

Final
**Environmental Assessment for the
Implementation of Base Realignment and Closure 2005
Realignment Actions at Jonesboro, Arkansas**



Prepared for:

U.S. ARMY RESERVE

Prepared by:

**U.S. ARMY CORPS OF ENGINEERS
MOBILE DISTRICT**

April 2009

ENVIRONMENTAL ASSESSMENT ORGANIZATION

This environmental assessment addresses the proposed action to construct and operate an Armed Forces Reserve Center in Jonesboro, Arkansas, pursuant to 2005 Base Closure and Realignment Commission (BRAC Commission) recommendations. It has been developed in accordance with the National Environmental Policy Act and implementing regulations issued by the Council on Environmental Quality (Title 40 of the *Code of Federal Regulations* [CFR] Parts 1500–1508) and the Army (32 CFR Part 651). Its purpose is to inform decisionmakers and the public of the likely environmental and socioeconomic consequences of the proposed action and alternatives.

An ***EXECUTIVE SUMMARY*** briefly describes the proposed action, environmental and socioeconomic consequences, and mitigation measures.

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SECTION 1.0: ***PURPOSE, NEED, AND SCOPE*** summarizes the purpose of and need for the proposed action and describes the scope of the environmental impact analysis process.

SECTION 2.0: ***PROPOSED ACTION*** describes the proposed action to implement the BRAC Commission recommendations at Jonesboro, Arkansas.

SECTION 3.0: ***ALTERNATIVES*** examines alternative sites and alternatives to implementing the proposed action.

SECTION 4.0: ***AFFECTED ENVIRONMENT AND CONSEQUENCES*** describes the existing environmental and socioeconomic setting at the proposed sites and Jonesboro and identifies potential effects of implementing the proposed action and alternatives.

SECTION 5.0: ***FINDINGS AND CONCLUSIONS*** summarizes the environmental and socioeconomic effects of implementing the proposed action.

SECTION 6.0: ***LIST OF PREPARERS*** identifies the persons who prepared the document.

SECTION 7.0: ***DISTRIBUTION LIST*** indicates recipients of this environmental assessment.

SECTION 8.0: ***REFERENCES*** provides bibliographical information for cited sources.

SECTION 9.0: ***PERSONS CONSULTED*** provides a listing of persons and agencies consulted during preparation of this environmental assessment.

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- A*** Emissions calculations and Record of Non-applicability
- B*** Scientific names of species mentioned in the document
- C*** Agency coordination letters
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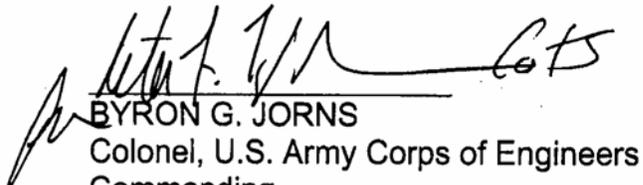
ACRONYMS AND ABBREVIATIONS provides a list of acronyms and abbreviations used in the document.



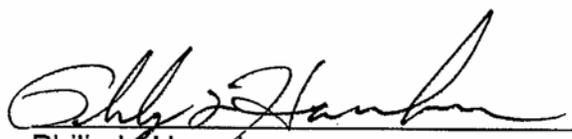
**FINAL ENVIRONMENTAL ASSESSMENT FOR THE
IMPLEMENTATION OF BASE REALIGNMENT AND CLOSURE
2005 REALIGNMENT ACTIONS AT JONESBORO, ARKANSAS**

Prepared by:

U.S. ARMY CORPS OF ENGINEERS
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ENVIRONMENTAL ASSESSMENT

LEAD AGENCY: U.S. Army Reserve, 90th Regional Readiness Command

TITLE OF PROPOSED ACTION: Final Environmental Assessment for the Implementation of Base Realignment and Closure 2005 Realignment Actions at Jonesboro, Arkansas

AFFECTED JURISDICTION: Jonesboro, Arkansas

PREPARED BY: Byron G. Jorns, Colonel, Corps of Engineers, Commanding, U.S. Army Corps of Engineers, Mobile District

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ABSTRACT: This environmental assessment (EA) considers the proposed construction and operation of an Armed Forces Reserve Center at Jonesboro, Arkansas, pursuant to the 2005 Base Closure and Realignment Commission (BRAC Commission) recommendations. The EA identifies, evaluates, and documents the environmental and socioeconomic effects of facility construction, renovation, maintenance, and operation proposed to accommodate the changes mandated by the BRAC Commission. A No Action Alternative is also evaluated. Implementation of the proposed action is not expected to result in significant environmental or socioeconomic effects. Therefore, preparation of an environmental impact statement is not required, and a finding of no significant impact (FNSI) will be published in accordance with the National Environmental Policy Act.

REVIEW COMMENT DEADLINE: The EA and draft FNSI are available for review and comment for 30 days from publication of a Notice of Availability in the Jonesboro *Sun*. Copies of the EA and draft FNSI can be obtained by contacting Sam Pett at 703-385-6000, or at sam.pett@tetrattech.com. A copy of the EA and draft FNSI is available in Jonesboro at the Craighead County Jonesboro Public Library, 315 W. Oak Avenue, Jonesboro, and the EA and draft FNSI can be read on the Internet at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm. Comments on the EA and draft FNSI should be submitted to Mr. James Wheeler II at 90th RRC, 8000 Camp Robinson Road, N. Little Rock, Arkansas 72118, or by e-mail to jim.wheeler@usar.army.mil by no later than the end of the public comment period.

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EXECUTIVE SUMMARY

ES.1 INTRODUCTION

This environmental assessment (EA) describes and analyzes the effects of constructing and operating an Armed Forces Reserve Center and associated actions on the natural and human environment in Jonesboro, Arkansas, pursuant to 2005 Defense Base Closure and Realignment Commission (BRAC Commission) recommendations.

ES.2 BACKGROUND

With respect to Jonesboro, Arkansas, the BRAC Commission recommended in relevant part:

Close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center and Field Maintenance Site in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC shall have the capability to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro, Arkansas, the Arkansas Army National Guard Readiness Center, Paragould, Arkansas, and the Field Maintenance Site (FMS), Jonesboro if the state decides to relocate those National Guard units.

Relocation of units, equipment, and personnel from the U.S. Army Reserve Center in Jonesboro and Arkansas National Guard units from the Arkansas Army National Guard Readiness Center in Jonesboro, the Arkansas Army National Guard Readiness Center in Paragould, Arkansas, and the Field Maintenance Site in Jonesboro would require construction and operation of new facilities at Jonesboro. In this EA, the Army identifies and describes the environmental effects associated with its proposed action at Jonesboro, Arkansas.

ES.3 PROPOSED ACTION AND ALTERNATIVES

ES.3.1 Proposed Action (Preferred Alternative)

The Army proposes to construct and operate a new Armed Forces Reserve Center (AFRC) large enough for 400 personnel at Jonesboro, Arkansas. The primary facilities would be an AFRC training building, an Organizational Maintenance Shop, organizational parking, and unheated unit storage. Actions taken to support the facilities would include land clearing, paving, fencing, general site improvement, and extending utilities to serve the project. The AFRC training building would provide approximately 75,416 square feet (ft²) of space, the Organizational Maintenance Shop would have approximately 20,486 ft² of space, and the unheated storage building would have approximately 1,520 ft² of space. The project would provide adequate parking for all military and privately owned vehicles. Contract award for the design is scheduled to occur in May 2009 and construction would be completed by no later than February 2011.

The AFRC would be in the Jonesboro area on a 20-acre parcel of land in the southwest corner of the intersection of C.W. Post Road and Moore Road. The property is undeveloped.

ES.3.2 Site 5 Alternative

Under the Site 5 Alternative, the AFRC would be constructed and operated on a 20-acre site at 3911 S. Caraway Road. Access would be from Caraway Road. The site is relatively flat, with a slight incline along its southern edge. The site contains a former home site consisting of a house, barn, and storage shed.

ES.3.3 Site 9 Alternative

Under the Site 9 Alternative, the AFRC would be constructed and operated on a 25-acre site on North Church Street (Highway 141) and Magnolia Road. This site is not flat and is an odd-shaped property.

ES.3.4 No Action Alternative

Inclusion of the No Action Alternative is prescribed by Council on Environmental Quality regulations. The No Action Alternative serves as a baseline alternative against which other alternatives can be evaluated. Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities. The units proposed for relocation under the proposed action would continue to operate from their current facilities. The No Action Alternative is evaluated in detail in this EA.

ES.4 ENVIRONMENTAL CONSEQUENCES

The EA evaluates potential effects on land use, aesthetics and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances. For each resource, the predicted effects from implementing the proposed action (identified as the Army's Preferred Alternative) and the No Action Alternative are briefly described below. The consequences of the alternatives are summarized in Table ES-1.

ES.4.1 Preferred Alternative

No adverse effects from implementing the proposed action would be expected on the following resource areas: land use; geology and topography; water resources (including the coastal zone); sensitive species; wetlands; cultural resources; and population, housing, quality of life, environmental justice, and the protection of children. *Short-term minor adverse* effects from implementing the proposed action would be expected on the following resource areas: air quality, the noise environment, soils, and transportation. *Short-term minor beneficial* effects from implementing the proposed action would be expected on economic development. *Long-term minor adverse* effects from implementing the proposed action would be expected on aesthetics and visual resources, air quality, prime farmland soils, floodplains, vegetation, wildlife, transportation, utility systems, and hazardous and toxic substances. None of the adverse effects associated with implementing the proposed action would be significant.

ES.4.2 Site 5 Alternative

No adverse effects from implementing the Site 5 Alternative would be expected on the following resource areas: geology; topography; prime farmland soils; water resources (including floodplains

Table ES-1
Summary of potential environmental and socioeconomic consequences

| Environmental and socioeconomic effects | | | | |
|--|---------------------------------------|------------------------------------|------------------------------------|------------------------------|
| Resource area | Preferred Alternative | Site 5 Alternative | Site 9 Alternative | No Action Alternative |
| Land use | No effects | Long-term minor adverse | Long-term minor adverse | No effects |
| Aesthetics and visual resources | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| Air quality | Short- and long-term minor adverse | Short- and long-term minor adverse | Short- and long-term minor adverse | No effects |
| Noise | Short-term minor adverse | Short-term minor adverse | Short-term minor adverse | No effects |
| Geology and soils | | | | |
| • Geology/topography | No effects | No effects | No effects | No effects |
| • Soils | Short-term minor adverse | Short-term minor adverse | Short-term minor adverse | No effects |
| • Prime farmland soils | Long-term minor adverse | No effects | No effects | No effects |
| Water resources | | | | |
| • Surface waters | No effects | No effects | No effects | No effects |
| • Groundwater | No effects | No effects | No effects | No effects |
| • Floodplains | Long-term minor adverse or No effects | No effects | No effects | No effects |
| • Coastal zone | No effects | No effects | No effects | No effects |
| Biological resources | | | | |
| • Vegetation | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| • Wildlife | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| • Sensitive species | No effects | No effects | No effects | No effects |
| • Wetlands | No effects | No effects | No effects | No effects |
| Cultural resources | No effects | Unknown effects | Unknown effects | No effects |
| Socioeconomics | | | | |
| • Economic development | Short-term minor beneficial | Short-term minor beneficial | Short-term minor beneficial | No effects |
| • Population | No effects | No effects | No effects | No effects |
| • Housing | No effects | No effects | No effects | No effects |
| • Quality of life | No effects | No effects | No effects | No effects |
| • Environmental justice | No effects | No effects | No effects | No effects |
| • Protection of children | No effects | Short-term minor adverse | Short-term minor adverse | No effects |
| Transportation | Short- and long-term minor adverse | Short- and long-term minor adverse | Short- and long-term minor adverse | No effects |
| Utilities | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| Hazardous and toxic substances | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |

and the coastal zone); sensitive species; wetlands; population, housing, quality of life; and environmental justice. *Short-term minor adverse* effects from implementing the Site 5 Alternative would be expected on the following resource areas: air quality, the noise environment, soils, the protection of children, and transportation. *Short-term minor beneficial* effects from implementing the Site 5 Alternative would be expected on economic development. *Long-term minor adverse* effects from implementing the Site 5 Alternative would be expected on land use, aesthetics and visual resources, air quality, vegetation, wildlife, transportation, utility systems, and hazardous and toxic substances. Unknown effects would occur on cultural resources. None of the adverse effects associated with implementing the Site 5 Alternative would be significant.

ES.4.3 Site 9 Alternative

No adverse effects from implementing the Site 9 Alternative would be expected on the following resource areas: geology; topography; prime farmland soils; water resources (including floodplains and the coastal zone); sensitive species; wetlands; population, housing, quality of life; and environmental justice. *Short-term minor adverse* effects from implementing the Site 9 Alternative would be expected on the following resource areas: air quality, the noise environment, soils, the protection of children, and transportation. *Short-term minor beneficial* effects from implementing the Site 9 Alternative would be expected on economic development. *Long-term minor adverse* effects from implementing the Site 9 Alternative would be expected on land use, aesthetics and visual resources, air quality, vegetation, wildlife, transportation, utility systems, and hazardous and toxic substances. Unknown effects would occur on cultural resources. None of the adverse effects associated with implementing the Site 9 Alternative would be significant.

ES.4.4 No Action Alternative

No adverse effects on any resource area would be expected from implementing the No Action alternative. Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities. The units proposed for relocation under the proposed action would continue to operate from their current facilities.

ES.5 CONCLUSIONS

On the basis of the analyses performed in this EA, construction of an AFRC and associated facilities in Jonesboro would not be expected to have any significant direct, indirect, or cumulative adverse effects on the quality of the natural or human environment. An environmental impact statement does not need to be prepared, and issuance of a finding of no significant impact would be appropriate.

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ACRONYMS AND ABBREVIATIONS

SECTION 1.0 PURPOSE, NEED, AND SCOPE

1.1 INTRODUCTION

On September 8, 2005, the Defense Base Closure and Realignment Commission (BRAC Commission) recommended that certain realignment actions occur throughout the United States. The President approved these recommendations on September 15, 2005. The Congress did not alter any of the BRAC Commission's recommendations. The BRAC Commission recommendations must now be implemented, as provided for in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended.

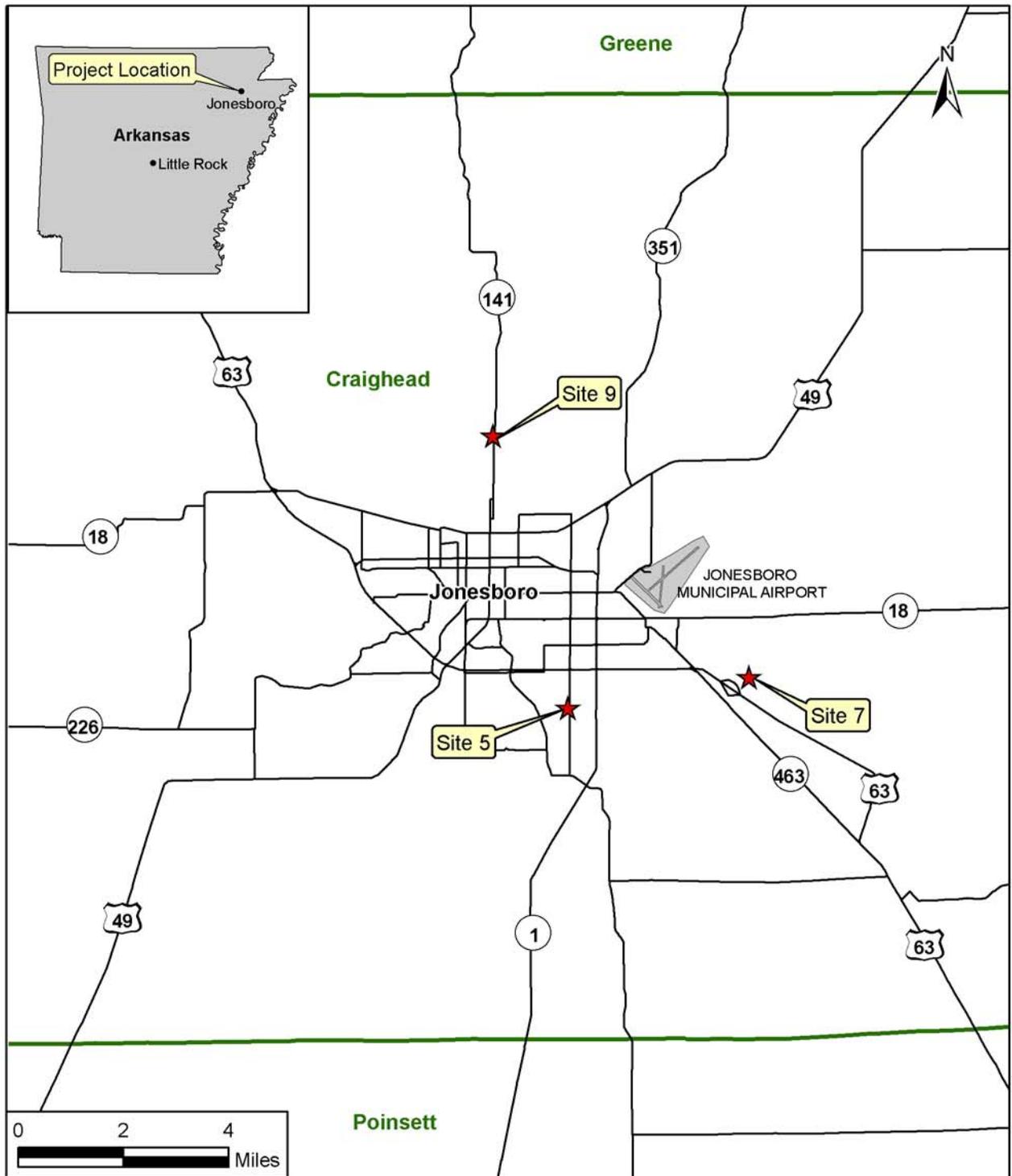
The BRAC Commission recommended the closure of the United States Army Reserve Center, Jonesboro, Arkansas, and relocation of units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC would also have the capability to accommodate Arkansas National Guard units from the Arkansas Army National Guard (ARARNG) Readiness Center, Jonesboro, Arkansas; the ARARNG Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro if the state decides to relocate those National Guard units. In this environmental assessment (EA), the Army identifies and describes the environmental effects associated with its proposed action in Jonesboro. Details on the proposed action are set forth in Section 2.2.

1.2 PURPOSE AND NEED

The purpose of the proposed action is to provide the necessary facilities to support the BRAC Commission's recommendation pertaining to United States Army Reserve and Army National Guard units to be located in Jonesboro. Figure 1-1 shows a general location map of Jonesboro and the sites being considered for the new AFRC.

The need for the proposed action is to improve the nation's ability to respond rapidly to challenges of the 21st century. The Army is legally bound to defend the United States and its territories, to support national policies and objectives, and to defeat nations responsible for aggression that endangers the peace and security of the United States. To carry out these tasks, the Army must adapt to changing world conditions and must improve its capabilities to respond to a variety of circumstances across the full spectrum of military operations. The proposed action also is needed because existing Army Reserve and Army National Guard facilities are substandard and are not adequately sized to support the number of assigned Soldiers. The following is a discussion of two major initiatives that contribute to the Army's need for the proposed action.

Base Realignment and Closure. In previous rounds of BRAC, the explicit goal was to save money and downsize the military to reap a peace dividend. In the 2005 BRAC round, the Department of Defense (DoD) also sought to reorganize its installation infrastructure to most efficiently support its forces, increase operational readiness, and facilitate new ways of doing business. Thus, BRAC represents more than cost savings; it supports advancing the goals of transformation, improving military capabilities, and enhancing military value. The Army needs to carry out the BRAC Commission's recommendations at Jonesboro to achieve the objectives of the BRAC process.



