site specific Superfund information in support of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). This database contains an extract of sites that have been investigated or are in the process of being investigated for potential environmental risk.

DNPL	Delisted National Priority List	(3/2004)	ASTM

This database includes U.S. Environmental Protection Agency (EPA) Final National Priorty List sites where remedies have proven to be satisfactory or sites where the original analyses were inaccurate, and the site is no longer appropriate for inclusion on the NPL, and final publication in the Federal Register has occurred.

ERNS	Emergency Response Notification System	(12/2002)	ASTM

This EPA database contains data on reported releases of oil and hazardous substances. The data comes from spill reports made to the EPA, U.S. Coast Guard, the National Response Center and/or the Department of Transportation.

FINDS	Facility Index System	(2/2003)	ASTM Suplemental

FINDS data is a comprehensive listing of facilities regulated under a variety of EPA programs. The FINDS database provides some basic information about each facility and a listing of ID numbers in other EPA databases.

HMIRS	Hazardous Materials Incident Reporting System	(2/2004)	ASTM Suplemental

The HMIRS database contains unintentional hazardous materials release information reported to the US Department of Transportation.

NFRAP	No Further Remedial Action Planned	(3/2004)	ASTM

This database includes sites, which have been determined by the EPA, following preliminary assessment, to no longer pose a significant risk or require further activity under CERCLA. After initial investigation, no contamination was found, contamination was quickly removed or contamination was not serious enough to require Federal Superfund action or NPL consideration.

NPDES	National Pollutant Discharge Elimination System	(2/2003)	ASTM Suplemental

Information in this database is extracted from the (PCS) Water Permit Compliance System database which is used by EPA to track surface water permits issued under the Clean Water Act.

NPL	National Priority List	(3/2004)	ASTM

This database includes U.S. Environmental Protection Agency (EPA) National Priority List sites that fall under the EPA's Superfund program, established to fund the cleanup of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action.

ENVIRONMENTAL RECORDS DEFINITIONS - FEDERAL

RCRIS	Resource Conservation & Recovery Act Information System (4/2004)		ASTM

This databases include Handlers, Generators (Large, Small, and Exempt), Transporters, Violations, Corrective Actions, and Treatment, Storage & Disposal Facilities (TSD) (this database includes selective information on sites which handle, generate, transport, store, treat, or dispose of hazardous wastes). See RCRIS Description page for more information.

RODS	Record Of Decision System	(4/2004)	ASTM Suplemental

These decision documents maintained by the U.S. EPA describe the chosen remedy for NPL (Superfund) site remediation. They also include site history, site description, site characteristics, community participation, enforcement activities, past and present activities, contaminated media, the contaminants present, and scope and role of response action.

TRI	Toxics Release Inventory	(12/2002)	ASTM Suplemental

This EPA database includes information about releases and transfers of toxic chemicals from manufacturing facilities.

LUST	Leaking Underground Storage Tanks	(9/2000)	ASTM

The LUST listing of leaking underground storage tanks is maintained by the Oklahoma Corporation Commission.

SWF	Solid Waste Facilities	(4/2004)	ASTM

The Oklahoma Department of Environmental Quality (DEQ) maintained SWF listing contains permitted solid waste facilities, which include: storage units, transfer facilities, recycling units and treatment units.

UST	Underground Storage Tanks	(9/2000)	ASTM

The UST database includes a listing of registered underground storage tanks maintained by the Oklahoma Corporation Commission.

VCP	Voluntary Cleanup Program	(3/2004)	ASTM Suplemental

This Oklahoma DEQ listing contains facilities that are part of the VCP program which provides a means for private parties and government entities to voluntarily investigate and if warranted, clean up properties that may be contaminated with hazardous wastes.

RCRIS – Descriptions

Acronyms

RCRISG – RCRIS GENERATOR/HANDLER
RCRIST – RCRIS TSD
RCRISC – RCRIS CORRECTIVE ACTION

Generator Types

Large Quantity Generators:

- Generate 1,000 kg or more of hazardous waste during any calendar month; or
- Generate more than 1 kg of acutely hazardous waste during any calendar month; or
- Generate more than 100 kg of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month; or
- Generate 1 kg or less of acutely hazardous waste during any calendar month, and accumulate more than 1kg of of acutely hazardous waste at any time; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulated more than 100 kg or that material at any time.

Small Quantity Generators:

- Generate more than 100 and less than 1000 kilograms of hazardous waste during any calendar month and accumulate less than 6000 kg of hazardous waste at any time; or
- Generate 100 kg or less of hazardous waste during any calendar month, and accumulate more than 1000 kg of hazardous waste at any time.

Conditionally Exempt Small Quantity Generators:

- Generate 100 kilograms or less of hazardous waste per calendar month, and accumulate 1000 kg or less of hazardous waste at any time; or
- Generate one kilogram or less of acutely hazardous waste per calendar month, and accumulate at any time:
  - 1 kg or less of acutely hazardous waste; or
  - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste; or
- Generate 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, or acutely hazardous waste during any calendar month, and accumulate at any time:
  - 1 kg or less of acutely hazardous waste; or
  - 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste.

TSD Indicator: Indicates that the handler is engaged in the treatment, storage or disposal of hazardous waste.
Allowed Values: TSD
Not a TSD, Verified
Not a TSD, Unverified

Transporter Indicator: Indicates that the handler is engaged in the transportation of hazardous waste.
Allowed Values: Handler transports wastes for hire (i.e., commercial transport)
Handler transports wastes for self
Handler transports wastes, but commercial status is unknown
Not a transporter, verified
Unverified

Appendix 7: Solicitation Letter

May 19, 2004

FIELD(Name)
FIELD(Company)
FIELD(Address)
FIELD(City State Zip)

Dear FIELD(greeting):

The Oklahoma Department of Transportation is soliciting comments on a study to improve US-70 in McCurtain County (see the attached map). The study corridor begins approximately 6.4 miles east of the junction of SH-3 in Broken Bow and extends east to the Oklahoma/Arkansas state line. This project is in the developmental stages and any comments relative to the social, economic, or environmental effects of this proposal will be appreciated.

US-70 is currently a two-lane roadway with shoulders. This segment of roadway is classified as inadequate on the Oklahoma Department of Transportation Highway Sufficiency Rating Map. The Department proposes to add 2 new parallel lanes and resurface the existing lanes through this segment of roadway.

The project is in the early stages of development and any comments relative to the corridor or items previously listed would be appreciated. To allow for adequate time for evaluation of your suggestions, we would appreciate receiving your comments within fifteen days of this letter. Your written comments should be directed to the Planning & Research Division Engineer, Oklahoma Department of Transportation, 200 Northeast 21st Street, Oklahoma City, OK 73105.