- LEGEND**
- ★ Potential Site
 - ▭ County Boundary
 - ∧ Road

Location Map

Figure 1-1

1.3 SCOPE

The 1990 Defense Base Closure and Realignment Act specifies that the National Environmental Policy Act (NEPA) does not apply to actions of the President, the BRAC Commission, or the DoD, except “(i) during the process of property disposal, and (ii) during the process of relocating functions from a military installation being closed or realigned to another military installation after the receiving installation has been selected but before the functions are relocated” (Section 2905[c][2][A], Public Law 101-510, as amended). The law further specifies that in applying NEPA provisions to the process, the Secretary of Defense and the secretaries of the military departments concerned do not have to consider “(i) the need for closing or realigning the military installation which has been recommended for closure or realignment by the Commission, (ii) the need for transferring functions to any military installation which has been selected as the receiving installation, or (iii) military installations alternative to those recommended or selected” (Section 2905[c][2][B]). Because the BRAC Commission’s deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from NEPA, this EA does not address the need for realignment. Because NEPA does apply to the activities proposed to support unit realignment, the Army addresses such actions in this document.

1.4 PUBLIC INVOLVEMENT

The Army invites public participation in the NEPA process. Consideration of the views and information of all interested persons promotes open communication and enables better decision making. All agencies, organizations, and members of the public having a potential interest in the proposed action, including minority, low-income, disadvantaged, and Native American groups, are urged to participate in the decision-making process.

Public participation opportunities with respect to this EA and decision making on the proposed action are guided by Title 32 of the *Code of Federal Regulations* (CFR) Part 651.14. The EA and draft finding of no significant impact (FNSI) are available for review and comment for 30 days from publication of a Notice of Availability in the *Jonesboro Sun*. The EA and draft FNSI can be read on the Internet at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm. At the end of the 30-day period, the Army will consider any comments submitted by individuals, agencies, or organizations on the proposed action, the EA, or draft FNSI. As appropriate, the Army may then execute the FNSI and proceed with implementing the proposed action. If it is determined before issuance of a final FNSI that implementing the proposed action would result in significant impacts, the Army will commit to mitigation actions sufficient to reduce impacts below significance levels, will take no action, or will publish in the *Federal Register* a notice of intent to prepare an environmental impact statement.

1.5 IMPACT ANALYSIS PERFORMED

This EA has been developed in accordance with NEPA and its implementing regulations, issued by the President’s Council on Environmental Quality (CEQ) and the Army.¹ Its purpose is to inform decisionmakers and the public of the likely environmental consequences of the proposed action and alternatives.

¹ Council on Environmental Quality *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act*, 40 CFR Parts 1500–1508, and Environmental Analysis of Army Actions, 32 CFR Part 651.

An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians has analyzed the proposed action and alternatives in light of existing conditions and has identified relevant beneficial and adverse effects associated with the action. The proposed action is described in Section 2.0, and alternatives, including the No Action Alternative, are described in Section 3.0. Conditions considered to be the baseline are described in Section 4.0, Affected Environment and Environmental Consequences. The expected effects of the proposed action, also described in Section 4.0, are presented immediately following the description of baseline conditions for each environmental resource area addressed in the EA. The potential for cumulative effects is also addressed in Section 4.0, and mitigation measures are identified where appropriate. Conclusions are presented in Section 5.0.

1.6 FRAMEWORK FOR DECISION MAKING

A decision on whether to proceed with the proposed action rests on numerous factors, such as mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, the Army is guided by relevant statutes and their implementing regulations and by Executive Orders (EOs) that establish standards and provide guidance on environmental and natural resources management and planning. These include the Clean Air Act; Clean Water Act; Noise Control Act; Farmland Protection Policy Act (FPPA); Endangered Species Act; National Historic Preservation Act (NHPA); Archaeological Resources Protection Act; Native American Graves Protection and Repatriation Act; American Indian Religious Freedom Act; Resource Conservation and Recovery Act; Comprehensive Environmental Response, Compensation, and Liability Act; Community Environmental Response Facilitation Act; and Toxic Substances Control Act. EOs bearing on the proposed action include EO 11988 (*Floodplain Management*); EO 11990 (*Protection of Wetlands*); EO 12088 (*Federal Compliance with Pollution Control Standards*); EO 12580 (*Superfund Implementation*); EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*); EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*); EO 13175 (*Consultation and Coordination with Indian Tribal Governments*); EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*), and EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*). These authorities are addressed in various sections throughout this EA when relevant to environmental resources and conditions. To the extent that state or local laws, ordinances, or regulations are relevant, they are discussed within the appropriate narrative section of this EA, and accompanying citations of authority or other references are provided. The full text of the laws, regulations, and EOs is available on the Defense Environmental Network and Information Exchange Web site, at <http://www.denix.osd.mil>. To the extent that various provisions of state or local laws, ordinances, or regulations are referenced in the text of the EA, they are discussed in the relevant text.

SECTION 2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 INTRODUCTION

This section describes the Army's Preferred Alternative for carrying out the BRAC Commission's recommendations, which became law on November 9, 2005, as follows:

Close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center and Field Maintenance Site in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC shall have the capability to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro, Arkansas, the Arkansas Army National Guard Readiness Center, Paragould, Arkansas, and the Field Maintenance Site (FMS), Jonesboro if the state decides to relocate those National Guard units.

To meet the BRAC directive, the Army proposes to acquire approximately 20 acres in Jonesboro, Arkansas. Upon acquisition of the site, the Army would construct and operate an AFRC (including an Organizational Maintenance Shop and unheated storage building) having approximately 97,400 square feet of space.

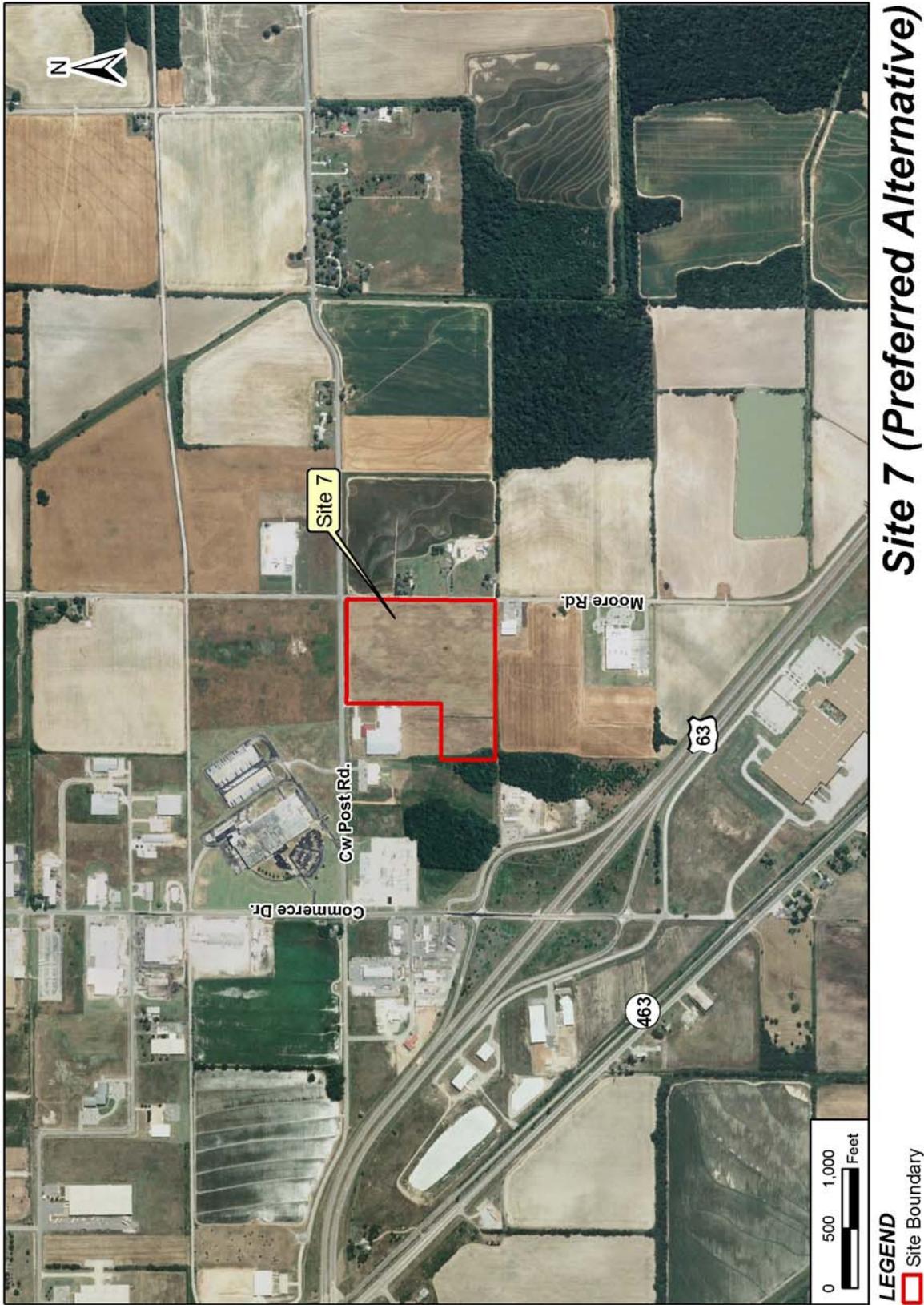
2.2 PROPOSED ACTION

2.2.1 Site Description

The site proposed for the new AFRC is in the southwest quadrant of the intersection of C.W. Post Road and Moore Road (see Figure 2-1). (Note: the Army's site evaluation process labeled this location as *Site No. 7*.) The property consists of approximately 27 acres. This is the *Preferred Alternative* for implementation of the proposed action, as is further discussed in Section 3.0 and throughout this EA.

The site could be accessible from either C.W. Post Road or Moore Road. The grasslands terrain is essentially flat. A small portion of the property along C.W. Post Road lies within the 100-year flood plain; this portion would not be purchased (the owner is willing to subdivide the property to provide the Army its 20-acre requirement). Zoned for industrial uses, there are no buildings on the site. All utilities are available on-site or reasonably nearby (electricity, water, gas, sewer, and storm drainage).

To the north, farmland is across C.W. Post Road and a commercial warehouse is northwest of the site along C.W. Post Road. Moore Road runs along the eastern border of the property and on the other side of Moore Road is an active farm. Site 3 (discussed in Section 3.2.1) borders Site 7 to the south. Woods, maintained land, and commercial establishments are west of the property.



Site 7 (Preferred Alternative)

Figure 2-1

2.2.2 Facilities Construction

In addition to land acquisition, primary facilities of the new AFRC would consist of a training building, Organizational Maintenance Shop, organizational parking for military and privately owned vehicles, and an unheated storage building. Site improvements (walks, curbs, and gutters, and the like) would be provided. The facilities would be sufficient to accommodate 400 personnel. Table 2-1 provides information on the sizes of these facilities. Buildings would be of permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; plumbing; heating, ventilation, and air conditioning systems; and mechanical, security, and electrical systems. In accordance with Army policy for constructing new facilities, this project would be designed to meet Leadership in Energy and Environmental Design Silver standards, or better, with a view toward enhanced sustainability and energy efficiency.

Table 2-1
Facility sizes

| Facility | Size (square feet) |
|--|-------------------------------|
| Armed Forces Reserve Center | 75,416 |
| Organizational Maintenance Shop | 20,486 |
| Unheated storage building | 1,520 |
| Organizational parking | 213,480 |
| Privately owned vehicle parking, walks, curbs, and gutters | 115,389 |

Facilities would require minor land clearing, paving, fencing, general site improvements, and extension of utilities to serve the project. Force protection (physical security) measures would be incorporated into the design, including maximum standoff distance from roads, parking areas, and vehicle unloading areas. Berms, heavy landscaping, and bollards would be used to prevent access when standoff distances cannot be maintained.

Because the property is undeveloped, no demolition of existing facilities would be required. Construction could begin as early as May 2009 and could be completed by February 2011—a build-out period of approximately 22 months.

2.2.3 Operations

The Jonesboro AFRC would support operations of units of the Army Reserve and ARARNG. The AFRC would be used Monday through Friday by a small full-time staff of about 10 personnel and on weekends by the various Reserve Component units for training. Daily operations would include administrative, training, and maintenance support of unit missions and requirements; recruiting; and preparation for battle assembly weekends.

Approximately 400 Reservists and Guardsmen would be assigned to the units stationed at the AFRC. These Soldiers would participate in training activities on weekends each month. A typical training weekend would involve approximately 240 Soldiers on-site. On weekends that include a military-observed holiday, training would not occur. Training activities from a holiday weekend would be shifted to one of the other weekends during the same month, resulting in higher training populations during the remaining weekends that month. Peak weekend populations at the AFRC during such weekends would be approximately 400 Soldiers.

Training activities conducted during drill weekends would include Military Occupational Specialties training in a Soldier's skill (such as maintenance and communications), required briefings, physical training, mentoring, and evaluations. Weekend traffic would include personal vehicles and military vehicles, such as high mobility multi-purpose wheeled vehicles of various configurations, 2.5- and 5-ton cargo trucks, light medium tactical vehicles, wreckers, and trailers of various configurations.

SECTION 3.0 ALTERNATIVES

3.1 INTRODUCTION

A bedrock principle of NEPA is that an agency should consider reasonable alternatives to a proposed action. Considering alternatives helps to avoid unnecessary impacts and allows analysis of reasonable ways to achieve the stated purpose. The following discussion identifies alternatives considered by the Army and whether they are feasible and, hence, subject to detailed evaluation in this EA.

Alternatives to the proposed action were assessed on the basis of alternative sites. The Army assembled a Site Selection Team to prepare a Site Survey Report evaluating 14 potential sites for the AFRC. Five contending sites were identified: Site Nos. 3, 5, 6, 7, and 9. During on-site visits, the Army determined that Site No. 6 would not be suitable for the AFRC because of it being in a floodplain. The three contending sites considered as alternatives for the proposed action, the Preferred Alternative (Site No. 7), as well as the No Action Alternative, are discussed below.

3.2 CONTENDING SITES

The Army considered a site a contending site if it met the following criteria:

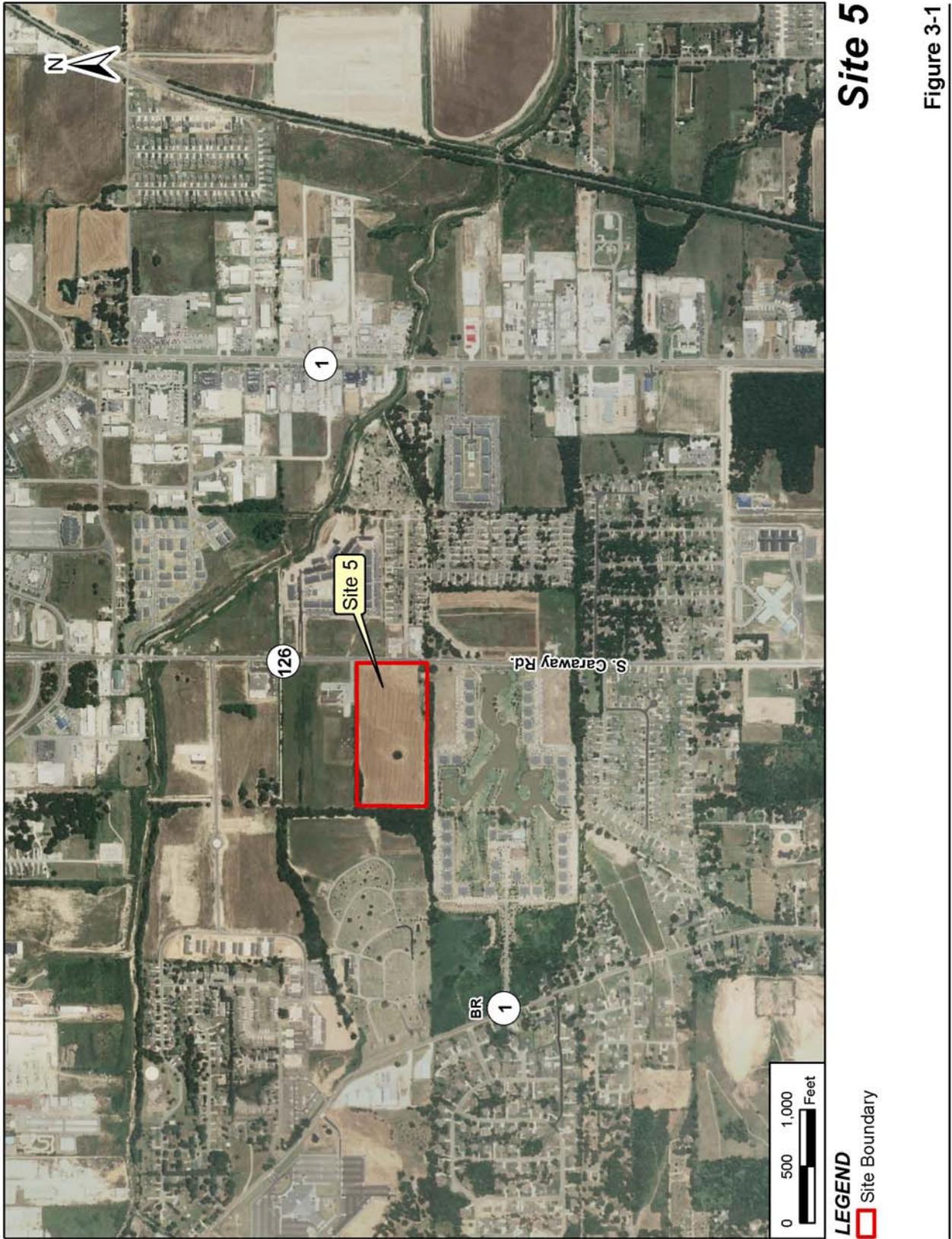
- Net usable acreage
- Compatibility with surrounding land uses
- Support for intended construction and environmental compliance
- Ready access to public utilities
- Reasonable cut or fill requirements
- Proximity to a major roadway corridor and safe ingress and egress
- Reasonable purchase price, within budget
- Appropriate zoning and antiterrorism (property set-back requirements) considerations

3.2.1 Site No. 3

This 27-acre site is on Moore Road. The site is relatively flat, though some minor cut and fill would be required. While currently in agricultural use, the location is zoned for industrial uses. Site 7, the preferred site for the AFRC, borders Site 3 to the north. A U.S. Post Office distribution center is to the south of the site. The west side of the site is bordered by woods. Electrical power, water and sewer are available but not connected. The Army's Site Selection Team compared this site to Site 7 just to the north and determined that this site was considerably less desirable than Site 7. Given the proximity of the two sites, the Site Selection Team determined that Site 7 would be pursued but not Site 3. Accordingly, Site 3 is not evaluated in this EA.

3.2.2 Site No. 5

This 20-acre site is at 3911 S. Caraway Road (Figure 3-1). Access would be from Caraway Road. The site is relatively flat, with a slight incline along its southern edge. The site contains a former home site consisting of a house, barn, and storage shed. The home and barn have been removed, but there are remnants and debris remaining on the site. The small concrete shed remains and would require minor demolition effort. A few hardwoods on the property would require removal.



An apartment complex is at a slightly higher elevation to the south, and there is a church to the north. Across Caraway Road, which defines the eastern border, is a car wash and gas station. There is a wooded area to the west; the tree line extends along the south and southwestern property boundary. The Army's Site Selection Team determined that this site could serve as an alternate site for acquisition if acquisition of Site 7 failed. Accordingly, it is evaluated in this EA.