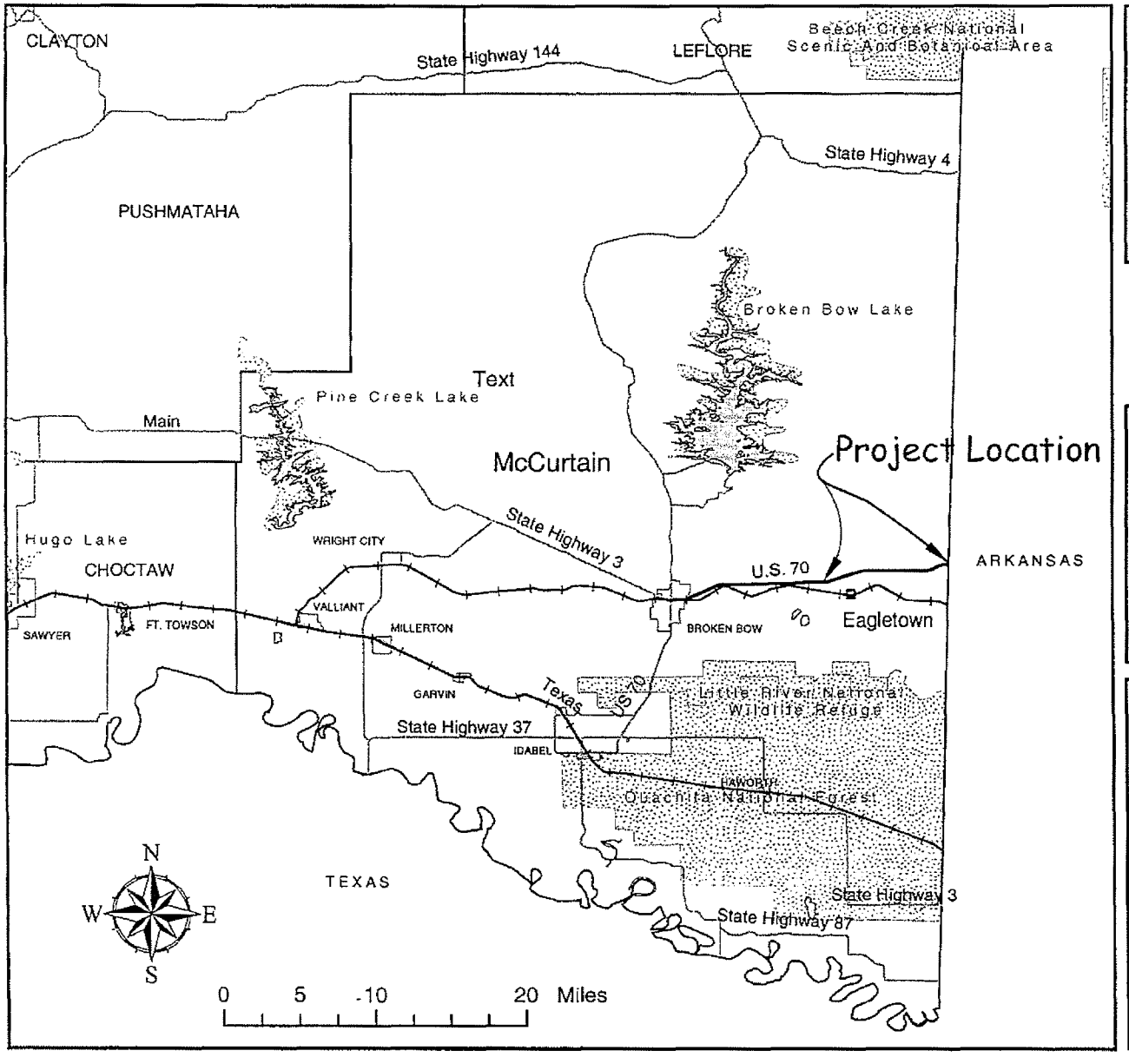
We sincerely appreciate your cooperation in this matter. ODOT has contracted with Carter & Burgess, Inc. on this project. For further information or if you have any questions, please contact Ms. Stephanie Hansen at Carter & Burgess (405-810-8254 or hansensa@c-b.com) or ODOT's Project Manager, Ms. Gwen Christie (405-521-2535 or gchristie@ODOT.org).

Sincerely,

Dawn Sullivan, P.E.
Planning & Research Division Engineer

DRS/qc:sah
Attachment: Location Map

U.S. 70 Study - McCurtain County



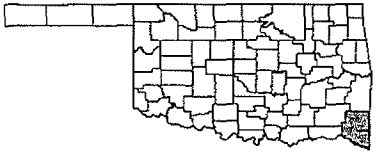
RailRoad
Federal Lands
Citys
Lakes
Counties

Project Description

U.S. 70 - McCurtain County
From 6.4 miles east of Jct. U.S. 70 and S.H. 3 in Broken Bow easterly to the Arkansas State Line.

The scope of work for the U.S. 70 corridor includes
1. Enviromental Studies
2. Hydraulic an Hydrology Analysis
3. Geometric Study
4. Traffic Analysis

Project Located in McCurtain County



Mr. James Allard
Bureau of Reclamation
Oklahoma/ Kansas Office
'149 Highline Boulevard, Ste. 200
Oklahoma City, OK 73108-2097

Mr. Jerry Brabander
U.S. Fish and Wildlife Service
222 South Houston, Ste. A
Tulsa, OK 74127

Ms. Margaret M. Graham
Department of Environmental Quality
PO BOX 1677
Oklahoma City, OK 73101-1677

Mr. Mike Thralls
Oklahoma Conservation Commission
2800 North Lincoln Blvd., Ste. 160
Oklahoma City, OK 73105

Ms. Sandy Garrett
State Board of Education
2500 North Lincoln Blvd., Ste. 112
Oklahoma City, OK 73105

Ms. Mary Lou Drywater
Bureau of Land Management
221 North Service Road
Moore, OK 73160-4946

Mr. David Manning
Tulsa District Corps of Engineers
1645 South 101 East Avenue
Tulsa, OK 74128-4629
Attention: Regulatory Section

Mr. Ed Schellenberger
National Park Service
PO BOX 728
Santa Fe, New Mexico 87504-0728

Mr. Dan B. Overland
Oklahoma Transportation Commission
200 N.E. 21st Street
Oklahoma City, OK 73105

Mark Musser
State of Oklahoma
Governor's Public Affairs Office
Oklahoma City, OK 71305