3.2.3 Site No. 7

This site is the Army's Preferred Alternative for the AFRC. Described in detail in Section 2.2, it is evaluated in detail in this EA.

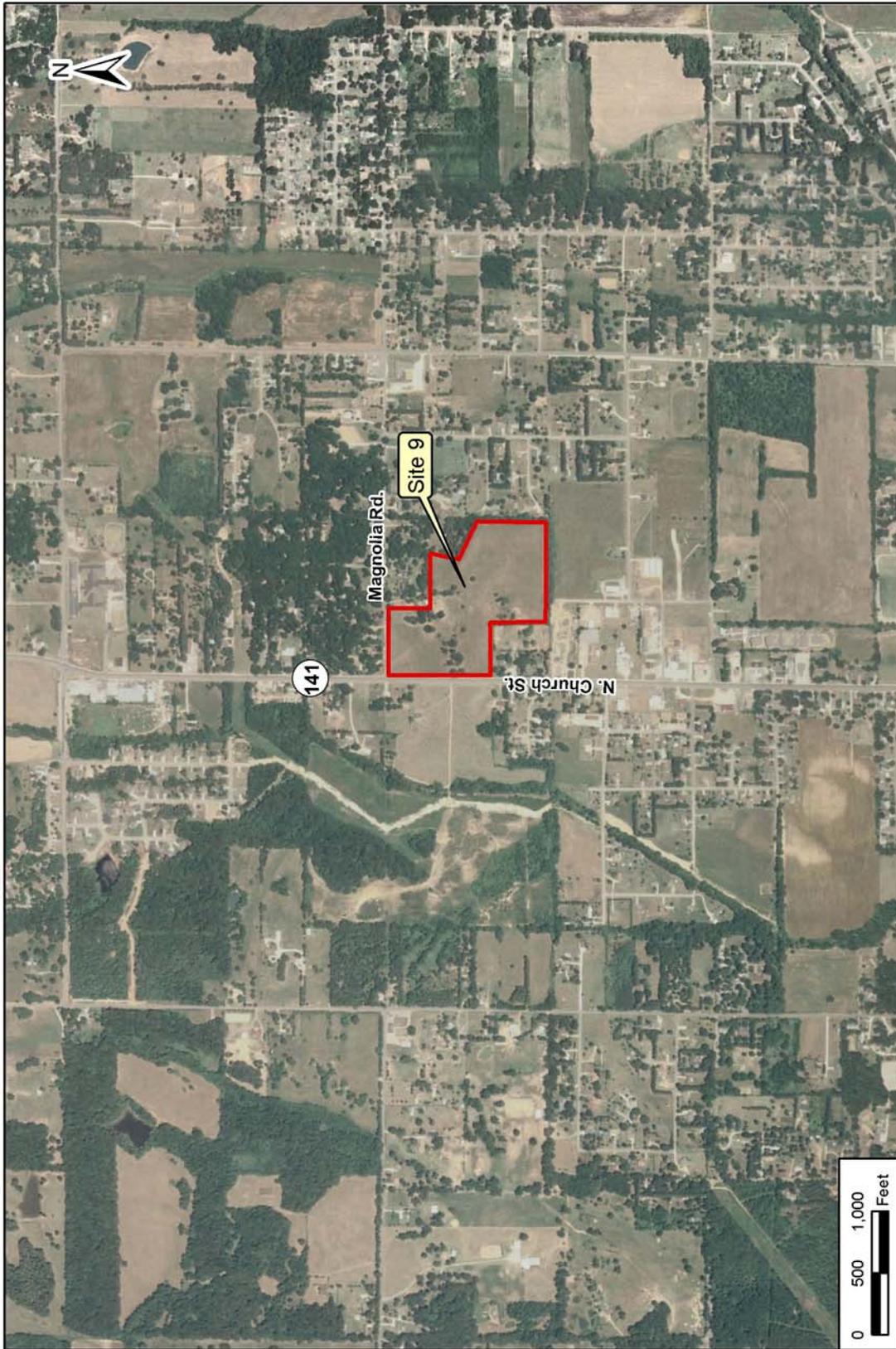
3.2.4 Site No. 9

This 25-acre site is on North Church Street (Highway 141) and Magnolia Road (Figure 3-2). This site is not flat and is an odd-shaped property. There is a significantly low center on the northwest portion of the property. There are many other low points and hills on the property. The Site Selection Team found that the northwest portion of the property (at the intersection of North Church Street and Magnolia Road), would not be buildable because of the sloping and low area. As a result, construction would be limited to only the southeast portion of the property that is relatively flat and at a higher elevation. Cut and fill requirements across the property would be substantial. There is a sparse population of deciduous trees on the property; some tree-clearing would be needed. The property is surrounded by residential neighborhoods, with houses to the south and east. Magnolia Road is north of the property; there are houses across the street. North Church Street is to the west, with houses across the street. Despite the site's shortcomings, the Army's Site Selection Team determined that this site could serve as an alternate site for acquisition if acquisition of Sites 7 and 5 failed. Accordingly, it is evaluated in this EA.

3.3 NO ACTION ALTERNATIVE

The CEQ regulations require inclusion of the No Action Alternative, which serves as a baseline against which the effects of the proposed action and alternatives can be evaluated.

Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities. The units proposed for relocation under the proposed action would continue to operate from their current facilities. The No Action Alternative is evaluated in detail in this EA, and serves as a baseline against which the effects of the proposed action can be measured.



Site 9

Figure 3-2

LEGEND
Site Boundary

SECTION 4.0

AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

4.1 LAND USE

4.1.1 Affected Environment

4.1.1.1 Proposed Action

The preferred site for an AFRC in Jonesboro, Arkansas, is a vacant plot of land in a mixed industrial and agricultural area. The land is zoned industrial, but there are no buildings on the site. An commercial distribution warehouse is northwest of the proposed site at the intersection of Commerce Drive and C.W. Post Road, commercial buildings are along C.W. Post Road adjacent to and west of the site, wooded land is just south of those buildings, and residences and agricultural fields surround the land to the east and south.

4.1.1.2 Site 5 Alternative

Site 5 is in agricultural production and is zoned commercial. The site has a buffer of trees along the north, west, and south edges. North of the site is a church surrounded by vacant land. West of the site is the Jonesboro Memorial Park Cemetery. An apartment complex, the *Links at Jonesboro*, surrounds a 9-hole golf course south of the site. East of the site is South Caraway Road, and beyond the road is a residential area.

4.1.1.3 Site 9 Alternative

Site 9 is undeveloped property. It is zoned residential. Low- to medium-density residential areas surround the site. West of the site is North Church Street (State Highway 141), beyond which is a single-family home surrounded by undeveloped, grassed property. North of the site is Magnolia Road and single-family homes in a low-density development, with mixed evergreen and deciduous woods surrounding the houses. The area east of the site is similar to the area north of the site, although the residential density is slightly higher. South of the site is vacant land at the southeast corner and a medium-density residential area at the southwest corner.

4.1.2 Environmental Consequences

4.1.2.1 Proposed Action

No effects on land use would be expected from implementing the proposed action. Although the land would change from undeveloped and vacant to an active military training center, the land use would be compatible with the land's industrial zoning and with surrounding commercial, industrial, and agricultural land uses.

4.1.2.2 Site 5 Alternative

Long-term minor adverse effects on land use would be expected from implementing the Site 5 Alternative. The land would change from agricultural use to an active military training center, and the land use would not be expected to be compatible with the land's nearby users. A land use conflict could result from the AFRC being operational mostly on weekends when the church

north of the site would also be at peak use. Also, residents of the *Links at Jonesboro* apartment complex south of the site and the residential area east of the site would be expected to be adversely affected by the presence of an operational AFRC adjacent to their residences. Some weekend visitors to the Jonesboro Memorial Park Cemetery would also be expected to take exception to the presence of the AFRC adjacent to the cemetery, but they would not be affected in the same manner as nearby residents because of the normally brief duration of visits to the cemetery.

4.1.2.3 Site 9 Alternative

Long-term minor adverse effects on land use would be expected from implementing the Site 9 Alternative. The land would be changed from vacant property to an active military training center, and the surrounding area is primarily residential land use. An operational AFRC would be expected to have an adverse effect on nearby residents.

4.1.2.4 No Action Alternative

No effects on land use would result from implementing the No Action Alternative. Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities.

4.2 AESTHETICS AND VISUAL RESOURCES

4.2.1 Affected Environment

4.2.1.1 Proposed Action

The proposed location for the AFRC is in a semi-rural area west of and on the outskirts of central Jonesboro. The more developed area of Jonesboro begins about ½ mile west of the proposed location. The immediate area proposed for the AFRC is mostly open with an open view of about a mile. The view is occasionally obscured by some farm houses, an industrial site, and some commercial buildings. Driving from Jonesboro to the east, a person would have a sense of having just left the city and entered an agricultural area, while coming from the east and traveling to Jonesboro, a person would have a sense of entering a more developed area because of the change from open farmland to a agricultural landscape now shared with buildings and associated parking lots and with Route 63 visible to the west.

4.2.1.2 Site 5 Alternative

Site 5 has the aesthetics of being in a mixed residential area. Although a church surrounded by vacant land is north of the site and a cemetery is west of the site, views in those directions are blocked by buffers of trees, and the prominent views from the site are to the west and south, both of which are of medium- to high-density residential development. South Caraway Road runs parallel to Stadium Boulevard, also designated as State Route 49 and Route 1, about ½ mile east of the site. Traffic on South Caraway Road is light because of the availability of Stadium Boulevard.

4.2.1.3 Site 9 Alternative

Site 9 is in a residential area north of central Jonesboro. North Church Street is the local roadway providing direct access to the site, and though it leads to points north of Jonesboro, it does not carry large volumes of traffic (AHTD 2007, JMPO 2005). The area has a mixture of development, wooded sites, and open areas. Continuing north from the site, this mixture of developed, wooded, and open land continues for about 3 miles, whereas going south from the site toward central Jonesboro, the land quickly becomes more densely populated with homes. Apart from traffic on North Church Street, the area has the aesthetics of a quiet, sparsely populated residential area on the outskirts of a medium-sized town.

4.2.2 Environmental Consequences

4.2.2.1 Proposed Action

Long-term minor adverse effects on aesthetics and visual resources would be expected from implementing the proposed action. The proposed area is currently a mixture of agricultural land and development, and an AFRC would fit well with the surroundings. The proposed site, however, would be converted from open space to developed land, which would further diminish the rural character of the immediate area. The AFRC would be next to and across the road from other developed sites. The Army would incorporate setbacks from the property boundary and suitable landscaping to minimize any adverse effects on the area's aesthetics to the extent that the layout of the AFRC and the size of the property permit.

4.2.2.2 Site 5 Alternative

Short- and long-term minor adverse effects on aesthetics and visual resources would be expected from implementing the Site 5 Alternative. In the short term, construction activities would be expected to be aesthetically displeasing to nearby residents. Converting the land from an agricultural field to an active military training center would adversely affect the viewshed of nearby residents in the *Links at Jonesboro* apartment complex, of residents east of Site 5, and of visitors to the Jonesboro Memorial Park Cemetery west of Site 5. Although the viewshed from the church north of Site 5 would also change, church activities would primarily be held indoors, and the change in view from the church would not be expected to have the same degree of adverse effect as the change from residences.

4.2.2.3 Site 9 Alternative

Short- and long-term minor adverse effects on aesthetics and visual resources would be expected from implementing the Site 9 Alternative. In the short term, construction activities would be expected to be aesthetically displeasing to nearby residents. The land would be changed from vacant property to an active military training center, and the view from surrounding residences in all directions toward the property would be adversely affected.

4.2.2.4 No Action Alternative

No effects on aesthetics and visual resources would result from implementing the No Action Alternative. Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities.

4.3 AIR QUALITY

4.3.1 Affected Environment

This section presents a description of ambient air quality at the proposed site with respect to attainment of National Ambient Air Quality Standards (NAAQS) and identifying applicable air quality regulations. The affected environment is the same for the proposed action, Site 5 alternative, and Site 9 Alternative, and the discussion below applies equally to all three of the action alternatives.

4.3.1.1 National Ambient Air Quality Standards and Attainment Status

The U.S. Environmental Protection Agency (EPA) Region 6 and the Arkansas Department of Environmental Quality (ADEQ) regulate air quality in Arkansas. The Clean Air Act (42 U.S.C. 7401–7671q), as amended, gives EPA the responsibility to establish the primary and secondary NAAQS (40 CFR Part 50) that set acceptable concentration levels for seven criteria pollutants: fine particulate matter (PM₁₀), very fine particulate matter (PM_{2.5}), sulfur dioxide (SO₂), carbon monoxide (CO), nitrous oxides (NO_x), ozone (O₃), and lead. Short-term standards (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term standards (annual averages) have been established for pollutants contributing to chronic health effects. On the basis of the severity of the pollution problem, nonattainment areas are categorized as marginal, moderate, serious, severe, or extreme. Each state has the authority to adopt standards stricter than those established under the federal program; however, Arkansas accepts the federal standards.

Federal regulations designate Air-Quality Control Regions (AQCRs) in violation of the NAAQS as *nonattainment* areas. Federal regulations designate AQCRs with levels below the NAAQS as *attainment* areas. Craighead County, Arkansas, and all proposed AFRC facilities are completely within the Northeast Arkansas Intrastate AQCR (AQCR 020) (USEPA 2008). Federal regulations designate AQCR 020 as an attainment area for all criteria pollutants (40 CFR 81.304). Because the project area is in an attainment region, air conformity regulations do not apply to the proposed action. The proposed project's emissions of criteria pollutants and the applicability thresholds under the general conformity rules, however, have been carried forward for more detailed analysis to determine the level of effect under NEPA.

4.3.1.2 Local Ambient Air Quality

Existing ambient air quality conditions can be estimated from measurements taken at air-quality monitoring stations close to the proposed AFRC (Table 4-1). The only criteria pollutant that is monitored in the region is PM_{2.5}, and as expected for an attainment region, the monitored values are below the NAAQS (USEPA 2008).

**Table 4-1
NAAQS and monitored air quality concentrations**

| Pollutant and averaging time | Primary NAAQS ^a | Secondary NAAQS ^a | Monitored data ^b | Location of station |
|--|----------------------------|------------------------------|-----------------------------|---------------------|
| PM _{2.5} | | | | |
| Annual arithmetic mean ^c (µg/m ³) | 15 | 15 | 12.6 | Phillips County |
| 24-hour maximum ^d (µg/m ³) | 35 | 35 | 31.1 | White County |

µg/m³ = micrograms per cubic meter

a Source: 40 CFR 50.1-50.12.

b Source: USEPA 2008

c The 3-year average of the weighted annual mean PM_{2.5} concentrations from must not exceed 15.0 µg/m³.

d The 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor must not exceed 35 µg/m³.

4.3.2 Environmental Consequences

4.3.2.1 Proposed Action

Short- and long-term minor adverse effects on air quality would be expected from implementing the proposed action. The effects would be primarily from air emissions during facility construction and from creating new stationary sources of air emissions, such as heating boilers

and standby generators, at the AFRC. Increases in emissions would not exceed applicability thresholds, be regionally significant, or contribute to a violation of any federal, state, or local air regulation.¹

Estimated Emissions and General Conformity. The general conformity rules require federal agencies to determine whether their action(s) would increase emissions of criteria pollutants above preset threshold levels (40 CFR 93.153(b)). These *de minimis* (of minimal importance) rates vary depending on the severity of the nonattainment and geographic location. The proposed site is in an attainment area; therefore, General Conformity regulations are not applicable. Army policy dating back to 1995, however, is to examine the potential impact of a proposed action on air quality as part of its NEPA analysis and prepare a Record of Non-Applicability even though it may not otherwise be required by EPA regulation (ACSIM 1995). In so doing, the Army is able to maintain a paper trail that demonstrates its compliance with Clean Air Act. All direct and indirect emissions of criteria pollutants for the proposed action have been estimated and compared to applicability threshold levels of 100 tons per year to determine the proposed action's impact under NEPA. The air emissions calculations and RONA are included in Appendix A of this EA. The total direct and indirect emissions associated with the following activities were accounted for:

- Constructing the new facilities
- Operating vehicles for construction workers
- Paving parking areas
- Operating personal vehicles for employees and trainees

¹ A facility's emissions are regionally significant if its emissions could equal or exceed 10 percent of the emissions of one or more pollutants of concern in the nonattainment or maintenance area [40 CFR 93.153(h)(4)(i)]. Regional significance is not applicable to facilities constructed in an attainment area.

- Operating new boilers
- Operating a new backup generator

The total direct and indirect emissions associated with the proposed action would not exceed applicability threshold levels (Table 4-2). Because the region is an attainment area, there is no existing emission budget. Because of the limited size and scope of the proposed action, however, it is not expected that the estimated emissions from the AFRC development and operation would make up 10 percent or more of regional emissions for any criteria pollutant, and they would, therefore, not be regionally significant.

Table 4-2
Proposed action emissions compared to applicability thresholds

| Activity | Annual emissions (tons per year) | | | | | | De minimis threshold (tons per year) | Would emissions exceed applicability thresholds? (Yes/No) |
|--------------|-------------------------------------|-----------------|-----|-----------------|------------------|-------------------|--|---|
| | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | | |
| Construction | 5.3 | 6.3 | 1.3 | 0.0 | 5.7 | 0.8 | 100 | No |
| Operational | 3.1 | 2.2 | 0.4 | 0.4 | 0.1 | 0.1 | | |

VOC = volatile organic compound

For the purposes of calculating emissions, it was assumed that approximately 10 permanent personnel and 400 trainees would be stationed at the AFRC. It was also assumed that a 700-kilowatt backup generator would be at the facility either initially or in the future. Moderate changes in the size or type of equipment ultimately selected or the number of personnel would not substantially change the total direct or indirect emissions or the level of impact under NEPA.

Regulatory Review. The Clean Air Act, as amended in 1990, mandates that state agencies adopt and implement State Implementation Plans to eliminate or reduce the severity and number of violations of the NAAQS. Since 1990, Arkansas has developed a core of air quality regulations that EPA has approved. These approvals signified the development of the general requirements of the State Implementation Plan. The Arkansas program for regulating air emissions affects industrial sources, commercial facilities, and residential development activities. Regulation occurs primarily through a process of reviewing engineering documents and other technical information, applying emission standards and regulations in permit issuance, performing field inspections, and assisting industries in determining their compliance status with applicable requirements.

As part of these requirements, ADEQ oversees programs for permitting the construction and operation of new or modified stationary source air emissions in Arkansas. ADEQ air permitting is required for many industries and facilities that emit regulated pollutants. These requirements include Title V permitting of major sources, New Source Review, Prevention of Significant Deterioration, New Source Performance Standards for selected categories of industrial sources, and the National Emission Standards for Hazardous Air Pollutants. ADEQ air permitting regulations do not apply to mobile sources, such as trucks. An overview of the applicability of these regulations to the project is outlined in Table 4-3.