Ms. Jeanette Hanna
Bureau of Indian Affairs
101 North 5th Street
Muskogee, OK 74401

Mr. Glen Sekavec
Department of the Interior
PO BOX 649
Albuquerque, New Mexico 87103

Mr. Greg Duffy
Department of Wildlife Conservation
PO BOX 53465
Oklahoma City, OK 73152

Dr. Charles J. Mankin
Oklahoma Geological Survey
100 East Boyd, Rm. N-131
Norman, OK 73019-0628

Mr. Dennis Howard
Department of Agriculture
PO BOX 528804
Oklahoma City, OK 73152-8804

Mr. Philip Keasling
Bureau of Land Management
221 North Service Road
Moore, OK 73160-4946

Mr. David Manning
Tulsa District Corps of Engineers
1645 South 101 East Avenue
Tulsa, OK 74128-4629
Attention: Planning Section

Dr. Bob Blackburn
Oklahoma Historical Society
2101 North Lincoln Blvd.
Oklahoma City, OK 73105-4915

Mr. Victor N. Bird
OK Aeronautics Commission
3700 North Classen Blvd., Ste. 240
Oklahoma City, OK 73118

Mr. Gary Ridley
Oklahoma Department of Transportation
200 N.E. 21st Street
Oklahoma City, OK 73105

Southwest Regional Environmental Officer
U.S. Department of the Interior
PO BOX 728
Santa Fe, New Mexico 87504-0728

Mr. Michael Schmidt
Oklahoma Corporation Commission
Jim Thorpe Building
2101 North Lincoln Blvd.
Oklahoma City, OK 73105

Mr. Ken Morris
Oklahoma Water Resources Board
3800 North Classen
Oklahoma City, OK 73118

Dr. Robert Brooks
University of Oklahoma
11 East Chesapeake, Bldg. 134
Norman, OK 73019-0575

Ms. Kristina S. Marek
OK Tourism and Recreation Department
The Concord Building
15 North Robinson Ave., Ste. 100
Oklahoma City, OK 73102-5403

Mr. David Manning
Tulsa District Corps of Engineers
1645 South 101 East Avenue
Tulsa, OK 74128-4629
Attention: Environmental Analysis Section

Colonel Timothy Sanford
Tulsa District Corps of Engineers
1645 South 101 East Avenue
Tulsa, OK 74128-4629

Mr. Walter Kudzia
Federal Highway Administration
300 North Meridian, Rm. 105S
Oklahoma City, OK 73107-6560

Mr. Doug Riebel
OTA
4401 W. Memorial Rd, Ste. 130
Oklahoma City, OK 73134

Executive Director
Oklahoma Department of Commerce
PO BOX 26980
Oklahoma City, OK 73126

The Honorable Brad Carson
321 South 3rd Street, Ste. 4
McAlester, OK 74501

The Honorable James Inhofe
United States Senate
1924 South Utica, Ste. 530
Tulsa, OK 74101

The Honorable Don Nickles
United States Senate
1820 Liberty Towers
Oklahoma City, OK 73102

Mr. Chester Dennis
Kiamichi Economic Development District
PO BOX 638
Wilburton, OK 74578

Mr. Larry Bachman
City of Broken Bow
210 North Broadway
Broken Bow, OK 74728

Mr. Mark Guthrie
City of Broken Bow
210 North Broadway
Broken Bow, OK 74728

Mr. Jimmy O'Donnell
City of Broken bow
210 North Broadway
Broken Bow, OK 74728

Mr. Ray Burris
City of Broken Bow
210 North Broadway
Broken Bow, OK 74728

Ms. Charity O'Donnell
Broken Bow Chambers of Commerce
113 West Martin Luther King
Broken Bow, OK 74728

Mr. Jeff Rabon
United States Senate District 5
2300 North Lincoln Blvd., Rm. 421
Oklahoma City, OK 73105-4808

Mr. Jerry Ellis
State Capital
2300 North Lincoln Blvd., Rm. 300
Oklahoma City, OK 73105-4808

Mr. Edward H. Fite, III
Oklahoma Scenic Rivers Commission
PO BOX 292
Tahlequah, OK 74464

McCurtain County Board of Commissioners
PO BOX 1078
Idabel, OK 74745

Mr. Jimmy Westbrook
PO BOX 1078
Idabel, OK 74745

Mr. Aubrey Thompson
PO BOX 1078
Idabel, OK 74745

Mr. Jim Freeny
PO BOX 1078
Idabel, OK 74745

District Conservationist
Idabel Field Service Center
201 N. Central Ave., Rm. 124
Idabel, OK 74745-3831

Vernon Hunter
Caddo Tribe
PO BOX 487
Binger, OK 73009

Chief Greg Pyle
Choctaw Nation
PO Drawer 1210
Durrant, OK 74701

Mr. Gary McAdams
Wichita Tribe
PO BOX 729
Anadarko, OK 73005

Mr. L.W.Collier, Jr.
Bureau of Indian Affairs
Anadarko Area Office
United States Courthouse
Anadarko, OK 73005

Mr. Merritt Youngdeer
Bureau of Indian Affairs
Muskogee Area Office
United States Courthouse, Rm. 311
Muskogee, OK 74401

Mr. Jerry Don Smith
City of Broken Bow
210 North Broadway
Broken Bow, OK 74728

Appendix 8: Responses to Solicitation Letter

OKLAHOMA DEPARTMENT OF TRANSPORTATION

RECEIVED
ODOT
JUN 0 2 2004
PLANNING & RESEARCH
DIVISION

MAY 2004
RECEIVED
Oklahoma
Scenic Rivers
Commission

May 19, 2004

Mr. Edward H. Fite, III
Administrator - Oklahoma Scenic Rivers Commission
PO BOX 292
Tahlequah, Oklahoma 74464

Dear Mr. Fite:

The Oklahoma Department of Transportation is soliciting comments on a study to improve US-70 in McCurtain County (see the attached map). The study corridor begins approximately 6.4 miles east of the junction of SH-3 in Broken Bow and extends east to the Oklahoma/Arkansas state line. This project is in the developmental stages and any comments relative to the social, economic, or environmental effects of this proposal will be appreciated.

US-70 is currently a two-lane roadway with shoulders. This segment of roadway is classified as inadequate on the Oklahoma Department of Transportation Highway Sufficiency Rating Map. The Department proposes to add 2 new parallel lanes and resurface the existing lanes through this segment of roadway.