Table 4-3
Air quality regulatory review for proposed stationary sources

| Regulation | Project status |
|---|--|
| New Source Review (NSR) | It is possible that a state operating permit would be required for boilers and emergency back-up generators; however, a final determination cannot be made until the actual equipment is selected. |
| Prevention of Significant Deterioration (PSD) | Potential emissions would not exceed the 250- tons-per-year PSD threshold. Therefore, the project would not be subject to PSD review. |
| Title V Permitting Requirements | The facility's potential to emit would be below the Title V major source threshold and would not require a Title V permit. |
| National Emission Standards for Hazardous Air Pollutants (NESHAP) | Potential Hazardous Air Pollutant emissions would not exceed NESHAP thresholds. Therefore, the use of Maximum Available Control Technology would not be required. |
| New Source Performance Standards (NSPS) | Both emergency generators and boilers would be subject to NSPS. |

Other non-permitting requirements may be required through the use of compliant practices or products. These regulations are outlined in Arkansas Pollution Control and Ecology Commission Regulations. They include the following:

- Regulation 18 - Chapter 5: Visible Emissions
- Regulation 18 - Chapter 6: Emissions from Open Burning
- Regulation 18 - Chapter 9: Control of Fugitive Emissions
- Regulation 21 - Asbestos Abatement Regulation
- Regulation 25 - Lead-based Paint Hazard

In addition to those outlined above, no person may handle, transport, or store any material in a manner that could allow unnecessary amounts of air contaminants to become airborne. During construction, reasonable measures could be required to prevent unnecessary amounts of particulate matter from becoming airborne (A.A.C. Section 18.901). Such precautions could include, the following:

- Using water to control dust during construction operations, grading roads, or clearing land;
- Paving roadways and maintaining them in a clean condition;
- Covering open equipment for conveying or transporting material likely to create objectionable air pollution when airborne; and,
- Promptly removing spilled or tracked dirt or other materials from paved streets.

4.3.2.2 Site 5 Alternative

Short- and long-term minor adverse effects on air quality would be expected from implementing the Site 5 Alternative. The discussion of air quality effects in Section 4.3.2.1 applies equally to the Site 5 Alternative. The construction and operation of an AFRC on Site 5 would have the same air quality effects as would its construction on the preferred site.

4.3.2.3 Site 9 Alternative

Short- and long-term minor adverse effects on air quality would be expected from implementing the Site 9 Alternative. The discussion of air quality effects in Section 4.3.2.1 applies equally to the Site 9 Alternative. The construction and operation of an AFRC on Site 9 would have the same air quality effects as would its construction on the preferred site.

4.3.2.4 No Action Alternative

No effects on air quality would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and no new Reserve training operations would occur. Ambient air-quality conditions would remain as described in Sections 4.3.1.

4.4 NOISE

4.4.1 Affected Environment

Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise, the distance between the noise source and the receptor, receptor sensitivity, and time of day.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Hertz are used to quantify sound frequency. The human ear responds differently to different frequencies. A-weighting, described in A-weighted decibels (dBA), approximates this frequency response to express accurately the perception of sound by humans. Sounds encountered in daily life and their approximate levels in dBA are provided in Table 4-4.

**Table 4-4
Common sounds and their levels**

| Outdoor | Sound level (dBA) | Indoor |
|------------------------|-------------------|--------------------|
| Snowmobile | 100 | Subway train |
| Tractor | 90 | Garbage disposal |
| Noisy restaurant | 85 | Blender |
| Downtown (large city) | 80 | Ringling telephone |
| Freeway traffic | 70 | TV audio |
| Normal conversation | 60 | Sewing machine |
| Rainfall | 50 | Refrigerator |
| Quiet residential area | 40 | Library |

Source: Harris 1998.

The dBA noise metric describes steady noise levels. Very few noises are, in fact, constant, so a noise metric, day-night sound level (DNL) has been developed. DNL is defined as the average sound energy in a 24-hour period with a 10-dB penalty added to nighttime levels (10 p.m. to 7 a.m.). DNL is a useful descriptor for noise because it averages ongoing yet intermittent noise, and

it measures total sound energy over a 24-hour period. In addition, equivalent sound level (L_{eq}) is often used to describe the overall noise environment. L_{eq} is the average sound level in dB.

The Noise Control Act of 1972 (Public Law 92-574) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1974 EPA provided information suggesting that continuous and long-term noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses such as residences, schools, churches, and hospitals. Arkansas has no statewide noise regulation. The city of Jonesboro maintains a general nuisance noise ordinance. The code, however, does not set explicit not-to-exceed sound levels. Construction noise is specifically exempt or restricted. However, all heavy equipment must have its mufflers or other devices maintained to effectively prevent loud or explosive noises (Jonesboro Municipal Code Title 7, Chapter 52 – Noise).

Existing sources of noise near the proposed site and alternate sites include local road traffic; aircraft overflights; noise from activities at nearby locations (such as the church and residential areas near Site 5 and the residential areas at Site 9); and natural noises such as leaves rustling and bird vocalizations. The prominent source of noise at all the sites is local roadway traffic. None of the proposed sites are adjacent to any rail corridors or airfields.

Existing noise levels (DNL and L_{eq}) were estimated for the proposed sites and surrounding areas using the techniques specified in the *American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound Part 3: Short-term measurements with an observer present* (ANSI 2003). Table 4-5 outlines the closest noise-sensitive areas such as residents, schools, churches, and hospitals, and the estimated existing noise levels at each location. Notably, the area surrounding the proposed site is primarily industrial commercial, and there are no residences, churches, schools, or hospitals within 1,500 feet of the site. The area surrounding Site 5 is a mixture of residential and commercial (cemetery and church properties) areas that generate little noise, and near Site 9 the area is primarily residential. There are several noise sensitive areas within 1,500 feet of all three sites.

Table 4-5
Estimated existing noise levels at nearby noise-sensitive areas

| Location | Closest noise-sensitive area | | | | Estimated existing sound levels (dBA) | | |
|----------|------------------------------|----------------------------|---------------------------------|----------------------|---------------------------------------|--------------------|----------------------|
| | Type | Distance | Direction | Land Use | DNL | L_{eq} (daytime) | L_{eq} (nighttime) |
| Site 7 | Residence | 1,500 feet (450 meters) | East | Light Industrial | 55 | 53 | 47 |
| | Residence | 3,100 feet (950 meters) | Southwest across Route 63 | | | | |
| Site 5 | Church | 150 feet (48 meters) | North | Suburban Residential | | | |
| | Residence | 100 feet (30 meters) | South | | | | |
| Site 9 | Residence | 75 feet (23 meters) | East | | | | |
| | Residence | 160 feet (50 meters) | West | | | | |

Source: ANSI 2003

4.4.2 Environmental Consequences

4.4.2.1 Proposed Action

Short-term minor adverse effects on the noise environment would be expected from implementing the proposed action. Minor increases in noise would be primarily from using heavy equipment during construction. The effects would be temporary and would end upon completion of construction. Noise from facility operations would be expected to be negligible.

The proposed action would require the construction of several new facilities at the site. Individual pieces of construction equipment typically generate noise levels of 80 to 90 dBA at a distance of 50 feet (Table 4-6). With multiple items of equipment operating concurrently, noise levels can be relatively high during daytime periods at locations within several hundred feet of active construction sites. The zone of relatively high construction noise levels typically extends to distances of 400 to 800 feet from the site of major equipment operations. Locations more than 1,000 feet from construction sites seldom experience appreciable levels of construction noise. There are no residences closer than 800 feet to the site that would experience appreciable amounts of construction noise. Given the temporary nature of the construction and the distance to the nearest sensitive receptor, it would be expected to have a minor effect.

Table 4-6
Noise levels associated with outdoor construction

| Construction phase | dBA L _{eq} at 50 feet from source |
|---------------------|--|
| Ground clearing | 84 |
| Excavation, grading | 89 |
| Foundations | 78 |
| Structural | 85 |
| Finishing | 89 |

Source: USEPA 1971.

Although construction-related noise effects would be minor, best management practices that would be recommended to minimize noise effects would include limiting construction to occur only during normal weekday business hours and properly maintaining construction equipment mufflers. It is not expected, therefore, that construction noise would violate the Jonesboro's nuisance noise ordinance.

Noise effects on construction personnel could be limited by ensuring that all personnel wear adequate personal hearing protection to limit exposure and ensuring compliance with federal health and safety regulations, including those outlined by the U.S. Occupational Safety and Health Administration.

Training at the AFRC is not expected to generate disruptive noise levels at the adjacent residences. No use of weaponry, demolitions, or aircraft operations would occur with the implementation of the proposed action.

4.4.2.2 Site 5 Alternative

Short-term minor adverse effects on the noise environment would be expected from implementing the Site 5 Alternative. These minor increases in noise would primarily be due to the

use of heavy equipment during construction. These minor increases would be temporary and would end upon completion of construction.

This alternative would require construction, and the levels of construction noise associated with this alternative would be similar in both level and frequency as those outlined in Section 4.4.2.1. Unlike the proposed action, there are several existing noise sensitive areas closer to Site 5 than 800 feet that would experience appreciable amounts of construction noise. Best management practices to minimize the effect of the noise on these nearby areas would be similar to those outlined in Section 4.4.2.1, and the effects would be considered minor.

4.4.2.3 Site 9 Alternative

Short-term minor adverse effects on the noise environment would be expected from implementing the Site 9 Alternative. These minor increases in noise would primarily be due to the use of heavy equipment during construction and would be temporary and end upon completion of construction.

Construction of new facilities at Site 9 would generate levels of noise similar in both level and frequency as those outlined in Section 4.4.2.1. Unlike the proposed action, there are several existing noise sensitive areas closer than 800 feet to Site 9 that would experience appreciable amounts of construction noise, but the noise would end after completion of construction. Best management practices would be similar to those outlined for the proposed action and the effects would be considered minor.

4.4.2.4 No Action Alternative

No effects on the noise environment would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state. Ambient noise conditions would remain as described in Section 4.4.1.

4.5 GEOLOGY AND SOILS

4.5.1 Affected Environment

4.5.1.1 Proposed Action

Geologic and Topographic Conditions. The proposed site is in the Mississippi River Alluvial Plain of Arkansas. Geologically, the proposed site is characterized by unconsolidated, flat-lying alluvium from streams overlying poorly consolidated Tertiary formations. The Tertiary formations dip slightly to the south (AGS 2009). Topographically, the proposed AFRC location is flat.

Soils. Site soils are classified as Calhoun and Fountain silt loams (USDA 2009a). The soils are derived from alluvial material, have a very high available water capacity, and are poorly drained. Neither of the soils is subject to flooding or ponding. The depth to the water table is from 0 to 24 inches, and the depth to a restrictive feature is more than 80 inches. All of the soils on the site are rated as being very limited for dwellings without basements and for dwellings with basements.

Prime Farmland. Congress enacted the FPPA as a subtitle of the 1981 Farm Bill. The purpose of the law is to “minimize the extent to which Federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses” (Public Law 97-98, Sec. 1539-1549; 7 U.S.C. section 4201 *et seq.*). *Farmland* under the act includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forest land, pastureland, cropland, or other land, but not water or urban built-up land. Federal projects are subject to FPPA requirements if they might irreversibly convert farmland to nonagricultural use (USDA 2009c). According to the U.S. Department of Agriculture, Fountain silt loam is considered to be a prime farmland soil, and Calhoun silt loam soil is a prime farmland soil if it is drained (USDA 2009b). Development on the project site, therefore, requires consultation with the local Natural Resources Conservation Service (NRCS) office. A letter was sent to the local NRCS to inform the service of the project and to request comment on the conversion of prime farmland soils (see Appendix C).

4.5.1.2 Site 5 Alternative

Geologic and Topographic Conditions. Site 5 is in the same geologic area as the Preferred Alternative site (Site 7) and has the same geologic characteristics. Site 5 has a flat terrain.

Soils. Site soils are classified as Calloway, Calhoun, Falaya, and Grenada silt loams (USDA 2009a). The soils originate from alluvial material. Most of the soils on the site (approximately 99 percent of the site) have a moderate to very high available water capacity and are poorly drained. The soils are not subject to ponding, and only the Falaya silt loam soil, which covers approximately 3 acres of the site at its southeastern corner, is occasionally flooded. The depth to the water table on the soils is from 0 to 30 inches, and the depth to a restrictive feature is generally more than 80 inches. All the soils on the site except for the 0.1 acre of Grenada silt loam at the southwestern corner of the site are rated as being very limited for dwellings without basements, and all the site soils are rated as being very limited for dwellings with basements.

Prime Farmland. Site 5 is within the Urbanized Area of Jonesboro, Arkansas. According to the FPPA, areas within urbanized areas on U.S. Census Bureau maps are not farmland and are not subject to the provisions of the FPPA.

4.5.1.3 Site 9 Alternative

Geologic and Topographic Conditions. Site 9 is in the same geologic area as the Preferred Alternative site (Site 7) and has the same geologic characteristics. Topographically, the site is rolling terrain with many low points and hills. A large drainage swale leads to a low area in the northwest portion of the property. The southeast portion of the property is relatively flat and is at a higher elevation than the rest of the parcel.

Soils. Site soils are classified as Loring, Collins, and Grenada silt loam (USDA 2009a). The Loring silt loam is the predominant soil, covering approximately 24 acres of the site. It has a low available water capacity and is moderately well drained. The soil has no flooding or ponding. The depth to water table in the soil is about 16 to 30 inches, and the depth to a restrictive feature is from 24 to 32 inches. The other soils cover approximately 2 acres of the northern portion of the site and 1.5 acres of the east-central portion of the site. They have a high available water capacity, are moderately well drained, and have no ponding frequency. The Collins silt loam is occasionally flooded. The depth to water table in the soils is about 16 to 60 inches, and the depth to a restrictive feature is from 24 to 80 inches. The soils on the site are rated as being somewhat

to very limited for dwellings without basements and as being very limited for dwellings with basements.

Prime Farmland. Site 9 is within the Urbanized Area of Jonesboro, Arkansas. According to the FPPA, areas within urbanized areas on U.S. Census Bureau maps are not farmland and are not subject to the provisions of the FPPA.

4.5.2 Environmental Consequences

4.5.2.1 Proposed Action

Short-term minor adverse effects on soils and long-term minor adverse effects on prime farmland soils would be expected from implementing the proposed action. The minor adverse effect would be from vegetation removal, site grading, and soil exposure during construction. These effects would be minimized by the use of appropriate best management practices for controlling runoff, erosion and sedimentation, and by reestablishing vegetation on disturbed soils upon completion of construction activities. The NRCS stated in a letter dated February 2, 2009, that construction of the AFRC would convert less than 0.01 percent of farmland in the county to developed land (see Appendix C). Compliance with ADEQ Construction Storm Water Permit (ARR150000) would be required (ADEQ 2008a). No effects on geology or topography would be expected.

4.5.2.2 Site 5 Alternative

Short-term minor adverse effects on soils would be expected from implementing the Site 5 Alternative. The effects would result from soil disturbance during construction, but stabilizing the soils after construction would prevent long-term effects from occurring. No effects would be expected on geology, topography, or prime farmland soils.

4.5.2.3 Site 9 Alternative

Short-term minor adverse effects on soils would be expected from implementing the Site 9 Alternative. The effects would result from soil disturbance during construction, and the uneven terrain of the site could require the use of specialized best management practices for soil retention and runoff prevention. Stabilizing the soils after construction would prevent long-term effects from occurring. No effects would be expected on geology, topography, or prime farmland soils.

4.5.2.4 No Action Alternative

No effects on geology, topography, or soils would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state.

4.6 WATER RESOURCES

4.6.1 Affected Environment

4.6.1.1 Proposed Action

Surface Water. Site 7, the preferred AFRC site, is in the Lower St. Francis River basin. The site is about 10 miles west of the river's meandering, marshy southbound channel. The St. Francis

River continues its highly meandering southerly course to its confluence with the Mississippi River just north of Helena, Arkansas, about 90 miles south of Jonesboro. The highly agricultural watershed also is crossed by numerous irrigation and drainage ditches and canals (ANRC 2006). The proposed site is within the St. Francis Bay subwatershed of the Lower St. Francis River basin (ANRC 2006).

The proposed site is essentially flat (USACE Little Rock District 2008), with surface water drainage conveyed into drainage ditches just west and north of the site (along C.W. Post Road) that thereafter convey surface waters generally east and south through a series of low-gradient ditches and canals ultimately toward the St. Francis River (ADEQ 2008c). A segment of the St. Francis River east of Jonesboro is on the Arkansas 2008 303(d) list of impaired waters (ADEQ 2008b). No waterbodies between Jonesboro and the St. Francis River appear on the state's 2008 303(d) list (ADEQ 2008b; ArkansasWater 2008).

Hydrogeology/Groundwater. Jonesboro overlies the Mississippi River Valley Alluvial aquifer and the Sparta/Memphis aquifer. Craighead County is in the second highest of five categories of groundwater use by county in Arkansas (100 to 560 million gallons per day), most of which is withdrawn from the Alluvial aquifer. The Alluvial aquifer is the uppermost aquifer in the Mississippi Embayment. It is composed of 50 to 150 feet of sand and gravel and is generally overlain by the Mississippi River Confining Unit, itself made up of 0 to 50 feet of fine-grained sand, silt, and clay. The Alluvial aquifer is connected hydraulically with several rivers and drainage areas. Historically, it has been an important water source for agriculture in the region. In the Jonesboro area, depth to water in the Alluvial aquifer ranges from 23 to 56 feet according to 2007 monitoring data. In the Jonesboro area, water levels in the Alluvial aquifer declined between 1 and 7 feet between 1997 and 2007, with an average change in Craighead County monitoring wells of -4.23 feet (ANRC 2008). The Sparta/Memphis aquifer is a confined aquifer that extends in a southwest to northeast band across eastern Arkansas and adjacent states. In eastern Arkansas, including Craighead County, the predominant component of the Sparta/Memphis aquifer is Memphis Sand, part of a thick sand section in the middle and lower portions of the Claiborne Group that includes the Sparta Sand, the predominantly sandy facies of the Cane River, and the Carrizo Sand. The Memphis aquifer is the major source of quality drinking water in the area. In the Jonesboro area, depth to water in the Sparta/Memphis aquifer ranges from 55 to 148 feet according to 2007 monitoring data (ANRC 2008). No groundwater wells are known to occur on the proposed site. The depth to the water table in the site soils is from 0 to 24 inches (USDA 2009b).

Floodplains. The proposed site contains Federal Emergency Management Agency-designated 100-year floodplain (Zone AE) along its northern boundary adjacent to C.W. Post Road. This section of floodplain is part of a larger continuous floodplain area that occurs near the site to its west, north, and east (USACE Little Rock District 2008).

Coastal Zone. Arkansas is outside the coastal zone of the United States (NOAA 2007). Accordingly, the proposed action at Jonesboro is not subject to the federal Coastal Zone Management Act.

4.6.1.2 Site 5 Alternative

Surface Water. Site 5 is also in the Lower St. Francis River basin (ANRC 2006). The descriptions of the watershed, subwatershed, and impaired water features for Site 7 (see Section 4.6.1.1) apply equally to Site 5. Site 5 is mostly flat with a slight incline toward the southern edge

(USACE Little Rock District 2008). Surface water percolates into the soils when they are dry or drains toward the buffer of trees along the southern boundary. Higginbottom Creek north of the site flows east to the Viney Slough Ditch. A tributary of Higginbottom Creek flows east approximately 300 feet southeast of the southeastern corner of Site 5 (USGS 1986).

Hydrogeology/Groundwater. The description of hydrogeology/groundwater for Site 7 (see Section 4.6.1.1) applies equally to Site 5.

Floodplains. The proposed site is not within the 100-year floodplain (USACE Little Rock District 2008).

Coastal Zone. Arkansas is outside the coastal zone of the United States (NOAA 2007).