The project is in the early stages of development and any comments relative to the corridor or items previously listed would be appreciated. To allow for adequate time for evaluation of your suggestions, we would appreciate receiving your comments within fifteen days of this letter. Your written comments should be directed to the Planning & Research Division Engineer, Oklahoma Department of Transportation, 200 Northeast 21st Street, Oklahoma City, OK 73105.

We sincerely appreciate your cooperation in this matter. ODOT has contracted with Carter & Burgess, Inc. on this project. For further information or if you have any questions, please contact Ms. Stephanie Hansen at Carter & Burgess (405-810-8254 or hansensa@c-b.com) or ODOT's Project Manager, Ms. Gwen Christie (405-521-2535 or gchristie@ODOT.org).

Sincerely,

Dawn Sullivan, P.E.
Planning & Research Division Engineer

This proposed project will have no adverse impact on any of Oklahoma's "Scenic River Areas."

H. Fite 5/25/2004
Oklahoma Scenic Rivers Commission Administrator

DRS/gc:sah
Attachment: Location Map

DUANE A. SMITH
EXECUTIVE DIRECTOR

BRAD HENRY
GOVERNOR

STATE OF OKLAHOMA
WATER RESOURCES BOARD
www.owrb.state.ok.us

June 1, 2004

Ms. Dawn R. Sullivan, P.E.
ODOT
200 NE 21st Street
Oklahoma City, OK 73105-3204

RE: Proposed improvements to US-70 in McCurtain County.

Dear Ms. Sullivan:

Thank you for your letter concerning environmental review of your proposed project. Please contact the appropriate local floodplain administrator listed in the directory located at the following website: www.owrb.state.ok.us/hazard/fp/pdf_fp/fpa_list.pdf. This directory contains an alphabetic listing of the communities and counties participating in the National Flood Insurance Program, along with their designated floodplain administrators and points of contact. These entities participate in the National Flood Insurance Program and administer a flood damage prevention ordinance. Any development in the floodplains in these communities/counties requires a floodplain development permit from their respective floodplain administrator.

Also, if this project falls on state owned or operated property, such as crossing a state highway, within the regulatory floodplain, a floodplain permit is required from the Oklahoma Water Resources Board. Enclosed is a permit application and a copy of Chapter 55 that addresses these requirements.

OWRB has a Memorandum of Agreement with ODOT regarding road and bridge development on state owned or operated property within the floodplain. Please coordinate this project with John Dyer of your office.

If you have any questions, please contact the State Floodplain Manager at (405) 530-8800.

Sincerely,

Michael E. Mathis, Chief
Planning and Management Division

cc: John Dyer, ODOT

OKLAHOMA

BRAD HENRY, GOVERNOR

GREG D. DUFFY, DIRECTOR

DEPARTMENT OF WILDLIFE CONSERVATION

1801 N. Lincoln P.O. Box 53465 Oklahoma City, OK 73152 PH. 521-3851

June 28, 2004

Ms. Dawn Sullivan
Planning and Research Division Engineer
Oklahoma Department of Transportation
200 NE 21st St.
Oklahoma City, Ok 73105

RE: US-70 Improvement, McCurtain Co., Oklahoma

Dear Ms. Sullivan,

This responds to your letter of March 19 2003 concerning improvements to US-70 in McCurtain County. The proposed project consists of adding two lanes to US-70 and resurfacing the existing lanes. The project will extend for approximately 6.4 miles to the Oklahoma-Arkansas border.

Please understand that, due to financial and personnel constraints, the Oklahoma Department of Wildlife Conservation (ODWC) has not conducted an actual field survey of the proposed project to determine its impacts on state-listed threatened or endangered species, species of special concern, critical habitat or Wildlife Management Areas (WMAs). Based on this review, one state listed endangered species and several Species of Special Concern Category 2 (SSII) have been known to occur in the area. A SSII is a species that has been identified by technical experts as possibly threatened or extirpation but for which additional information is needed. These species include the Red-Cockaded Woodpecker (Picoides borealis), Woodchuck (Marmota monax) and Alligator Snapping Turtle (Macroclemys temminckii), respectively.

McCurtain County is a naturally diverse area and contains several federally listed species as well. These species include the American Burying Beetle (Endangered), Interior Least Tern (Endangered), Ouachita Rock Pocketbook Mussel (Endangered), Winged Mapleleaf Mussel (Endangered), American Alligator (Threatened), Bald Eagle (Threatened), Leopard Darter (Threatened and Critical Habitat), Piping Plover (threatened), and Scaleshell Mussel (Endangered). For information on federally listed threatened or endangered species, please contact the U.S. Fish and Wildlife Service, Ecological Services, 222 South Houston, Suite A. Tulsa, OK 74127 or http://ifw2es.fws.gov/Oklahoma/endsp.htm.

Search for the Scissortail on Your State Tax Form

Few opportunities exist for meaningful wildlife habitat improvement or enhancement in association with highway construction or reconstruction projects. The best course of action is to minimize the impact of highway projects on local wildlife populations and to mitigate for habitat losses and degradations. As general guidelines, we recommend the following measures to reduce the impact of highway construction on local wildlife populations through the alteration or loss of habitat.

1) Disturbance to the following habitat types (if applicable) should be avoided to the greatest extent possible during construction: streams, wetlands, springs, rock outcrops, caves. These habitat types are usually limited in quantity and their loss is difficult to mitigate. Highway routes should be chosen which take advantage of previously disturbed lands such as crop fields, improved pastures and existing road or utility right-of-ways. We appreciate ODOT's efforts to choose highway routes accordingly.

2) The wildlife-related impact of cement barriers between lanes of opposing the traffic is still poorly understood. In general, we support the use of cement barriers for short distances (<700 feet) in the vicinity of stream crossings to reduce the overall width of disturbed right-of-way and stream bank. We do not, however, recommend cement barriers for extended lengths because of their potential to block the local movement of wildlife.

3) All wetland loses should be mitigated in accordance with the provisions of Sections 404 and 401 of the Clean Water Act.

3) Erosion control measures should be installed and maintained throughout the construction phase of the project. This is especially important in the vicinity of streams and wetlands. At a minimum, this should involve the use of Best Management Practices for the control of erosion and storm water runoff and may include a combination of:

a) vegetated buffer zones around the construction area and all streams or wetlands,
b) silt fencing around the construction area,
c) stabilization of disturbed ground using mulch, erosion control fabric or temporary vegetation during construction, or
d) the construction of storm water retention or detention basins.