4.6.1.3 Site 9 Alternative

Surface Water. Site 9 is in the Cache River basin and the Big Creek Ditch-Bayou DeVew subwatershed (ANRC 2006). The site has no streams, but a drainage swale slopes to the northwest portion of the property. A stream approximately ¼ mile east of the site drains north to an isolated pond, and Lost Creek Ditch is approximately 1.25 miles west of the site and drains to Bayou DeVew (USGS 1986). Lost Creek Ditch is channelized for most of its length in Jonesboro, and it connects to the Cache River at the southernmost extent of the river basin approximately 75 miles south of Jonesboro. Approximately 67 percent of the Cache River basin is in agricultural production, and another 25 percent is in forest and pasture cover (ANRC 2006). There are no impaired waters on Bayou DeVew (ADEQ 2008b).

Hydrogeology/Groundwater. The description of hydrogeology/groundwater for Site 7 (see Section 4.6.1.1) applies equally to Site 9.

Floodplains. The proposed site is not within the 100-year floodplain (USACE Little Rock District 2008).

Coastal Zone. Arkansas is outside the coastal zone of the United States (NOAA 2007).

4.6.2 Environmental Consequences

4.6.2.1 Proposed Action

No adverse effects on water resources would be expected from implementing the proposed action. The nearest surface water (the St. Francis River) is 10 miles from the proposed site, and though drainage ditches convey storm water runoff from the area to the river, the distance involved would render any sediment or pollutants generated during construction or operational activities as immeasurable quantities in surface waters. Similarly, depth to groundwater in the area is from 23 to 56 feet to the Alluvial aquifer and from 55 to 148 feet to the Sparta/Memphis aquifer, and both aquifers are overlain by thick layers of sand, gravel, silt, and clay. Erosion and sediment runoff during land disturbance activities would be minimized by using construction-specific best management practices to control storm water runoff during land development and construction, and afterward during operation of the AFRC (including the use of oil-water separators in vehicle maintenance bays, or similar equipment to confine and collect potential pollutants). Compliance with the ADEQ Construction Storm Water Permit (ARR150000) by the Army or its contractors

would be required (ADEQ 2008d), including developing a site-specific Stormwater Pollution Prevention Plan.

Long-term minor adverse effects on floodplains would be expected if the area of floodplain along C.W. Post Road was incorporated into site layout. The Army will comply with EO 11988, *Floodplain Management*, by attempting to avoid the floodplain area during site layout planning. If avoidance is not possible, the Army would design and build the AFRC to reduce the risk of flood loss; minimize any impact that floods would have on human safety, health, and welfare; and preserve the natural and beneficial values served by the floodplain area. Note, however, that the Army is seeking to exclude the floodplain from the portion of the proposed site that would be purchased, and no effects on floodplains would be expected under the proposed action if the Army was able to acquire a subdivided portion of the proposed site that does not include the floodplain along C.W. Post Road.

No effects on coastal zone resources would be expected under the proposed action.

4.6.2.2 Site 5 Alternative

No adverse effects on water resources would be expected from implementing the Site 5 Alternative. The nearest surface water is approximately 300 feet from the site, and its flat topography inhibits rapid runoff of storm water from the site to nearby surface waters. Groundwater can be very shallow on the site soils, but depth to the Alluvial aquifer in the area is from 23 to 56 feet and from 55 to 148 feet to the Sparta/Memphis aquifer. The precautions to minimize erosion and sediment runoff during land disturbance activities discussed for the Preferred Alternative would be implemented if Site 5 was chosen for the AFRC.

4.6.2.3 Site 9 Alternative

No adverse effects on water resources would be expected from implementing the Site 9 Alternative. The nearest surface water is approximately ¼ mile from the site, and the drainage swale on the site channels runoff to the northwestern corner of the site and inhibits runoff from leaving the site. Groundwater is generally deeper than 16 inches on the site soils, and depth to the Alluvial aquifer in the area is from 23 to 56 feet and from 55 to 148 feet to the Sparta/Memphis aquifer. The precautions to minimize erosion and sediment runoff during land disturbance activities discussed for the Preferred Alternative would be implemented if Site 9 was chosen for the AFRC.

4.6.2.4 No Action Alternative

Under the No Action Alternative, no impacts on water resources would be expected because baseline conditions would remain the same.

4.7 BIOLOGICAL RESOURCES

4.7.1 Affected Environment

4.7.1.1 Proposed Action

Vegetation. Jonesboro, Arkansas, is in the Lower Mississippi Riverine Forest Province (Bailey 1995) but it sits on Crowley's Ridge, the only portion of the Bluff Hills ecoregion in Arkansas

(USEPA 2003). Crowley's Ridge is a disjunct series of loess-capped hills surrounded by the lower, flatter Mississippi Alluvial Plain. Wooded land and pastureland are common in the area, but there is only a limited amount of cropland in the area because of the hilly topography (USEPA 2003). Natural forest stands in the Bluff Hills ecoregion are usually classified as oak-beech but can consist of oak-hickory forest, oak-hickory-pine forest, post oak-blackjack oak forest, southern red oak-white oak forest, and beech-maple forest (Bailey 1995, USEPA 2003). (Scientific names of species mentioned in the text are provided in Appendix B.) In Arkansas, tulip poplar is native only to the Bluff Hills area (USEPA 2003).

The proposed site is a field drained by a shallow ditch. The field supports a mixture of warm season and cool season grasses with a few weedy forbs. The ditch line and adjacent unmaintained area support some native grasses, vines, and deciduous trees. Trumpet vine was observed along the tree line. A native warm season grass, broomsedge bluestem, was observed outside the mowed area. Clumps of rushes were present in moist soils along the drainage ditch (Figure 4-1).



Figure 4-1. Proposed site 7 in Jonesboro

Wildlife. Bird species common in the Jonesboro area include the field sparrow, mourning dove, downy woodpecker, blue jay, Carolina chickadee, tufted titmouse, Carolina wren, American robin, dark-eyed junco, house finch, and other commonly observed species (GBBC 2008). Common mammals of the Crowley's Ridge region include the eastern chipmunk, gray squirrel, eastern cottontail rabbit, opossum, red fox, raccoon, white-tailed deer, and the black bear (CRNC 2007).

Sensitive Species. The Arkansas Natural Heritage Commission (AHNC) lists two species with federal protected status in Craighead County, the fat pocketbook, a mussel, and pondberry, a plant (AHNC 2009). The fat pocketbook is a species of mussel that prefers sand, mud, and fine-gravel bottoms of large rivers (USFWS 1997). Pondberry is a shrub or small tree of the laurel family (CPC 2008). Other common names for it are southern spicebush and swamp spicebush. It occurs in seasonally flooded wetlands, sandy sinks, pond margins, and swampy depressions. In Arkansas and Missouri, the species tends to occupy depressions that form natural swamps or ponds. Approximately 40 populations remain extant in Arkansas and Missouri. The proposed site does not support habitat for either species.

Wetlands. The proposed site does not have any wetlands (USACE Little Rock District 2008).

4.7.1.2 Site 5 Alternative

Vegetation. The regional description of potential climax vegetation provided in Section 4.7.1.1 applies equally to Site 5. Site 5 is in agricultural production, and its only natural vegetation is a small group of trees near the center of the site and the treed buffer that extends along most of the northern and southern boundaries of the site and the entire western boundary of the site.

Wildlife. The description of wildlife of the Jonesboro region provided in Section 4.7.1.1 applies equally to Site 5, and Site 5 is similar to Site 7 in having been altered from its natural vegetative

state. Site 5 is in agricultural production and does not provide natural habitat for the wildlife of the area, although the trees along three sides of the site are most likely used by birds and small species of mammals and reptiles.

Sensitive Species. No sensitive species are known to occur on the site.

Wetlands. The proposed site does not have any wetlands (USACE Little Rock District 2008).

4.7.1.3 Site 9 Alternative

Vegetation. The site has been cleared of its natural vegetation and is mostly a maintained site covered with warm-season grasses.

Wildlife. The description of wildlife of the Jonesboro region provided in Section 4.7.1.1 applies equally to Site 9. Treed areas surround the site, and the site could provide low-quality habitat and foraging area for wildlife in the area.

Sensitive Species. No sensitive species are known to occur on the site.

Wetlands. The proposed site does not have any wetlands (USACE Little Rock District 2008).

4.7.2 Environmental Consequences

4.7.2.1 Proposed Action

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the proposed action. Developing the site as an AFRC would require converting an open-field habitat to developed land, which would adversely affect the field vegetation and animals that inhabit the site or use it for foraging, nesting, or other purposes. There is no habitat for sensitive species on the site, however, and developing the site would not adversely affect threatened or endangered species. Coordination letters were submitted to the U.S. Fish and Wildlife Service and the Arkansas Game and Fish Commission (see Appendix C). Both agencies responded that they would not expect adverse effects on wildlife resources from implementing the proposed action. No wetlands are known to be on the site, so no wetlands would be affected.

4.7.2.2 Site 5 Alternative

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the Site 5 Alternative. Developing the site as an AFRC would require converting agricultural land to developed land, which would reduce vegetative cover and adversely affect any animals that inhabit the site or use it for foraging or other purposes. There is no habitat for sensitive species on the site, and developing the site would not adversely affect threatened or endangered species. If the site was chosen for the AFRC, coordination letters describing the site and its location would be submitted to the U.S. Fish and Wildlife Service and the Arkansas Game and Fish Commission for their assessment of the effects of constructing and operating an AFRC at the site on wildlife and sensitive species. No wetlands are known to be on the site, so no wetlands would be affected.

4.7.2.3 Site 9 Alternative

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the Site 9 Alternative. Developing the site as an AFRC would require converting a maintained, grassed area to developed land, which would adversely affect any animals that use the site. There is no habitat for sensitive species on the site, and developing the site would not adversely affect threatened or endangered species. If the site was chosen for the AFRC, coordination letters describing the site and its location would be submitted to the U.S. Fish and Wildlife Service and the Arkansas Game and Fish Commission for their assessment of the effects of constructing and operating an AFRC at the site on wildlife and sensitive species. No wetlands are known to be on the site, so no wetlands would be affected.

4.7.2.4 No Action Alternative

No adverse effects on biological resources would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state.

4.8 CULTURAL RESOURCES

4.8.1 Affected Environment

Cultural resources are composed of historic properties (buildings, structures, districts, landscapes, and the like (as defined by Army Regulation 200-1 [AR 200-1] and the NHPA), archaeological sites (as defined and governed by the Archaeological Resources Protection Act, AR 200-1, and the NHPA), Native American sacred sites (as identified in EO 13007 and the American Indians Religious Freedom Act), traditional cultural properties (as defined in the NHPA and as described in National Register Bulletin 38), and sites and artifacts associated with Native American Graves (as defined and governed by the Native American Graves Protection and Repatriation Act).

Note that neither Site 5 nor Site 9 was included in the Archaeological Impact Evaluation. However, if the preferred site (Site 7) is not selected and the Army instead elects to move forward with the Site 5 Alternative or the Site 9 Alternative, the Army would first conduct a Phase I Cultural Resources Survey on the chosen site, complete any further consultation with state and federal agencies and Native American tribes, and prepare supplemental NEPA documentation—either a Record of Environmental Consideration or a Supplemental EA and FNSI, depending on the nature of any impact(s) and mitigation measure(s) that may be identified as a result of follow-on NHPA compliance efforts—before the initiation of any construction.

4.8.1.1 Archaeological Resources

A review of the Arkansas Archaeological Survey revealed no previously recorded archaeological sites within the Area of Potential Effect (APE) for the proposed project. The APE for the proposed undertaking included the area within the boundary of the proposed site, as well as the viewshed adjacent to the proposed site, which typically extends from 1.5 to 2 miles from the site boundary. Eleven previously recorded archaeological sites were identified within a 1-mile radius of the APE (see Table 4-7). Of these 11 sites, none have been evaluated for listing on the National Register of Historic Places (NRHP). All 11 identified sites are associated with Native American occupation of the area spanning the Dalton through the Woodland periods; most of the sites date to the Archaic. One of the sites also contains an unknown historic component. Three of the sites

are southeast of the project area; three sites are to the east; two sites are to the west; two sites are to the immediate north; and one site is northeast of the project area.

New South Associates archaeologists conducted an Archaeological Impact Evaluation of the APE between January 16 and 19, 2009, to identify those areas of the APE that were too disturbed to contain archaeological sites and to identify areas with potential to contain archaeological deposits. An intensive archaeological survey of those areas of the APE with potential to contain archaeological deposits was conducted. The Archaeological Impact Evaluation completes a 100 percent archaeological survey of the APE. This survey, which included a pedestrian survey and hand excavated shovel tests, revealed no archaeological deposits within the project's APE.

**Table 4-7
Previously recorded archaeological sites within a 1-mile radius
of the APE for the proposed action**

| Site | Site type | Cultural affiliation | Relation to APE | NRHP status |
|--------|--|--|-----------------|--------------|
| 3CG66 | Prehistoric lithic scatter | Dalton, early Archaic, Archaic, Woodland | Outside | Unknown |
| 3CG75 | Prehistoric lithic scatter | Unknown prehistoric | Outside | Unknown |
| 3CG353 | Prehistoric lithic scatter | Archaic | Outside | Unknown |
| 3CG357 | Prehistoric lithic scatter | Archaic | Outside | Not eligible |
| 3CG442 | Prehistoric lithic scatter | Archaic | Outside | Unknown |
| 3CG443 | Prehistoric lithic scatter | Archaic | Outside | Unknown |
| 3CG502 | Prehistoric lithic scatter | Archaic | Outside | Not eligible |
| 3CG904 | Prehistoric lithic scatter; historic artifact scatter | Archaic; unknown historic | Outside | Unknown |
| 3CG905 | Prehistoric lithic scatter | Archaic | Outside | Unknown |
| 3CG940 | Prehistoric artifact scatter | Late Archaic, Baytown | Outside | Unknown |
| 3CG941 | Prehistoric artifact scatter | Archaic, Baytown | Outside | Unknown |

Source: Warhop and Olson 2009

Archaeologists concluded that there are no archaeological resources within the APE for the proposed project (36 CFR 800.16) and no State Archaeological Landmarks.

4.8.1.2 Historic Buildings

A review of the NRHP and the Arkansas Archeological Survey identified no previously recorded historic buildings within the APE for the proposed project. A cultural resource survey of the APE conducted by New South Associates between January 16 and 19, 2009, revealed no historic properties 50 years of age or older (built before 1958), within the APE for the proposed project.

Two NRHP-listed properties were identified within a 1.5-mile radius of the APE for the proposed project. Shiloh Church (CG0023) is northwest of the APE and is identified as significant for history and culture. The church building dates from the 1800s; however, it appears to have been destroyed since the date of the survey. The Cotton Gin on AR 18 (CG0256) is northeast of the APE and is identified as significant for agricultural history. The cotton gin dates to the 1950s.

4.8.1.3 Historic Districts

Background research conducted of the NRHP and the Arkansas Archeological Survey identified no previously recorded historic districts or historic landmark districts within the APE for the proposed project. The cultural resource survey of the APE also identified no historic districts or historic landmark districts within the APE for the proposed project.

4.8.1.4 Historic Markers, Monuments, and Memorials

No previously recorded historic markers, monuments, or memorials were identified within the APE for the proposed project. The cultural resource survey of the APE also identified no historic markers, monuments, or memorials within the APE.

4.8.1.5 Traditional Cultural Properties, National Historic Landmarks, and World Heritage Sites

No previously recorded traditional cultural properties, National Historic Landmarks (NHL), World Heritage Sites, or any state or locally designated landmarks were identified within the APE. The cultural resource survey of the APE did not identify any of these resource types within the APE for the proposed project, either.

4.8.2 Environmental Consequences

4.8.2.1 Proposed Action

No adverse effects on cultural resources would be expected from implementing the proposed action. No cultural or historic resources have been identified within the APE for the proposed project, and there are no NRHP-listed or NRHP-eligible resources within the APE. All previously recorded NRHP-listed resources are well removed from the view shed of the project and, therefore, would not be affected. A coordination letter regarding the proposed action was sent to the Arkansas State Historic Preservation Office (SHPO). The SHPO responded that the proposed action would not affect known historic properties (see Appendix C). A Phase I cultural survey report will be sent to the SHPO for review and concurrence.

4.8.2.2 Site 5 Alternative

Unknown effects on cultural resources would be expected from implementing the Site 5 Alternative. Site 5 was not included in the Phase I Cultural Resources Survey. If this alternative was chosen, the Army would be responsible for having a Phase I Cultural Resources Survey performed before construction could begin.

4.8.2.3 Site 9 Alternative

Unknown effects on cultural resources would be expected from implementing the Site 9 Alternative. Site 9 was not included in the Phase I Cultural Resources Survey. If this alternative was chosen, the Army would be responsible for having a Phase I Cultural Resources Survey performed before construction could begin.

4.8.2.4 No Action Alternative

No effects on cultural resources would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state.

4.9 SOCIOECONOMICS

4.9.1 Affected Environment

The socioeconomic indicators used for this study include economic development, demographics, quality of life, environmental justice, and protection of children. These indicators characterize the region of influence (ROI). The ROI is a geographic area selected as a basis on which social and economic impacts of project alternatives are analyzed. The ROI for the social and economic environment is Craighead County, Arkansas. The ROI covers an area of 711 square miles. The closest major metropolitan areas to Jonesboro are Memphis, Tennessee, which is about 70 miles to the southeast, and Little Rock, Arkansas, which is about 130 miles to the southwest. The ROI and discussion of the affected environment are the same for and apply equally to the proposed action, Site 5 Alternative, and Site 9 Alternative, and the discussion below applies equally to all three of the action alternatives.

The baseline year for socioeconomic data is 2007, the most recent year for which most of the ROI socioeconomic indicators (e.g., population, employment) are reasonably available. Where 2007 data are not available, the most recent data available are presented.

4.9.1.1 Economic Environment

Employment and industry. The ROI has a civilian labor force of 45,602, an increase of 7 percent over the 2000 labor force of about 42,782 (Table 4-8). The ROI 2007 annual unemployment rate was 5.0 percent, higher than the national unemployment rate of 4.6 percent (BLS 2008). The primary sources of ROI employment were health care and social assistance, government and government enterprises, retail trade, and manufacturing. Together these industry sectors accounted for more than 50 percent of regional employment (BEA 2008).

Income. ROI income levels are higher than state averages but lower than national averages. The ROI per capita personal income (PCPI) was 104 percent of the state PCPI of \$20,708 and 80 percent of the national PCPI of \$26,688 (Table 4-9). ROI median household income was 107 percent of the state median household income of \$38,134 and 81 percent of the national median household income of \$50,740 (U.S. Census Bureau 2008a).

Table 4-8
Labor force and unemployment

| | 2000 civilian labor force | 2007 civilian labor force | Change in labor force, 2000–2007 | 2007 Unemployment rate |
|------------------|------------------------------|------------------------------|-------------------------------------|---------------------------|
| Craighead County | 42,782 | 45,602 | 7% | 5.0% |
| United States | 142,583,000 | 153,124,000 | 7% | 4.6% |

Source: BLS 2008

Table 4-9
Income, 2007

| | Craighead County | Arkansas | United States |
|-------------------------|------------------|----------|---------------|
| PCPI | \$21,433 | \$20,708 | \$26,688 |
| Median household income | \$40,873 | \$38,134 | \$50,740 |

Source: U.S. Census Bureau 2008a

Population. The ROI's population was 91,552, an increase of 11 percent from the 2000 population of 82,148 (Table 4-10). During the same time period, Arkansas' population increased by 6 percent, and the nation's population increased by 7 percent (U.S. Census Bureau 2008a, 2008b).

Table 4-10
Population

| | 2000 population | 2007 population | Change in population, 2000–2007 |
|------------------|-----------------|-----------------|------------------------------------|
| Craighead County | 82,148 | 91,552 | 11% |
| Arkansas | 2,673,400 | 2,834,797 | 6% |
| United States | 281,421,906 | 301,621,159 | 7% |

Source: U.S. Census Bureau 2008a, 2008b.