**We recommend that you contact your county office of the Natural Resources Conservation Service for more information regarding these Best Management Practices or for technical references refer to* http://www.nrcs.usda.gov/technical/references/

6) Final revegetation of disturbed ground on highway right-of-ways should be accomplished using only native grasses and forbs. The use of exotic plant species should be avoided to minimize the spread of these species into undisturbed habitats.

7) Nonselective blanket-spraying of vegetation should be avoided as a means of vegetation control during routine right-of-way maintenance. We recommend brush-hogging, mowing or other mechanical methods rather than the application of broadleaf herbicides. The non-selective used of broadleaf herbicides can reduce the diversity of forbs and shrubs on the right-of-way which are important sources of food and cover for much wildlife species.

We appreciate the opportunity to review this project and submit comments. I apologize for the lack of timeliness concerning this correspondence. If we can be of further assistance, please contact our Natural Resources Section at 405/521-4663.

Sincerely,

Ferrella March
Natural Resources Biologist

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, TULSA DISTRICT
1645 SOUTH 101ST EAST AVENUE
TULSA, OKLAHOMA 74128-4609

June 10, 2004

Planning, Environmental, and Regulatory Division
Regulatory Branch

Ms. Dawn Sullivan, P. E.
Planning and Research Division Engineer
Oklahoma Department of Transportation
200 Northeast 21st Street
Oklahoma City, OK 73105-3204

Dear Ms. Sullivan:

This response is in reference to your letter dated May 19, 2004, for a proposed transportation project involving US-70 starting approximately 6.4 miles east of Broken Bow, McCurtain County, Oklahoma, and extending to the Arkansas state line. At least twelve distinct crossings of regulated watercourses have been preliminarily identified; others may later be determined. The proposed project is a candidate for authorization under Nationwide Permit for Linear Transportation Crossings (NWP-14) however, the information necessary to process this request has not been provided. Future submittals must include absolute route, design, and other information constituting a complete application package. Each watercourse crossing must be specifically identified by its latitude and longitude.

Your proposal has the potential to impact more than 1/10 acre of "Waters of the United States" (WOUS), which may include "Special Aquatic Sites" (SAS) (i.e. wetlands, riffle and pool complexes, etc.). Wetlands must be identified according to the U.S. Army Corps of Engineers 1987 Wetlands Delineation Manual.

If you wish to pursue processing under NWP-14, the information required in the enclosed General Condition 13 must be submitted to this office. In particular, for any discharge into a WOUS, you must include a delineation of the WOUS and a compensatory mitigation plan to offset permanent losses of WOUS. Mitigation plans should be designed to ensure losses result in minimal adverse effects to the aquatic environment (WOUS). All forms of compensatory mitigation (avoidance, minimization, restoration/enhancement, vegetative buffers, replacement, etc.) will be considered in our minimal adverse effects determination. You must also include a statement describing how temporary impacts will be minimized to the maximum extent practicable.

We will continue processing of your request when all required information is received as required by General Condition 13. If the terms and conditions of the NWP-14 cannot be complied with, it may be necessary to initiate the application process for a Standard Individual Department of the Army Permit.

Please refer to file tracking **Identification Number 13848** in all future correspondence. If further assistance is required, please contact Mr. Timothy Hartsfield at 918-669-7237.

Sincerely,

Larry D. Hogue, P.E.
Chief, Planning, Environmental,
and Regulatory Division

Enclosure

Nationwide Permit for Linear Transportation Projects (NWP 14)

Activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, airport runways, and taxiways) in waters of the United States, including wetlands, if the activity meets the following criteria:

a. This Nationwide Permit (NWP) is subject to the following acreage limits:

(1) For linear transportation projects in non-tidal waters, provided the discharge does not cause the loss of greater than 1/2 acre of waters of the U.S.; or

(2) For linear transportation projects in tidal waters, provided the discharge does not cause the loss of greater than 1/3 acre of waters of the U.S.

b. The permittee must notify the District Engineer (DE) in accordance with General Condition 13 if any of the following criteria are met:

(1) The discharge causes the loss of greater than 1/10 acre of waters of the U.S.; or

(2) There is a discharge in a special aquatic site, including wetlands;

c. The notification must include a compensatory mitigation proposal to offset permanent losses of waters of the U.S. to ensure that those losses result only in minimal adverse effects to the aquatic environment and a statement describing how temporary losses will be minimized to the maximum extent practicable;

d. For discharges in special aquatic sites, including wetlands, and stream riffle and pool complexes, the notification must include a delineation of the affected special aquatic sites;

e. The width of the fill is limited to the minimum necessary for the crossing;

f. This permit does not authorize stream channelization, and the authorized activities must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality of any stream (see General Conditions 9 and 21);

g. This permit cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars; and

h. The crossing is a single and complete project for crossing waters of the U.S. Where a road segment (i.e., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of streams (several single and complete projects) the U.S. Army Corps of Engineers (Corps) will consider whether it should use its discretionary authority to require an individual permit.

Note: Some discharges for the construction of farm roads, forest roads, or temporary roads for moving mining equipment may be eligible for an exemption from the need for a Section 404 permit (see 33 CFR 323.4).

This NWP is authorized pursuant to Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act. This NWP (33 CFR 330) became effective March 18, 2002, following publication in the Federal Register.

General Conditions: The following general conditions must be followed for any authorization by this NWP to be valid:

1. Navigation. No activity may cause more than a minimal adverse effect on navigation.

2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the U.S. during periods of low flow or no flow.

4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low-flow conditions.

5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance.

6. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e))and with any case specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality Certification (see enclosure).

For all discharges proposed for authorization under any NWP into the following habitat types or specific locations, the applicant shall notify the appropriate DE in accordance with the NWP General Condition 13. The Corps will coordinate with the resource agencies as specified in NWP General Condition 13(e).

a. Wetlands, typically referred to as pitcher plant bogs, that are characterized by an organic surface soil layer and include vegetation such as pitcher plants (Sarracenia sp.), sundews (Drosera sp.), and sphagnum moss (Sphagnum sp.).

b. Swamps dominated by bald cypress (Taxodium distichum) and tupelo gum (Nyssa aquatica) tree species.

permittee does not provide all of the requested information, then the DE will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the DE. The prospective permittee shall not begin the activity:
(1) Until notified in writing by the DE that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer; or
(2) If notified in writing by the District or Division Engineer that an individual permit is required; or
(3) Unless 45 days have passed from the DE's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
b. Contents of Notification. The notification must be in writing and include the following information:
(1) Name, address and telephone numbers of the prospective permittee;
(2) Location of the proposed project;
(3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and result in a quicker decision.);
(4) For NWP 14, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f));
(5) For NWP 14 (Linear Transportation Projects), the PCN must include a compensatory mitigation proposal to offset permanent losses of waters of the U.S. and a statement describing how temporary losses of waters of the U.S. will be minimized to the maximum extent practicable;
(6) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and
(7) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.
c. Form of Notification: The standard individual permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b)(1)-(7) of General Condition 13. A letter containing the requisite information may also be used.
d. DE's Decision: In reviewing the PCN for the proposed activity, the DE will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The DE will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the DE determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the DE will notify the permittee and include any conditions the DE deems necessary. The DE must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the DE will expeditiously review the proposed compensatory mitigation plan. The DE must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the DE to be minimal, the DE will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the DE determines that the adverse effects of the proposed work are more than minimal, then the DE will notify the applicant either:
(1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;
(2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or
(3) that the project is authorized under the NWP with specific modifications or conditions.

d. Compensatory mitigation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, 1/4 acre of wetlands cannot be created to change a 3/4 acre loss of wetlands to a 1/2 acre loss associated with NWP 39 verification. However, 1/2 acre of created wetlands can be used to reduce the impacts of a 1/2 acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.

e. To be practicable, the mitigation must be available and capable of being done considering costs, existing technology, and logistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

f. Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of vegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native species. The width of the vegetated buffers required will address documented water quality or aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feet wide on each side of the stream, but the DEs may require slightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the Corps will determine the appropriate compensatory mitigation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory mitigation, the DE may waive or reduce the requirement to provide wetland compensatory mitigation for wetland impacts.

g. Compensatory mitigation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the U.S.

h. Permittees may propose the use of mitigation banks, in-lieu fee arrangements, or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas. Activities, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the U.S. or discharges of dredged or fill material.

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the U.S. or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.

24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.

25. Designated Critical Resource Waters. Critical resource waters include National Wild and Scenic Rivers, critical habitat for Federally-listed threatened and endangered species, state natural heritage sites, and outstanding National resource waters

Oklahoma Historical Society

Founded May 27, 1893

State Historic Preservation Office • 2704 Villa Prom • Shepherd Mall • Oklahoma City, OK 73107-2441
Telephone 405/521-6249 • Fax 405/947-2918

June 22, 2004

Ms. Dawn Sullivan
Planning & Research Division Engineer
Dept. of Transportation
200 Northeast 21st Street
Oklahoma City, OK 73105-3204

RE: File #1729-04; US-70 Proposed Improvements in McCurtain County

Dear Ms. Sullivan:

We have reviewed the documentation relating to the referenced project. We have no objection to your continued program planning. However, when specific impacted properties are identified, we request that documentation and photographs, for any structures in excess of 45 years of age, be submitted on Historic Preservation Resource Identification Forms. Structures less than 45 years of age do not require forms; however, documentation submitted must provide the addresses of the properties and their date of construction. If there are no impacted structures, a letter to that effect should be forwarded to this office.

When this documentation is received and reviewed, we will issue an opinion on the effect of the program on Oklahoma's cultural and historical resources. We appreciate your cooperation in the effort to identify and preserve the cultural heritage of Oklahoma.

If you have any questions, please contact Charles Wallis, RPA, Historical Archaeologist, at 405/521-6381.

Please reference the above underlined file number when responding. Thank you.

Sincerely,

Charles S. Wallis

Melvena Heisch
Deputy State Historic
Preservation Officer

MH:pm

United States Department of the Interior
BUREAU OF INDIAN AFFAIRS
Eastern Oklahoma Regional Office
P.O. Box 8002
Muskogee, OK 74402-8002

TAKE PRIDE IN AMERICA

IN REPLY REFER TO:
Environmental, Safety and
Cultural Resources

JUN 2 2 2004

RECEIVED
ODOT
JUN 2 3 2004
PLANNING & RESEARCH
DIVISION

Planning and Research Division Engineer
Oklahoma Department of Transportation
Attention: Ms. Dawn Sullivan, P.E.
200 Northeast 21st Street
Oklahoma City, Oklahoma 73105

Dear Ms. Sullivan:

On May 25, 2004, the Bureau of Indian Affairs, Eastern Oklahoma Regional Office, received a public notice soliciting comments for improvements to US-70 in McCurtain County, Oklahoma.

The project lies within the jurisdictional area of the Choctaw Nation of Oklahoma, a Federally recognized Tribe. If improvements to US-70 affects trust or restricted Indian land, additional actions to meet the requirements of the National Environmental Policy Act of 1969, as amended, may be necessary. Therefore, it is recommended that the Oklahoma Department of Transportation coordinate directly with the Choctaw Nation of Oklahoma on any of their concerns. The contact official for the Tribe is:

Honorable Gregory E. Pyle, Chief
Choctaw Nation of Oklahoma
P.O. Drawer 1210
Durant, Oklahoma 74702-1210

If additional information is required, please contact Mr. Bobby Coleman, Acting Division Chief, Division of Environmental, Safety and Cultural Resources, Eastern Oklahoma Regional Office, at (918) 781-4642.

Respectfully,

Karen Kitcher

Acting Regional Director

Choctaw Nation of Oklahoma

Drawer 1210 • Durant, Oklahoma 74702-1210 • (580) 924-8280

Gregory E. Pyle
Chief

Mike Bailey
Assistant Chief

John Hartley
Oklahoma Department of Transportation
200 Northeast 21st Street
Oklahoma City, OK 73105

Dear Mr. Hartley,

This is to confirm our telephone conversation on June 6, 2004. We agreed that I would have an extension of time to prepare my evaluation on the highway expansion study of state highway 70 east of Broken Bow. The project is to add 2 new parallel lanes and resurface the existing lanes. The segment of study is from 6.4 miles east of the SH-3 and SH-70 junction in Broken Bow and extends to the Oklahoma/ Arkansas state line.

This area is of great concern to the Choctaw Nation of Oklahoma. The Choctaws settled in the area in the early 1830's, following the removal from the homeland in Mississippi. The history of the Choctaw people's beginning in their new land is rich in the proposed project area. This extension will provide me time to do research, visit Choctaws living in the area for their input of cultural interests, and locating historical sites.

Thank you for your consideration.