4.9.1.2 Sociological Environment

Housing. Housing data are presented in Table 4-11. As shown, the ROI housing costs are lower than the state and national levels, with lower vacancy rates (U.S. Census Bureau 2008a).

Table 4-11
Housing data, 2007

| | Number of housing units | Occupied | Vacant | Median monthly mortgage | Median gross rent |
|------------------|----------------------------|----------|--------|----------------------------|----------------------|
| Craighead County | 38,991 | 92% | 8% | \$894 | \$549 |
| Arkansas | 1,287,472 | 86% | 14% | \$920 | \$573 |
| United States | 127,895,430 | 88% | 12% | \$1,464 | \$789 |

Source: U.S. Census Bureau 2008a.

Law enforcement, fire protection, medical services. ROI law enforcement is provided by the Jonesboro Police Department along with the county sheriff and state law enforcement officers. The Jonesboro Police Department operates out of one headquarters building and four police substations around the city (City of Jonesboro 2008). The nearest police station is about 7 miles from the proposed AFRC site.

The Jonesboro Fire Department operates from six fire stations. The department has 112 full-time uniformed personnel providing services which include fire suppression and rescue, emergency

medical services, and fire inspections (City of Jonesboro 2008). The nearest fire station is about 2.5 miles from the proposed AFRC site.

Jonesboro has several hospitals: the Northeast Arkansas Medical Center Hospital, Saint Bernard's Medical Center, and the Surgical Hospital of Jonesboro. Northeast Arkansas Medical Center is less than 5 miles from the proposed AFRC site, and Saint Bernard's and the Surgical Hospital are within 8 miles of the site. The hospitals provide emergency facilities, urgent medical care, inpatient care, and surgical facilities (ahd.com 2008).

Schools. The ROI has 8 public school districts with a total enrollment of more than 15,000 students in 36 schools. There are also six private schools with a total student enrollment of about 315 (NCES 2007). No primary or secondary schools are on or adjacent to the proposed AFRC site.

Support services, shops, and recreation. There is an array of the typical shopping, service, and recreational facilities in the ROI.

4.9.1.3 Environmental Justice

On February 11, 1994, President Clinton issued EO 12898, *Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*. The EO is designed to focus the attention of federal agencies on the human health and environmental conditions in minority communities and low-income communities. Environmental justice analyses are performed to identify the disproportionate placement of high and adverse environmental or health impacts from proposed federal actions on minority or low-income populations and to identify alternatives that could mitigate these impacts.

Minority populations are identified as Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and other Pacific Islander, persons of two or more races, and persons of Hispanic origin. Minority populations should be identified where either the minority population of the affected area exceeds 50 percent or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis (CEQ 1997). As of 2006, 87 percent of the ROI population was white, and 13 percent was of a minority population. The ROI had a lower percentage of minority populations compared to Arkansas and the United States, which had 19 percent and 20 percent minority populations, respectively (U.S. Census Bureau 2008b).

Poverty thresholds established by the Census Bureau are used to identify low-income populations (CEQ 1997). Poverty status is reported as the number of persons or families with income below a defined threshold level. About 16 percent of ROI residents were classified as living in poverty, lower than Arkansas' 18 percent poverty rate but higher the national poverty rate of 13 percent (U.S. Census Bureau 2008b).

4.9.1.4 Protection of Children

EO 13045, *Protection of Children from Environmental Health and Safety Risks*, requires federal agencies, to the extent permitted by law and mission, to identify and assess environmental health and safety risks that might disproportionately affect children.

There are no residences, schools, day care centers, parks, or churches on or adjacent to the preferred AFRC site. Site 5 has residential neighborhoods adjacent to its western and southern boundaries and a church to the north. Site 9 is bound by residential neighborhoods.

4.9.2 Environmental Consequences

4.9.2.1 Proposed Action

EIFS Methodology. The economic effects of implementing the proposed action are estimated using the Economic Impact Forecast System (EIFS) model, a computer-based economic tool that calculates multipliers to estimate the direct and indirect effects resulting from a given action. Changes in spending and employment from constructing the AFRC represent the direct effects of the action. Using the input data and calculated multipliers, the model estimates ROI changes in sales volume, income, employment, and population, accounting for the direct and indirect effects of the action.

For purposes of this analysis, a change is considered significant if it falls outside the historical range of ROI economic variation. To determine that range, the EIFS model calculates a rational threshold value (RTV) profile for the ROI. This analytical process uses historical data for the ROI and calculates fluctuations in sales volume, income, employment, and population patterns. The historical extremes for the ROI become the thresholds of significance (i.e., the RTVs) for social and economic change. If the estimated effect of an action falls above the positive RTV or below the negative RTV, the effect is considered significant. Appendix D discusses this methodology in more detail and presents the model inputs and outputs developed for this analysis.

EIFS model results. Short-term minor beneficial effects on economic development would be expected from implementing the proposed action. In the short term, the expenditures and employment associated with constructing the AFRC training building, Organizational Maintenance Shop, storage building, and military and privately owned vehicle parking area in Jonesboro would increase ROI sales volume, employment, and income. A benefit of any type of development is the construction spending, especially if local labor and materials are used. The economic benefits would be for a short term, lasting only for the duration of the construction period. These changes in sales volume, employment, and income would fall within historical fluctuations (i.e., within the RTV range) and be considered minor (Table 4-12 and Appendix D).

Table 4-12
EIFS model output

| Indicator | Projected change | Percentage change | RTV range |
|----------------------|------------------|-------------------|------------------|
| Direct sales volume | \$11,500,000 | | |
| Induced sales Volume | \$21,505,000 | | |
| Total sales volume | \$33,005,000 | 1.25% | -8.75% to 11.62% |
| Direct income | \$2,210,067 | | |
| Induced income | \$4,132,825 | | |
| Total income | \$6,342,892 | 0.41% | -7.89% to 9.83% |
| Direct employment | 62 | | |
| Induced employment | 116 | | |
| Total employment | 179 | 0.37% | -3.42% to 3.30% |
| Local population | 0 | 0.00% | -1.07% to 3.03% |

Source: EIFS model calculations.

Population. No effects on population would be expected from implementing the proposed action. The proposed action would not change the ROI's population because the closing Army Reserve Center is also in Jonesboro, Arkansas. The affected population already resides within the ROI. Full- or part-time employees and the Reservists would commute from their current homes to the AFRC.

Housing. No effects on housing would be expected from implementing the proposed action. The proposed action would not change the ROI's population and would not affect the housing market. Full- or part-time employees and the Reservists would commute from their homes to the AFRC.

Quality of Life. The following paragraphs identify the anticipated effects for each of the key components of quality of life.

- *Law Enforcement, Fire Protection, and Medical Services.* No effects on public services would be expected from implementing the proposed action. The Jonesboro police, fire, and medical emergency departments would respond to emergencies at the proposed site.
- *Schools.* No effects on schools would be expected from implementing the proposed action. The proposed action would not change the ROI population and would not affect school enrollment.
- *Family Support, Shops and Services, and Recreation.* No effects on family services would be expected from implementing the proposed action. Shopping and service facilities needed by the reservists or AFRC staff (such as gas stations or food establishments) are available in Jonesboro.

Environmental Justice. No effects on environmental justice would be expected from implementing the proposed action. No aspect of the construction or operation of the AFRC would create environmental or health risks that would disproportionately affect low-income or minority populations.

Protection of Children. No effects on the protection of children would be expected from implementing the proposed action (the Preferred Alternative at Site 7). Children would not use the AFRC, facilities frequented by children are not close to the proposed site, and no aspect of the construction or operation of the AFRC would disproportionately create environmental, health, or safety risks to children.

4.9.2.2 Site 5 Alternative

The effects of constructing and operating an AFRC on Site 5 would be the same as those for the proposed action. The effects discussion in Section 4.9.2.1 applies equally to the Site 5 Alternative.

Short-term minor adverse effects on the protection of children would be expected from implementing the Site 5 Alternative. There are residential neighborhoods near Site 5, and demolition and construction activity could pose an increased safety risk to children because construction sites can be enticing to children. During construction, the safety measures stated at 29 CFR Part 1926, *Safety and Health Regulations for Construction*, and AR 385-10, *Army Safety Program*, would be followed to protect the health and safety of nearby residents and construction workers. Barriers and *No Trespassing* signs would generally be placed around construction sites

to deter children from playing in these areas and construction vehicles and equipment would be secured when not in use.

4.9.2.3 Site 9 Alternative

The effects of constructing and operating an AFRC on Site 9 would be the same as those for the Site 5 Alternative. The effects discussion in Section 4.9.2.2 applies equally to the Site 9 Alternative.

4.9.2.4 No Action Alternative

No effects on socioeconomics, environmental justice, or the protection of children would result from implementing the No Action Alternative. Under the No Action Alternative, there would be no changes to the existing condition of socioeconomic resources.

4.10 TRANSPORTATION

This section describes the existing highway and transit subsystems near the proposed site, the effects associated with the proposed action, and potential mitigation measures, if required.

4.10.1 Affected Environment

Traffic in Jonesboro is generated primarily by personal operating vehicles (POVs). Roadways are predominantly paved two- or four-lane asphalt. Regional access to Jonesboro is provided by Routes 1, 49, 149, and 63 from the north, south, east, and west, respectively. Interstate 40 travels east to west between Memphis and Little Rock, approximately 50 miles south of Jonesboro. Once entering the area, travelers would approach the preferred site (Site 7) most efficiently via Route 63 and depending on their point of origin, could approach via Route 149. Route 63 near Site 7 has an annual average daily traffic count of 14,100. Travelers would approach Site 5 most efficiently via Route 49, which has an annual average daily traffic count of 13,000. Travelers would approach Site 9 most efficiently via Route 141 (North Church Street), which has an annual average daily traffic count of 2,900 (AHTD 2007, JMPO 2005).

Level of service (LOS) is a qualitative measure of the operating condition of an intersection or other transportation facility. There are six LOSs (A through F) defined: LOS A represents the best operating conditions with no congestion, and LOS F is the worst with heavy congestion. All the streets near the sites operate at LOS C or better. No streets or intersections adjacent to or near any of the potential sites have been identified as trouble spots in the *Long Range Transportation Plan* for the Jonesboro area (AHTD 2007, JMPO 2005).

The Jonesboro Economical Transit System provides Jonesboro with a transportation system of buses, and its Gold Route 2 has several stops along C.W. Post Road adjacent to the preferred site; its Blue Route has several stops along Links Circle adjacent to Site 5; and its Green Route has several stops along Church Street adjacent to Site 9 (JETS 2008). There are several charter bus services in Jonesboro. Amtrak provides passenger train service to Walnut Ridge, 20 miles northwest of Jonesboro.

The largest airport in the area is the Memphis International Airport in Memphis, which is a 1-hour drive from Jonesboro. This airport is one of Tennessee's largest airports serving the greater Memphis area and surrounding cities. There are more than 1,000 flight arrivals and

departures at Memphis each day. In addition, Jonesboro Municipal Airport is 2.5 miles from the preferred site and provides limited air service to the region.

4.10.2 Environmental Consequences

4.10.2.1 Proposed Action

Short- and long-term minor adverse effects on traffic would be expected from implementing the proposed action. Only small changes to the transportation system would be expected with the proposed action. The changes would be primarily contributable to construction vehicles and small changes in localized traffic patterns from the personnel.

Construction vehicles and traffic delays near the construction site would increase traffic locally. These effects would be temporary and would end with the construction phase. The local roadway infrastructure is sufficient to support the construction vehicle traffic that the AFRC project would generate. Road closures or detours to accommodate utility system work could be expected, creating short-term traffic delays. Construction vehicles would be equipped with backing alarms, two-way radios, and *Slow Moving Vehicle* signs when appropriate. Although the effects would likely be minor, construction traffic would be routed and scheduled to minimize conflicts with other traffic, and construction material staging areas would be strategically located to minimize traffic effects.

Access to the project site would be limited to a single entrance/exit from C.W. Post or Moore Road, which would result in minor effects on streets near the project site. Approximately 10 permanent on-post personnel and support staff would work at the proposed AFRC during normal weekday business hours. These personnel would constitute approximately 24 more POV trips per normal weekday (ITE 2003), only a fraction of which would occur during peak traffic periods. This small increase in traffic would not likely affect the capacity of any of nearby roadway segments or intersections adjacent to the site. Weekday operational activities would result in long-term negligible adverse effects on local and regional traffic levels.

Weekend training activities would generate traffic, mostly on Saturday morning and Friday and Sunday evenings. The 240 trainees on an average weekend would generate approximately 530 more POV trips during a training session (ITE 2003). None of the new trips would occur during weekday peak periods. This number of trips to and from the site would be only a fraction of the existing weekday traffic at any of the intersections or roadways affected, and would likely cause only negligible changes to traffic on these roadway and intersections. Moderate changes in the number of personnel would not substantially change the number of daily trips, the times of travel, or the level of impact under NEPA.

Because the administrative personnel and weekend trainees would be within driving distance of the AFRC, the proposed action would likely have no effect on public transit, rail, bus, or air traffic in the area. The 7.6 acres of parking would be adequate for the permanent personnel and trainees' POVs and for the staging military vehicles.

4.10.2.2 Site 5 Alternative

Short- and long-term minor adverse effects on traffic would be expected with the Site 5 Alternative. The changes would be primarily contributable to construction vehicles, small changes in localized traffic patterns due to the personnel.

Traffic would increase due to construction vehicles, traffic delays near construction sites and their effects would be similar to those outlined under the proposed action. Although effects would be minor, same precautions to minimize the traffic impacts of construction activities that are outlined in Section 4.10.2.1 would be taken if this alternative was chosen.

This site would be accessed directly from South Caraway Road. The numbers of permanent personnel and Reservists and the numbers of trips generated because of them that is outlined for the proposed action applies equally to the Site 5 Alternative. The trips would have minor changes on nearby roadway segments or intersections adjacent to the site. This alternative would have no impact on public transit, rail, bus, or air traffic in the area. Effects on parking would be similar to those discussed for the proposed action.

4.10.2.3 Site 9 Alternative

Short- and long-term minor adverse effects on traffic would be expected with the Site 9 Alternative. The discussion in Section 4.10.2.2 applies equally to the Site 9 Alternative. The only difference between the two alternatives with respect to transportation system effects is that construction and operation of the AFRC at Site 9 would have a localized effect on North Church Street and Magnolia Road north of Jonesboro. Implementation of the alternative would have minor changes on these roadway segments and nearby intersections. This alternative would have no impact on public transit, rail, bus, or air traffic in the area. Effects on parking would be similar to those discussed for the proposed action.

4.10.2.4 No Action Alternative

No effects on transportation resources would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state. Current and future traffic would remain as described in section 4.10.1.

4.11 UTILITIES

4.11.1 Affected Environment

The city of Jonesboro provides utilities to residents and has excess capacity available for current and future manufacturing facilities (Jonesboro Chamber of Commerce 2009).

4.11.1.1 Proposed Action

All utilities required for operating the AFRC are reported to be available at the proposed site (USACE Little Rock District 2008).

Potable Water Supply. City Water & Light of Jonesboro owns and maintains all potable water lines in the city and provides potable water to residents (CWL 2009).

Wastewater System. City Water & Light of Jonesboro owns and maintains all wastewater lines in the city and provides wastewater treatment for the city (CWL 2009).

Storm Water System. The Jonesboro Public Works Department maintains the city's storm water system (City of Jonesboro 2009). The proposed site is undeveloped and does not have a dedicated storm water collection system.

Energy Sources

- *Electricity.* City Water & Light of Jonesboro owns and maintains all electrical lines in the city and provides electrical service to residents (CWL 2009). Overhead electric lines run along C.W. Post Road.
- *Natural gas.* Natural gas service is available from CenterPoint Energy, Inc., which serves areas of Arkansas, Texas, Oklahoma, Louisiana, and Mississippi (CenterPoint Energy 2009; Jonesboro Chamber of Commerce 2009).

Communications. Overhead telephone lines run along C.W. Post Road. AT&T provides telephone service in the region. Most major cellular networks (Sprint, Alltel, AT&T, Verizon, and others) provide cellular phone reception in the area.

Solid Waste. The Jonesboro Sanitation Department is responsible for collecting refuse from residential areas in the city (City of Jonesboro 2009). It also runs a curbside-recycling program. The city of Jonesboro landfill facility closed in January 2005 and is under final closure procedures. The county's landfill is open to city residents. The Craighead County solid waste landfill has an estimated life expectancy of more than 500 years (Jonesboro Chamber of Commerce 2009). City residents must take all bulky items, such as appliances and furniture, to the county landfill, because the city no longer picks up such items.

4.11.1.2 Site 5 Alternative

All utilities required for operating the AFRC are reported to be available at Site 5 (USACE Little Rock District 2008). The discussions of utility providers and owners in Section 4.11.1.1 apply equally to Site 5.

4.11.1.3 Site 9 Alternative

All utilities required for operating the AFRC are reported to be available at Site 9 (USACE Little Rock District 2008). The discussions of utility providers and owners in Section 4.11.1.1 apply equally to Site 9.

4.11.2 Environmental Consequences

4.11.2.1 Proposed Action

Long-term minor adverse effects on utility systems would be expected from implementing the proposed action. Operation of the AFRC would create a minor additional demand on all utility systems, which would reduce the available capacity of all systems. The minor increase in demands, however, would be well within the capacities of existing systems.

Table 4-13 provides an estimate of the quantity of construction debris that would be generated during the new AFRC's construction. The Craighead County landfill and landfills in surrounding counties have adequate capacity to handle the estimated amount of waste.

Table 4-13
Estimates of construction and demolition debris generated
as a result of implementing the proposed action

| Construction type | Admin area (ft²) | C&D factor (lb/ft²) | Estimated waste (lb) | Estimated waste (tons) |
|--------------------------------|------------------------------------|---|-----------------------------|-------------------------------|
| Construction | 97,422 | 2.8 ^a | 272,782 | 136 |
| Amount recycled (50%) | N/A | N/A | 136,391 | 68 |
| Net total C&D debris generated | N/A | N/A | 136,391 | 68 |

Notes:

C&D = construction and demolition, ft² = square feet, lb = pound

^a EPA estimate for nonresidential construction debris generation.

4.11.2.2 Site 5 Alternative

Long-term minor adverse effects on utility systems would be expected from implementing the Site 5 Alternative. Operation of the AFRC would create a minor additional demand on all utility systems, which would reduce the available capacity of all systems. The minor increase in demands, however, would be expected to be well within the capacities of existing systems. The estimate of construction debris provided in Section 4.11.2.1 applies equally to the Site 5 Alternative.

4.11.2.3 Site 9 Alternative

Long-term minor adverse effects on utility systems would be expected from implementing the Site 9 Alternative. Operation of the AFRC would create a minor additional demand on all utility systems, which would reduce the available capacity of all systems. The minor increase in demands, however, would be expected to be well within the capacities of existing systems. The estimate of construction debris provided in Section 4.11.2.1 applies equally to the Site 9 Alternative.

4.11.2.4 No Action Alternative

No effects on utility systems would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, and the land would remain in its current state.

4.12 HAZARDOUS AND TOXIC SUBSTANCES

4.12.1 Affected Environment

4.12.1.1 Proposed Action

The preferred site is undeveloped, and no environmental concerns have been observed (USACE Little Rock District 2008). Before site acquisition, an Environmental Condition of Property (ECP) Report would be prepared. The ECP Report would meet the Department of the Army's requirement to assess, determine, and document the environmental condition of transferable property and to determine if the property is suitable for acquisition. The ECP Report would be prepared in accordance with Army Regulation 200-1 (AR 200-1), Section 15-5 c(6)

Environmental Protection and Enhancement, and comply with EPA's *All Appropriate Inquiry* rules under the Comprehensive Environmental Response, Compensation, and Liability Act. Additionally, the ECP Report would comply with the American Society for Testing and Materials Designation: E 1527-05, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM 2005).