Sincerely,

Olin Williams
Tribal Historic Preservation Officer
Choctaw Nation of Oklahoma

cc: Ms. Valli Powell Marti, ODOT Tribal Liaison

JERRY ELLIS
State Representative

2300 North Lincoln Blvd. - Rm. 300
Oklahoma City, OK 73105-4885
(405) 557-7363

P.O. Box 317
Valliant, OK 74764
(580) 933-4930

House of Representatives

STATE OF OKLAHOMA

District 1

COMMITTEES:
Vice Chairman
Commerce, Industry and Labor

MEMBER:
Environment and Natural Resources
Transportation
Veterans and Military Affairs
Wildlife

June 1, 2004

Gwen Christie
Planning and Research Division Engineer
Oklahoma Department of Transportation
200 Northwest 21st Street
Oklahoma City, Oklahoma 73105

Ms. Gwen Christie:

Oklahoma Department of Transportation requested comments on the section of highway beginning 6.4 miles east of Broken Bow and extending east to the Arkansas state line. Safety is a top priority with ODOT and we appreciate your concern and interest in McCurtain County.

The section of travel in focus receives heavy truck traffic daily. Broken Bow has two large trucking firms coupled with large log and wood chip trucks. With a high volume of large trucks, the addition of two lanes would greatly improve safety.

I appreciate the opportunity to comment. If you should need more information feel free to call on my at any time.

Sincerely,

Jerry Ellis
State Representative
District 1

CADDO TRIBE OF OKLAHOMA

Cultural Preservation Department
Post Office Box 487
Binger, Oklahoma 73009
405-656-2901 405-656-2344
Fax # 405-656-2892

June 2, 2004

RECEIVED
ODOT
JUN 0 4 2004
PLANNING & RESEARCH
DIVISION

Ms. Dawn Sullivan, P.E.
Planning and Research Division Engineer
Oklahoma Department of Transportation
200 Northeast 21st Street
Oklahoma City, OK 73105

Re: US-70 Improvements in McCurtain County

Dear Ms. Sullivan:

The Caddo Nation of Oklahoma has a long history in the above referenced area. There are many mound locations and associated villages of the Caddo located in this area. We would ask that ODOT consult with us prior to any ground disturbing activities. We would also like to receive copies of any previous cultural resource survey reports that relate to the construction of the highway.

Thank you for your time and consideration.

Sincerely,

Robert Cast
Tribal Historic Preservation Officer
Caddo Nation of Oklahoma

Gwen:
File & do
Carter Burgess

Valli – if we haven't initialed Sec 106 Tribal review yet... pls get with Coreen for basic info & copy of report when finished – Get with Robert for previous US 70 Reports in CADDO AREA ~

Oklahoma Archeological Survey
THE UNIVERSITY OF OKLAHOMA

May 24, 2004

Dawn Sullivan
Oklahoma Department of Transportation
200 NE 21st Street
Oklahoma City, OK 73105-3204

RE: Proposed addition of 2 lanes and re-surface of existing lanes on US-70. Legal Description: Sections 7, 8, 9, 10, 11, 12, T6S R26E; Sections 7, 8, 9, 4, 3, T6S R27E, McCurtain County, Oklahoma.

Dear Ms. Sullivan:

The above referenced project has been reviewed by the Community Assistance Program staff of this agency to identify potential areas that may contain prehistoric or historic archaeological materials (historic properties). The location of your project has been cross-checked with the state site files containing approximately 18,000 archaeological sites which are currently recorded for the state of Oklahoma. **Site(s) are listed in your project area, (MC-746, MC-544, MC-443 and 1899 GLO – Eagletown P.O.)** and based on the topographic and hydrologic setting of your project, archeological materials are likely to be encountered. **An archaeological field inspection is therefore considered necessary prior to project construction in order to identify significant archaeological resources that may exist in your area.** Please contact this office at (405) 325-7211 if you require additional information on this project.

This environmental review and evaluation is performed in order to locate, record, and preserve Oklahoma's prehistoric and historic cultural heritage in cooperation with the State Historic Preservation Office, Oklahoma Historical Society. If you have not done so, you should also be simultaneously submitting this application to their office. In addition to these review comments, under 36CFR Part 800.3 you are reminded of your responsibility to consult with the appropriate Native American tribe/groups to identify any concerns they may have pertaining to this undertaking and potential impacts to properties of traditional and/or ceremonial value. Thank you for your cooperation.

Sincerely,

Heather Szarka
Staff Archaeologist

Robert L. Brooks
State Archaeologist

:ls

cc: SHPO
Robert Bartlett

Solicitation Resp - provide copy to Carter Burgess - keep in our project file also

OKLAHOMA DEPARTMENT OF TRANSPORTATION

May 19, 2004

Mr. Chester Dennis
Executive Director
Kiamichi Economic Development District
PO BOX 638
Wilburton, Oklahoma 74578

RECEIVED
ODOT-PLANNING
2004 MAY 26 PM 2:55

Dear Mr. Dennis:

The Oklahoma Department of Transportation is soliciting comments on a study to improve US-70 in McCurtain County (see the attached map). The study corridor begins approximately 6.4 miles east of the junction of SH-3 in Broken Bow and extends east to the Oklahoma/Arkansas state line. This project is in the developmental stages and any comments relative to the social, economic, or environmental effects of this proposal will be appreciated.

US-70 is currently a two-lane roadway with shoulders. This segment of roadway is classified as inadequate on the Oklahoma Department of Transportation Highway Sufficiency Rating Map. The Department proposes to add 2 new parallel lanes and resurface the existing lanes through this segment of roadway.

The project is in the early stages of development and any comments relative to the corridor or items previously listed would be appreciated. To allow for adequate time for evaluation of your suggestions, we would appreciate receiving your comments within fifteen days of this letter. Your written comments should be directed to the Planning & Research Division Engineer, Oklahoma Department of Transportation, 200 Northeast 21st Street, Oklahoma City, OK 73105.

We sincerely appreciate your cooperation in this matter. ODOT has contracted with Carter & Burgess, Inc. on this project. For further information or if you have any questions, please contact Ms. Stephanie Hansen at Carter & Burgess (405-810-8254 or hansensa@c-b.com) or ODOT's Project Manager, Ms. Gwen Christie (405-521-2535 or gchristie@ODOT.org).

Sincerely,

Dawn Sullivan, P.E.
Planning & Research Division Engineer

DRS/gc:sah
Attachment: Location Map

NO FINDINGS
KEDDO has no further comment on the described action
Date 5/21/04
Approved by
Kiamichi Economic Development District of Oklahoma

DUANE A. SMITH
EXECUTIVE DIRECTOR

BRAD HENRY
GOVERNOR

RECEIVED
ODOT
JUN 0 2 2004
PLANNING & RESEARCH
DIVISION

STATE OF OKLAHOMA
WATER RESOURCES BOARD
www.owrb.state.ok.us

June 1, 2004

Ms. Dawn R. Sullivan, P.E.
ODOT
200 NE 21st Street
Oklahoma City, OK 73105-3204

RE: Proposed improvements to US-70 in McCurtain County.

Dear Ms. Sullivan:

Thank you for your letter concerning environmental review of your proposed project. Please contact the appropriate local floodplain administrator listed in the directory located at the following website: www.owrb.state.ok.us/hazard/fp/pdf_fp/fpa_list.pdf. This directory contains an alphabetic listing of the communities and counties participating in the National Flood Insurance Program, along with their designated floodplain administrators and points of contact. These entities participate in the National Flood Insurance Program and administer a flood damage prevention ordinance. Any development in the floodplains in these communities/counties requires a floodplain development permit from their respective floodplain administrator.

Also, if this project falls on state owned or operated property, such as crossing a state highway, within the regulatory floodplain, a floodplain permit is required from the Oklahoma Water Resources Board. Enclosed is a permit application and a copy of Chapter 55 that addresses these requirements.

OWRB has a Memorandum of Agreement with ODOT regarding road and bridge development on state owned or operated property within the floodplain. Please coordinate this project with John Dyer of your office.

If you have any questions, please contact the State Floodplain Manager at (405) 530-8800.

Sincerely,

Michael E. Mathis, Chief
Planning and Management Division

cc: John Dyer, ODOT

BRAD HENRY
GOVERNOR

KATHRYN TAYLOR
SECRETARY OF
COMMERCE & TOURISM

OKLAHOMA TOURISM & RECREATION DEPARTMENT

RALPH McCALMONT
INTERIM DIRECTOR

June 4, 2004

Ms. Dawn R. Sullivan, P.E.
Oklahoma Department of Transportation
200 N.E. 21st
Oklahoma City, OK 73105

RE: US-70 Improvements

Dear Ms. Sullivan:

We have examined our records regarding park and recreation areas in McCurtain County. There is one project near the project area that has utilized federal funds under the Land and Water Conservation Fund program. Attached is a description of this project. Beavers Bend State Park is also near the project area.

If there will be no permanent impact on the State Park facility or federal project location, then there will be no negative impact. If additional right-of-way will be needed that would affect any of these locations, a conversion may result in that this land is protected under Section 6F of the Land and Water Conservation Act.

Thank you for the opportunity to review this project proposal. If you have any questions, please give me a call at 405-521-2904.

Sincerely,

Susan Henry

Susan Henry, Planner
Division of Planning and Conservation

Attachment: 1

15 NORTH ROBINSON, SUITE 100 · OKLAHOMA CITY, OK 73102
TEL: (405) 521-2413 · FAX (405) 522-5354 · TRAVELOK.COM

Congressional District 2

Project	*Sponsor Name*	*County Name*	*Funding*
EAGLETOWN COMMUNITY PARK	EAGLETOWN PUBLIC SCHOOLS	MCCURTAIN	18,749.48
DEVELOP A CITY PARK ON SCHOOL LAND. SITE PREPARATION, LANDSCAPING, PERIMETER FENCING, WATER FOUNTAINS, PICNIC TABLES, TOT LOT, COOKING GRILLS STORAGE CABINET FOR EQUIPMENT, AND MULTI-PURPOSE COURTS. SIGNS.			

CADDO TRIBE OF OKLAHOMA

Cultural Preservation Department

Post Office Box 487
Binger, Oklahoma 73009
405-656-2901 405-656-2344
Fax # 405-656-2892

September 15, 2005

Ms. Dawn R. Sullivan, P. E.
Planning and Research Division Engineer
200 N. E. 21st Street
Oklahoma City, Oklahoma 73105-3204

Re: Proposed Improvements to US-70 in McCurtain County

Dear Ms. Ramsey:

The Caddo Nation of Oklahoma has a long history in this area of Oklahoma. There are many sites in the area of McCurtain County that the Caddo would consider to be a small part of their cultural landscape. Many of these locations may also be traditional cultural properties and eligible for the National Register of Historic Places.

We ask that we be provided more information concerning the exact boundaries of the project, what the area of potential effect is considered to be at this time, and any known historic properties that are within, or near to, the area of potential effect. We appreciate the opportunity to comment on this proposed undertaking.

Sincerely,

Robert Cast
Tribal Historic Preservation Officer
Caddo Nation of Oklahoma

Cc: Rhonda Fair, ODOT

Appendix 9: Public Meeting Minutes

Carter Burgess

MEETING REPORT

PROJECT:	US 70: East of Broken Bow to the Oklahoma/Arkansas State Line	**PROJECT NO.:**	ODOT 17427(05) C&B 022094.010
PRESENT:	See Attached Sign-In Sheets	**MEETING DATE:**	August 30, 2005 6:00 pm – 8:00 pm

The following is our understanding of the subject matter covered in this meeting. If this differs from your understanding, please notify Sandy Wesch-Schulze at 214-638-0145 within five (5) working days.

The Oklahoma Department of Transportation (ODOT) conducted a Public Meeting (open house format) to solicit public comments on the proposed improvements to US 70 from east of Broken Bow to the Oklahoma/Arkansas State Line. The meeting was held at the Broken Bow Public Library located at 404 North Broadway in Broken Bow, Oklahoma on Tuesday, August 30, 2005. The meeting was scheduled from 6:00 p.m. to 8:00 p.m. However, the meeting was adjourned at 7:20 pm due to the low community attendance.

A total of 60 public meeting notices were mailed to persons listed on the mailing list (to elected officials and interested parties). Newspaper ads for the open house meeting were published in two newspapers:

- McCurtain Daily Gazette – August 21, 2005
- McCurtain County News – August 24, 2005

A registration table was set up at the entrance to the conference room with sign-in sheets for attendees, elected officials, and the media. Handouts made available to the attendees included a fact/information sheet with a location map and time schedule and a written comment form. The registration attendance totaled 16 people: three people registered from the public and 13 people registered as part of the ODOT team. One elected official, State Representative Jerry Ellis, was also present at the public meeting.

Exhibits displayed at the open house included aerial photos of the entire project length showing environmental constraints, a display board showing the typical section of the proposed roadway, and environmental process cards. Viewing of the project exhibits and informal discussion sessions were held throughout the duration of the meeting to give attendees an opportunity to view the displays and to ask questions regarding the proposed project with the project team members present. No formal presentation was given at this meeting. No written comment forms were received at the public meeting.

A comment period (until September 14, 2005) was given after the meeting to allow comment forms to be submitted to ODOT. No comments were mailed or received by ODOT after the public meeting regarding the proposed project.

REPORTED BY: Nathan Drozd

Attachments: August 30, 2005 Sign-In Sheets