The Hazardous Waste Landfill nearest to Jonesboro is in Emelle, Alabama (Jonesboro Chamber of Commerce 2009). The landfill is operated by Chemical Waste Management of Emelle, Alabama.

4.12.1.2 Site 5 Alternative

The Site Selection Team assessed Site 5 and did not note any environmental concerns for the site (USACE Little Rock District 2008). If Site 5 was chosen for acquisition, an ECP Report would be prepared, as discussed in Section 4.12.1.1. The discussion of landfills in Section 4.12.1.1 applies equally to the Site 5 Alternative.

4.12.1.3 Site 9 Alternative

The Site Selection Team assessed Site 9 and did not note any environmental concerns for the site (USACE Little Rock District 2008). If Site 9 was chosen for acquisition, an ECP Report would be prepared, as discussed in Section 4.12.1.1. The discussion of landfills in Section 4.12.1.1 applies equally to the Site 9 Alternative.

4.12.2 Environmental Consequences

4.12.2.1 Proposed Action

Long-term minor adverse effects related to hazardous and toxic substances would be expected from implementing the proposed action. Operation of the AFRC would require the use of materials such as petroleum, oils, lubricants, solvents and paints. All hazardous materials and waste would be handled in accordance with local, state, and federal regulations and in accordance with established procedures. Therefore, the only effect expected from operation of the AFRC would be minor spills associated with normal vehicle maintenance activities.

4.12.2.2 Site 5 Alternative

Long-term minor adverse effects related to hazardous and toxic substances would be expected from implementing the Site 5 Alternative. Regarding hazardous and toxic substances, the effects of constructing and operating an AFRC on Site 5 would be expected to be the same as those for the proposed action. The discussion in Section 4.12.2.1 applies equally to the Site 5 Alternative.

4.12.2.3 Site 9 Alternative

Long-term minor adverse effects related to hazardous and toxic substances would be expected from implementing the Site 9 Alternative. Regarding hazardous and toxic substances, the effects of constructing and operating an AFRC on Site 9 would be expected to be the same as those for the proposed action. The discussion in Section 4.12.2.1 applies equally to the Site 9 Alternative.

4.12.2.4 No Action Alternative

No adverse effects on hazardous and toxic substance use, storage, or disposal would result from implementing the No Action Alternative. Under the No Action Alternative, no land would be acquired, no facilities would be constructed, the land would remain in its current state, and any such materials or wastes would continue to be managed in accordance with applicable law and regulations.

4.13 CUMULATIVE EFFECTS SUMMARY

All construction projects in the area local to where the proposed action would occur would affect numerous resource areas, including land use, aesthetics, local air quality, the local noise environment, the availability of habitat, economic development, and the local transportation system. No specific construction projects or other activities that would contribute to cumulative effects were identified. Therefore, no significant adverse cumulative effects would be expected to result if the proposed action, the Site 5 Alternative, or the Site 9 Alternative was implemented.

4.14 MITIGATION SUMMARY

Mitigation actions are used to reduce, avoid, or compensate for significant adverse effects. The EA determined that there was no need for mitigation measures. However, if for some reason either the Site 5 Alternative or Site 9 Alternative was selected for implementation, some additional analysis would be necessary before construction could proceed, including further NHPA compliance efforts. If follow-on surveys were necessary and they disclosed information suggesting a potential for adverse effects requiring mitigation, those requirements would be addressed in supplemental NEPA documentation—either a Record of Environmental Consideration or a Supplemental EA and FNSI, as appropriate, depending on the nature of any impact(s) and mitigation requirement(s) identified.

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SECTION 5.0 CONCLUSIONS

5.1 INTRODUCTION

This EA has been prepared to evaluate the potential effects on the natural and human environment from activities associated with constructing and operating an Armed Forces Reserve Center in Jonesboro, Arkansas, pursuant to 2005 BRAC Commission recommendations. The EA has examined the Army's Preferred Alternative (the Site 7 Alternative), the Site 5 Alternative, the Site 9 Alternative, and the No Action Alternative.

The EA evaluates potential effects on land use, aesthetic and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomic (including environmental justice and protection of children), transportation, utilities, and hazardous and toxic substances.

Evaluation of the proposed action indicates that the physical and socioeconomic environments at El Dorado and in the ROI would not be significantly affected from implementing the action at Site 7 (identified as the Army's Preferred Alternative), Site 5, or Site 9. The predicted consequences on resource areas are briefly described below. Table 5-1 provides a summary and comparison of the consequences of the Preferred Alternative, the Site 5 Alternative, the Site 9 Alternative, and the No Action Alternative.

5.2 PROPOSED ACTION

5.2.1 Land Use

No effects on land use would be expected from implementing the proposed action. Land use as an AFRC would be compatible with the industrial zoning designation of the land and with surrounding commercial, industrial, and agricultural land uses.

5.2.2 Aesthetics and Visual Environment

Long-term minor adverse effects on aesthetics and visual resources would be expected from implementing the proposed action. The proposed site would be converted from open space to developed land, which would further diminish the rural character of the immediate area.

5.2.3 Air Quality

Short- and long-term minor adverse effects on air quality would be expected from implementing the proposed action. Air emissions would result during facility construction and from creating new stationary sources of air emissions, such as heating boilers and standby generators, at the AFRC, but increases in emissions would not exceed applicability thresholds, be regionally significant, or contribute to a violation of any federal, state, or local air regulation.

**Table 5-1
Summary of potential environmental and socioeconomic consequences**

| Resource area | Preferred Alternative | Site 5 Alternative | Site 9 Alternative | No Action Alternative |
|--|---------------------------------------|------------------------------------|------------------------------------|------------------------------|
| Land use | No effects | Long-term minor adverse | Long-term minor adverse | No effects |
| Aesthetics and visual resources | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| Air quality | Short- and long-term minor adverse | Short- and long-term minor adverse | Short- and long-term minor adverse | No effects |
| Noise | Short-term minor adverse | Short-term minor adverse | Short-term minor adverse | No effects |
| Geology and soils | | | | |
| • Geology/topography | No effects | No effects | No effects | No effects |
| • Soils | Short-term minor adverse | Short-term minor adverse | Short-term minor adverse | No effects |
| • Prime farmland soils | Long-term minor adverse | No effects | No effects | No effects |
| Water resources | | | | |
| • Surface waters | No effects | No effects | No effects | No effects |
| • Groundwater | No effects | No effects | No effects | No effects |
| • Floodplains | Long-term minor adverse or No effects | No effects | No effects | No effects |
| • Coastal zone | No effects | No effects | No effects | No effects |
| Biological resources | | | | |
| • Vegetation | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| • Wildlife | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| • Sensitive species | No effects | No effects | No effects | No effects |
| • Wetlands | No effects | No effects | No effects | No effects |
| Cultural resources | No effects | Unknown effects | Unknown effects | No effects |
| Socioeconomics | | | | |
| • Economic development | Short-term minor beneficial | Short-term minor beneficial | Short-term minor beneficial | No effects |
| • Population | No effects | No effects | No effects | No effects |
| • Housing | No effects | No effects | No effects | No effects |
| • Quality of life | No effects | No effects | No effects | No effects |
| • Environmental justice | No effects | No effects | No effects | No effects |
| • Protection of children | No effects | Short-term minor adverse | Short-term minor adverse | No effects |
| Transportation | Short- and long-term minor adverse | Short- and long-term minor adverse | Short- and long-term minor adverse | No effects |
| Utilities | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |
| Hazardous and toxic substances | Long-term minor adverse | Long-term minor adverse | Long-term minor adverse | No effects |

5.2.4 Noise

Short-term minor adverse effects on the noise environment would be expected from implementing the proposed action. Minor increases in noise would result from using heavy equipment during construction, but the effects would be temporary. Noise from facility operations would be expected to be negligible.

5.2.5 Geology and Soils

Short-term minor adverse effects on soils and prime farmland soils would be expected from implementing the proposed action. Vegetation removal, site grading, and soil exposure during construction would disturb soils, and these effects would be minimized by using appropriate best management practices. The local office of the NRCS has stated that construction of the AFRC would convert less than 0.01 percent of farmland in the county to developed land, so the effect on prime farmland soils would be minor. No effects on geology or topography would be expected.

5.2.6 Water Resources

No adverse effects on water resources would be expected from implementing the proposed action. While construction activities would disturb soils, the nearest surface water (the St. Francis River) is 10 miles from the proposed site, and no measurable effects on the water quality in natural streams or rivers would be expected from storm water runoff during facility construction. Groundwater is protected by 50 to 100 feet of sand, silt, and clay confining layers, so no effects on groundwater would be expected.

Long-term minor adverse effects on floodplains would be expected if the area of floodplain along C.W. Post Road was incorporated into site layout. The Army will comply with EO 11988, *Floodplain Management*, through avoidance or by designing and building the AFRC to reduce the risk of flood loss and to minimize any impact of flooding at the site. The Army is seeking to exclude the floodplain from the portion of the proposed site that would be purchased, and no effects on floodplains would be expected under the proposed action if the Army was able to acquire a subdivided portion of the proposed site that does not include the floodplain along C.W. Post Road. No effects on coastal zone resources would be expected under the proposed action.

5.2.7 Biological Resources

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the proposed action. Development of the site as an AFRC would convert an open-field habitat to developed land, but there is not habitat for sensitive species on the site and development of the site would not adversely affect threatened or endangered species. No wetlands are known to be on the site.

5.2.8 Cultural Resources

No adverse effects on cultural resources would be expected from implementing the proposed action. No cultural or historic resources have been identified within the APE for the proposed project and there are no NRHP-listed or NRHP-eligible resources located within the APE. All previously recorded NRHP-listed resources are well removed from the view shed of the project, and therefore would not be affected.

5.2.9 Socioeconomics

Short-term minor beneficial effects on economic development would be expected from implementing the proposed action. Short-term expenditures and employment associated with construction of the AFRC training building, OMS, storage building, and military and privately owned vehicle parking area in Jonesboro would increase ROI sales volume, employment, and income. Changes in sales volume, employment, and income would fall within historical fluctuations and be considered minor. No effects would be expected on population, housing, public services, schools, family services, environmental justice, or the protection of children.

5.2.10 Transportation

Short- and long-term minor adverse effects on traffic would be expected from implementing the proposed action. The changes would be primarily contributable to construction vehicles and small changes in localized traffic patterns from the additional personnel.

5.2.11 Utilities

Long-term minor adverse effects on utility systems would be expected from implementing the proposed action. Operation of the AFRC would create a minor additional demand on all utility systems. Coupled with closure of the outdated Army Reserve Center in Jonesboro, however, the actions could result in a net decrease in demand on utility systems. Regardless, the minor increases in demand from the new AFRC would be well within the capacities of existing systems.

5.2.12 Hazardous and Toxic Substances

Long-term minor adverse effects on hazardous and toxic substances would be expected from implementing the proposed action. Operation of the AFRC would require the use of materials such as petroleum, oils, lubricants, solvents and paints, but the only effect expected from operation of the AFRC would be minor spills associated with normal vehicle maintenance activities.

5.3 SITE 5 ALTERNATIVE

5.3.1 Land Use

Long-term minor adverse effects on land use would be expected from implementing the Site 5 Alternative. The land would change from agricultural use to an active military training center, and a land use conflict could result between the operational AFRC, the church north of the site, and residential areas south and west of the site.

5.3.2 Aesthetics and Visual Environment

Short- and long-term minor adverse effects on aesthetics and visual resources would be expected from implementing the Site 5 Alternative. In the short term, construction activities would be expected to be aesthetically displeasing to nearby residents. In the long term, a military training center would adversely affect the viewshed from nearby residential areas.

5.3.3 Air Quality

Short- and long-term minor adverse effects on air quality would be expected from implementing the Site 5 Alternative. The effects on air quality of constructing and operating an AFRC at Site 5 would be the same as at the preferred site.

5.3.4 Noise

Short-term minor adverse effects on the noise environment would be expected from implementing the Site 5 Alternative. Minor increases in noise would result from using heavy equipment during construction, but the effects would be temporary. Noise from facility operations would be expected to be negligible.

5.3.5 Geology and Soils

Short-term minor adverse effects on soils would be expected from implementing the Site 5 Alternative. The effects would result from soil disturbance during construction, but stabilizing the soils after construction would prevent long-term effects from occurring. No effects would be expected on geology, topography, or prime farmland soils.

5.3.6 Water Resources

No adverse effects on water resources would be expected from implementing the Site 5 Alternative. The site's flat topography inhibits rapid runoff of storm water from the site to nearby surface waters, and the nearest surface water is approximately 300 feet from the site. Substantial depth to aquifers in the area would prevent effects on groundwater. The Army would take required precautions to minimize erosion and sediment runoff during land disturbance activities.

5.3.7 Biological Resources

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the Site 5 Alternative. Developing the site as an AFRC would require converting agricultural land to developed land, which would adversely affect any animals that might use the site. No effects on natural vegetation, sensitive species, or wetlands would be expected from implementing the Site 5 Alternative.

5.3.8 Cultural Resources

Unknown effects on cultural resources would be expected from implementing the Site 5 Alternative. Site 5 was not included in the Phase I Cultural Resources Survey. If this alternative was chosen, the Army would be responsible for having a Phase I Cultural Resources Survey performed before construction could begin.

5.3.9 Socioeconomics

Short-term minor beneficial effects on economic development would be expected from implementing the Site 5 Alternative. Short-term expenditures and employment associated with construction of the AFRC training building, OMS, storage building, and military and privately owned vehicle parking area in Jonesboro would increase ROI sales volume, employment, and income. Changes in sales volume, employment, and income would fall within historical

fluctuations and be considered minor. Short-term minor adverse effects on the protection of children would be expected from implementing the Site 5 Alternative. Demolition and construction activity could pose an increased safety risk to children because construction sites can be enticing to children. No effects would be expected on population, housing, public services, schools, family services, or environmental justice.

5.3.10 Transportation

Short- and long-term minor adverse effects on traffic would be expected from implementing the Site 5 Alternative. The changes would be primarily contributable to construction vehicles and small changes in localized traffic patterns from the additional personnel.

5.3.11 Utilities

Long-term minor adverse effects on utility systems would be expected from implementing the Site 5 Alternative. Operation of the AFRC would create a minor additional demand on all utility systems, which would reduce the available capacity of all systems. The minor increase in demands, however, would be expected to be well within the capacities of existing systems.

5.3.12 Hazardous and Toxic Substances

Long-term minor adverse effects related to hazardous and toxic substances would be expected from implementing the Site 5 Alternative. Regarding hazardous and toxic substances, the effects of constructing and operating an AFRC on Site 5 would be expected to be the same as those for the proposed action.

5.4 SITE 9 ALTERNATIVE

5.4.1 Land Use

Long-term minor adverse effects on land use would be expected from implementing the Site 9 Alternative. Changing the land from vacant property to an active military training center would be expected to have an adverse effect on nearby residential areas.

5.4.2 Aesthetics and Visual Environment

Short- and long-term minor adverse effects on aesthetics and visual resources land use would be expected from implementing the Site 9 Alternative. In the short term, construction activities would be expected to be aesthetically displeasing to nearby residents. The land would be changed from vacant property to an active military training center, and the view from surrounding residences in all directions toward the property would be adversely affected.

5.4.3 Air Quality

Short- and long-term minor adverse effects on air quality would be expected from implementing the Site 9 Alternative. The effects on air quality of constructing and operating an AFRC at Site 9 would be the same as at the preferred site.

5.4.4 Noise

Short-term minor adverse effects on the noise environment would be expected from implementing the Site 9 Alternative. Minor increases in noise would result from using heavy equipment during construction, but the effects would be temporary. Noise from facility operations would be expected to be negligible.

5.4.5 Geology and Soils

Short-term minor adverse effects on soils would be expected from implementing the Site 9 Alternative. The effects would result from soil disturbance during construction, and the uneven terrain of the site could require the use of specialized best management practices for soil retention and runoff prevention. Stabilizing the soils after construction would prevent long-term effects from occurring. No effects would be expected on geology, topography, or prime farmland soils.

5.4.6 Water Resources

No adverse effects on water resources would be expected from implementing the Site 9 Alternative. The nearest surface water is approximately ¼ mile from the site, and the drainage swale on the site channels runoff to the northwestern corner of the site and inhibits runoff from leaving the site. Groundwater is generally deep on the site's soils, and regional aquifers are deep enough that they would not be expected to be affected by incidental spills that might occur. The Army would take required precautions to minimize erosion and sediment runoff during land disturbance activities.

5.4.7 Biological Resources

Long-term minor adverse effects on vegetation and wildlife would be expected from implementing the Site 9 Alternative. Developing the site as an AFRC would require converting a maintained, grassed area to developed land, which would adversely affect any animals that use the site. No effects on threatened or endangered species, or wetlands would be expected from implementing the Site 9 Alternative.

5.4.8 Cultural Resources

Unknown effects on cultural resources would be expected from implementing the Site 9 Alternative. Site 9 was not included in the Phase I Cultural Resources Survey. If this alternative was chosen, the Army would be responsible for having a Phase I Cultural Resources Survey performed before construction could begin.

5.4.9 Socioeconomics

Short-term minor beneficial effects on economic development would be expected from implementing the Site 9 Alternative. Short-term expenditures and employment associated with construction of the AFRC training building, OMS, storage building, and military and privately owned vehicle parking area in Jonesboro would increase ROI sales volume, employment, and income. Changes in sales volume, employment, and income would fall within historical fluctuations and be considered minor. Short-term minor adverse effects on the protection of children would be expected from implementing the Site 9 Alternative. Demolition and construction activity could pose an increased safety risk to children because construction sites can

be enticing to children. No effects would be expected on population, housing, public services, schools, family services, or environmental justice.

5.4.10 Transportation

Short- and long-term minor adverse effects on traffic would be expected from implementing the Site 9 Alternative. The changes would be primarily contributable to construction vehicles and small changes in localized traffic patterns from the additional personnel.

5.4.11 Utilities

Long-term minor adverse effects on utility systems would be expected from implementing the Site 9 Alternative. Operation of the AFRC would create a minor additional demand on all utility systems, which would reduce the available capacity of all systems. The minor increase in demands, however, would be expected to be well within the capacities of existing systems.

5.4.12 Hazardous and Toxic Substances

Long-term minor adverse effects related to hazardous and toxic substances would be expected from implementing the Site 9 Alternative. Regarding hazardous and toxic substances, the effects of constructing and operating an AFRC on Site 9 would be expected to be the same as those for the proposed action.

5.5 NO ACTION ALTERNATIVE

No effects on any resource would result from implementing the No Action Alternative. Under the No Action Alternative, the Army would not implement the proposed action. No land would be acquired, no facilities would be constructed, and no units would relocate from other facilities. The units proposed for relocation under the proposed action would continue to operate from their current facilities.

5.6 CUMULATIVE EFFECTS SUMMARY

All development projects in the area local to where the proposed action would occur would have an effect on numerous resource areas, including land use, aesthetics, local air quality, the local noise environment, the availability of habitat, economic development, and the local transportation system. No specific construction projects or other activities that would contribute to cumulative effects, however, were identified. No significant adverse cumulative effects, therefore, would be expected to result if any of the alternatives was implemented.

5.7 MITIGATION SUMMARY

Mitigation actions are used to reduce, avoid, or compensate for significant adverse effects. The EA determined that there is no need for mitigation measures associated with implementation of the proposed action at Site 7.

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SECTION 9.0
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Natural Resources Conservation Service. January 29, 2009.

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APPENDIX A
AIR EMISSIONS CALCULATIONS
and
RECORD OF NON-APPLICABILITY

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Table A-1 Construction Equipment Use

| Equipment Type | Number of Units | Days on Site | Hours Per Day | Operating Hours |
|-------------------------------|-----------------|--------------|---------------|-----------------|
| Excavators Composite | 1 | 115 | 4 | 460 |
| Rollers Composite | 1 | 173 | 8 | 1384 |
| Rubber Tired Dozers Composite | 1 | 115 | 8 | 920 |
| Plate Compactors Composite | 2 | 115 | 4 | 920 |
| Trenchers Composite | 2 | 58 | 8 | 928 |
| Air Compressors | 2 | 115 | 4 | 920 |
| Cement & Mortar Mixers | 2 | 115 | 6 | 1380 |
| Cranes | 1 | 115 | 7 | 805 |
| Generator Sets | 2 | 115 | 4 | 920 |
| Tractors/Loaders/Backhoes | 2 | 230 | 7 | 3220 |
| Pavers Composite | 1 | 58 | 8 | 464 |
| Paving Equipment | 2 | 58 | 8 | 928 |

Table A-2 Construction Equipment Emission Factors (lbs/hour)

| Equipment | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ |
|-------------------------------|--------|-----------------|--------|-----------------|------------------|-------------------|-----------------|
| Excavators Composite | 0.5828 | 1.3249 | 0.1695 | 0.0013 | 0.0727 | 0.0727 | 119.6 |
| Rollers Composite | 0.4341 | 0.8607 | 0.1328 | 0.0008 | 0.0601 | 0.0601 | 67.1 |
| Rubber Tired Dozers Composite | 1.5961 | 3.2672 | 0.3644 | 0.0025 | 0.1409 | 0.1409 | 239.1 |
| Plate Compactors Composite | 0.0263 | 0.0328 | 0.0052 | 0.0001 | 0.0021 | 0.0021 | 4.3 |
| Trenchers Composite | 0.5080 | 0.8237 | 0.1851 | 0.0007 | 0.0688 | 0.0688 | 58.7 |
| Air Compressors | 0.3782 | 0.7980 | 0.1232 | 0.0007 | 0.0563 | 0.0563 | 63.6 |
| Cement and Mortar Mixers | 0.0447 | 0.0658 | 0.0113 | 0.0001 | 0.0044 | 0.0044 | 7.2 |
| Cranes | 0.6011 | 1.6100 | 0.1778 | 0.0014 | 0.0715 | 0.0715 | 128.7 |
| Generator Sets | 0.3461 | 0.6980 | 0.1075 | 0.0007 | 0.0430 | 0.0430 | 61.0 |
| Tractors/Loaders/Backhoes | 0.4063 | 0.7746 | 0.1204 | 0.0008 | 0.0599 | 0.0599 | 66.8 |
| Pavers Composite | 0.5874 | 1.0796 | 0.1963 | 0.0009 | 0.0769 | 0.0769 | 77.9 |
| Paving Equipment | 0.0532 | 0.1061 | 0.0166 | 0.0002 | 0.0063 | 0.0063 | 12.6 |

Source: CARB 2007b

Table A-3 Construction Equipment Emissions (Tons per Year)

| Equipment | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ |
|-------------------------------|-------------|-----------------|-------------|-----------------|------------------|-------------------|-----------------|
| Excavators Composite | 0.1341 | 0.3047 | 0.0390 | 0.0003 | 0.0167 | 0.0167 | 27.5037 |
| Rollers Composite | 0.3004 | 0.5956 | 0.0919 | 0.0005 | 0.0416 | 0.0416 | 46.4006 |
| Rubber Tired Dozers Composite | 0.7342 | 1.5029 | 0.1676 | 0.0011 | 0.0648 | 0.0648 | 109.9886 |
| Plate Compactors Composite | 0.0121 | 0.0151 | 0.0024 | 0.0000 | 0.0010 | 0.0010 | 1.9843 |
| Trenchers Composite | 0.2357 | 0.3822 | 0.0859 | 0.0003 | 0.0319 | 0.0319 | 27.2467 |
| Air Compressors | 0.1740 | 0.3671 | 0.0567 | 0.0003 | 0.0259 | 0.0259 | 29.2594 |
| Cement and Mortar Mixers | 0.0309 | 0.0454 | 0.0078 | 0.0001 | 0.0031 | 0.0031 | 5.0012 |
| Cranes | 0.2419 | 0.6480 | 0.0716 | 0.0006 | 0.0288 | 0.0288 | 51.7885 |
| Generator Sets | 0.1592 | 0.3211 | 0.0494 | 0.0003 | 0.0198 | 0.0198 | 28.0566 |
| Tractors/Loaders/Backhoes | 0.6542 | 1.2470 | 0.1939 | 0.0012 | 0.0964 | 0.0964 | 107.5583 |
| Pavers Composite | 0.1363 | 0.2505 | 0.0455 | 0.0002 | 0.0178 | 0.0178 | 18.0811 |
| Paving Equipment | 0.0247 | 0.0492 | 0.0077 | 0.0001 | 0.0029 | 0.0029 | 5.8593 |
| Total | 2.84 | 5.73 | 0.82 | 0.0051 | 0.35 | 0.35 | 458.73 |

Table A-4 Painting

| | | | |
|------------------------|---------------|---------------|-------------|
| VOC Content | 0.84 | lbs/gallon | |
| Coverage | 400 | sqft/gallon | |
| Emission Factor | 0.0021 | lbs/sqft | |
| Building/Facility | Wall Surface | VOC [lbs] | VOC [tpy] |
| All Buildings Combined | 194844 | 409.2 | 0.205 |
| Total | 194844 | 409.17 | 0.20 |

Table A-5 Delivery of Equipment and Supplies

| | | | | | | | |
|----------------------------|--------|-----------------|--------|-----------------|------------------|-------------------|-----------------|
| Number of Deliveries | 2 | | | | | | |
| Number of Trips | 2 | | | | | | |
| Miles Per Trip | 30 | | | | | | |
| Days of Construction | 230 | | | | | | |
| Total Miles | 27600 | | | | | | |
| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ |
| Emission Factor (lbs/mile) | 0.0219 | 0.0237 | 0.0030 | 0.0000 | 0.0009 | 0.0007 | 2.7 |
| Total Emissions (lbs) | 605.80 | 654.47 | 82.60 | 0.71 | 23.63 | 20.41 | 75056.4 |
| Total Emissions (tpy) | 0.30 | 0.33 | 0.04 | 0.0004 | 0.01 | 0.01 | 37.53 |

Source: CARB 2007a

Table A-6 Paving Off Gasses

| | | | |
|----------------------|--------------|-----------|-----------|
| VOC Emissions Factor | 2.62 | lbs/acre | |
| Building/Facility | Area [acres] | VOC [lbs] | VOC [tpy] |
| All Combined Parking | 7.56 | 19.82 | 0.0099 |
| Total | 7.56 | 19.82 | 0.0099 |

Source: SQAQMD 1993

Table A-7 Surface Disturbance

| | | | | | | |
|-------------------------------------|--------------|----------|------------------------|-------------------------|-------------------------|--------------------------|
| TSP Emissions | 80 | lb/acre | | | | |
| PM ₁₀ /TSP | 0.45 | | | | | |
| PM _{2.5} /PM ₁₀ | 0.15 | | | | | |
| Period of Disturbance | 30 | days | | | | |
| Capture Fraction | 0.5 | | | | | |
| Building/Facility | Area [acres] | TSP[lbs] | PM ₁₀ [lbs] | PM ₁₀ [tons] | PM _{2.5} [lbs] | PM _{2.5} [tons] |
| Construction | 3.6 | 8663 | 3899 | 1.95 | 292 | 0.15 |
| Total | 3.6 | 8663 | 3899 | 1.95 | 292 | 0.15 |

Sources: USEPA 1995 and USEPA 2005

Table A-8 Worker Commutes

| | | | | | | | |
|----------------------------|---------|-----------------|--------|-----------------|------------------|-------------------|-----------------|
| Number of Workers | 30 | | | | | | |
| Number of Trips | 2 | | | | | | |
| Miles Per Trip | 30 | | | | | | |
| Days of Construction | 230 | | | | | | |
| Total Miles | 414000 | | | | | | |
| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ |
| Emission Factor (lbs/mile) | 0.0105 | 0.0011 | 0.0011 | 0.0000 | 0.0001 | 0.0001 | 1.1 |
| Total Emissions (lbs) | 4367.05 | 456.59 | 446.79 | 4.45 | 35.21 | 21.91 | 455206.4 |
| Total Emissions (tpy) | 2.18 | 0.23 | 0.22 | 0.0022 | 0.02 | 0.01 | 227.60 |

Source: CARB 2007a

Table A-9 Total Construction Emissions (Tons per Year)

| | | | | | | | |
|------------------------------------|------|-----------------|------|-----------------|------------------|-------------------|-----------------|
| Activity/Source | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | CO ₂ |
| Construction Equipment | 2.84 | 5.73 | 0.82 | 0.0051 | 0.35 | 0.35 | 458.73 |
| Painting | 0.00 | 0.00 | 0.20 | 0.0000 | 0.00 | 0.00 | 0.00 |
| Delivery of Equipment and Supplies | 0.30 | 0.33 | 0.04 | 0.0004 | 0.01 | 0.01 | 37.53 |
| Paving Off Gasses | 0.00 | 0.00 | 0.01 | 0.0000 | 0.00 | 0.00 | 0.00 |
| Surface Disturbance | 0.00 | 0.00 | 0.00 | 0.0000 | 5.29 | 0.40 | 0.00 |
| Worker Commutes | 2.18 | 0.23 | 0.22 | 0.0022 | 0.02 | 0.01 | 227.60 |
| Total Construction Emissions | 5.32 | 6.28 | 1.30 | 0.0077 | 5.67 | 0.77 | 723.86 |

Table A-10 Boiler Emissions

| | | | | | | |
|-------------------------------|-------------|-------------------------|-------------|-----------------|------------------|-------------------|
| Gross Area | 97422 | sf | | | | |
| Heating Requirements | 99000 | btu/sf | | | | |
| Total Annual Heat Required | 9645 | MMBTU | | | | |
| Heating Value | 150 | MMBtu/1000 Gallons | | | | |
| Total #2 Oil Used | 64.3 | 10 ³ Gallons | | | | |
| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} |
| Emission Factor (lb/1000 gal) | 5 | 24 | 2.493 | 0.1 | 2 | 2 |
| Total Emissions (tons) | 0.16 | 0.77 | 0.08 | 0.00 | 0.06 | 0.06 |

1. Emission factors for all pollutants were obtained from U.S. EPA's AP-42, Section 1.3. Conservatively assume that PM₁₀ = PM.

2. Assumed sulfur concentration 1%

3. Heating requirements obtained from Commercial Buildings Energy Consumption Survey, DOE 2003

Table A-11 Emergency Generators

| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} | | |
|------------------------------|----------------------------|--------------------------------|-------------|-----------------|------------------|-------------------|------------------|-------------------|
| Emission Factor [lb/hp-hr] | 0.0055 | 0.024 | 0.000705 | 0.00809 | 0.0007 | 0.0007 | | |
| Generator Rating [kW] | Estimated Run Time (hr/yr) | Annual Power Output [kW-hr/yr] | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} |
| 700 | 100 | 70000 | 0.26 | 1.13 | 0.03 | 0.38 | 0.03 | 0.03 |
| Total Emissions [tpy] | | | 0.26 | 1.13 | 0.03 | 0.38 | 0.03 | 0.03 |

1. Emission factors for all pollutants were obtained from U.S. EPA's AP-42, Section 3.4 Stationary Diesel Engines

Table A-12 Worker Commutes

| | | | | | | |
|----------------------------|-------------|-----------------|-------------|-----------------|------------------|-------------------|
| Number of Workers | 10 | | | | | |
| Number of Trips | 2 | | | | | |
| Miles Per Trip | 30 | | | | | |
| Days of Work | 260 | | | | | |
| Total Miles | 156000 | | | | | |
| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} |
| Emission Factor (lbs/mile) | 0.0105 | 0.0011 | 0.0011 | 0.0000 | 0.0001 | 0.0001 |
| Total Emissions (lbs) | 1645.56 | 172.05 | 168.35 | 1.68 | 13.27 | 8.26 |
| Total Emissions (tons) | 0.82 | 0.09 | 0.08 | 0.00 | 0.01 | 0.00 |

Source: CARB 2007a

Table A-13 Drill Weekend Commutes

| | | | | | | |
|----------------------------|-------------|-----------------|-------------|-----------------|------------------|-------------------|
| Number of Workers | 400 | | | | | |
| Number of Trips | 0.600790337 | | | | | |
| Miles Per Trip | 60 | | | | | |
| Days of Training | 24 | | | | | |
| Total Miles | 346055 | | | | | |
| Pollutant | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} |
| Emission Factor (lbs/mile) | 0.0105 | 0.0011 | 0.0011 | 0.0000 | 0.0001 | 0.0001 |
| Total Emissions (lbs) | 3650.34 | 381.66 | 373.46 | 3.72 | 29.43 | 18.32 |
| Total Emissions (tons) | 1.83 | 0.19 | 0.19 | 0.00 | 0.01 | 0.01 |

Source: CARB 2007a

Table A-14 Total Operational Emissions (tons)

| Activity/Source | CO | NO _x | VOC | SO _x | PM ₁₀ | PM _{2.5} |
|------------------------------------|-------------|-----------------|-------------|-----------------|------------------|-------------------|
| Boiler Emissions | 0.16 | 0.77 | 0.08 | 0.00 | 0.06 | 0.06 |
| Emergency Generators | 0.26 | 1.13 | 0.03 | 0.38 | 0.03 | 0.03 |
| Worker Commutes | 0.82 | 0.09 | 0.08 | 0.00 | 0.01 | 0.00 |
| Drill Weekend Commutes | 1.83 | 0.19 | 0.19 | 0.00 | 0.01 | 0.01 |
| Total Operational Emissions | 3.07 | 2.17 | 0.38 | 0.39 | 0.12 | 0.11 |

RECORD OF NON-APPLICABILITY

In Accordance with the Clean Air Act - General Conformity Rule for the
Proposed Construction and Operation
of an Armed Forces Reserve Center in Jonesboro, Arkansas

6 March 2009

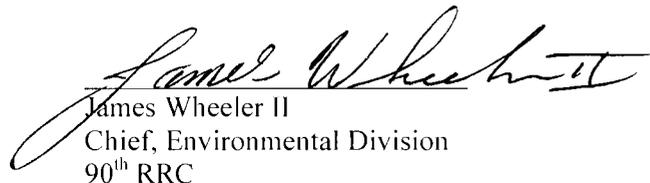
The Army proposes to construct and operate an Armed Forces Reserve Center (AFRC) in Jonesboro, Arkansas. Primary facilities would include an AFRC building, maintenance shop, and organizational unit storage building. Buildings would be of permanent construction with heating, ventilation, air conditioning, plumbing, mechanical, security, and electrical systems. Supporting activities would include land clearing, paving, fencing, general site improvements, and extension of utilities to serve the project. Force protection (physical security) measures would be incorporated into the design of the facility, to include consideration of stand-off distance from roads, parking areas, and vehicle unloading areas. The proposed AFRC would provide training to the Army National Guard, Army Reserve, and Army Active Component soldiers to attain military education and proficiency.

General Conformity under the Clean Air Act, Section 176 has been evaluated according to the requirements of Title 40 of the *Code of Federal Regulations* Part 93, Subpart B. The requirements of this rule are not applicable to the proposed action or the alternatives because:

All activities associated with the proposed action and alternatives are located in an area designated by the U.S. Environmental Protection Agency to be in attainment for all criteria pollutants.

Supported documentation and emission estimates:

- () Are attached
- () Appear in the NEPA documentation
- (X) Other (not necessary)


James Wheeler II
Chief, Environmental Division
90th RRC

13 Mar 2009
Date

APPENDIX B
SCIENTIFIC NAMES OF SPECIES

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Scientific names of flora and fauna species mentioned in the text

| | |
|--|---------------------------|
| <i>Acer</i> sp. | Maple |
| <i>Andropogon virginicus</i> | Broomsedge bluestem |
| <i>Campsis radicans</i> | Trumpet vine |
| <i>Carya</i> sp. | Hickory |
| <i>Fagus grandifolia</i> A | American beech |
| <i>Juncus</i> sp. | Rush |
| <i>Pinus</i> sp. | Pine |
| <i>Quercus</i> sp. | Oak |
| <i>Q. alba</i> White | White oak |
| <i>Q. falcata</i> Southern | Southern red oak |
| <i>Q. marilandica</i> Blackjack | Blackjack oak |
| <i>Q. stellata</i> Post | Post oak |
| <i>Carpodacus mexicanus</i> House | House finch |
| <i>Cyanocitta cristata</i> Blue | Blue jay |
| <i>Junco hyemalis</i> Dark-ey | Dark-eyed junco |
| <i>Parus bicolor</i> Tufted | Tufted titmouse |
| <i>P. carolinensis</i> Carolina | Carolina chickadee |
| <i>Picoides pubescens</i> Downy | Downy woodpecker |
| <i>Spizella pusilla</i> Field | Field sparrow |
| <i>Thryothorus ludovicianus</i> Carolina | Carolina wren |
| <i>Turdus migratorius</i> A | American robin |
| <i>Zenaidura macroura</i> Mourning | Mourning dove |
| <i>Didelphis virginiana</i> Opossum | Opossum |
| <i>Odocoileus virginianus</i> White-tailed | White-tailed deer |
| <i>Procyon lotor</i> Raccoon | Raccoon |
| <i>Sciurus carolinensis</i> Gray | Gray squirrel |
| <i>Sylvilagus floridanus</i> | Eastern cottontail rabbit |
| <i>Tamias striatus</i> Eastern | Eastern chipmunk |
| <i>Ursus americanus</i> Black | Black bear |
| <i>Vulpes vulpes</i> Red | Red fox |

Protected species in Craighead County

| Scientific name | Common name | Federal status | State status |
|-------------------------------|----------------|----------------|--------------|
| Animals - Invertebrate | | | |
| <i>Potamilus capax</i> | Fat pocketbook | LE | INV |
| Plants - Vascular | | | |
| <i>Lindera melissifolia</i> | Pondberry | LE | SE |

Note: INV = Inventory element (The Arkansas Natural Heritage Commission is currently conducting active inventory work on this element), LE = endangered, SE = State Endangered

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APPENDIX C

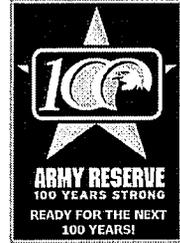
AGENCY COORDINATION LETTERS

[The two figures that follow the first letter in this appendix were included with all letters sent to agencies and tribes. The pages are not duplicated in this appendix.]

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DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Chris Hemann, Chief
Arkansas Department of Environmental Quality
Public Outreach and Assistance Division
5301 Northshore Drive
North Little Rock, AR 72118-5317

Dear Mr. Hemann:

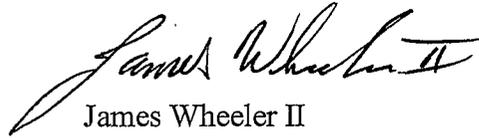
The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers, Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Protection Act, Clean Air Act, Clean Water Act, Noise Control Act, Resource Conservation and Recovery Act, Toxic Substances Control Act, and other regulations.

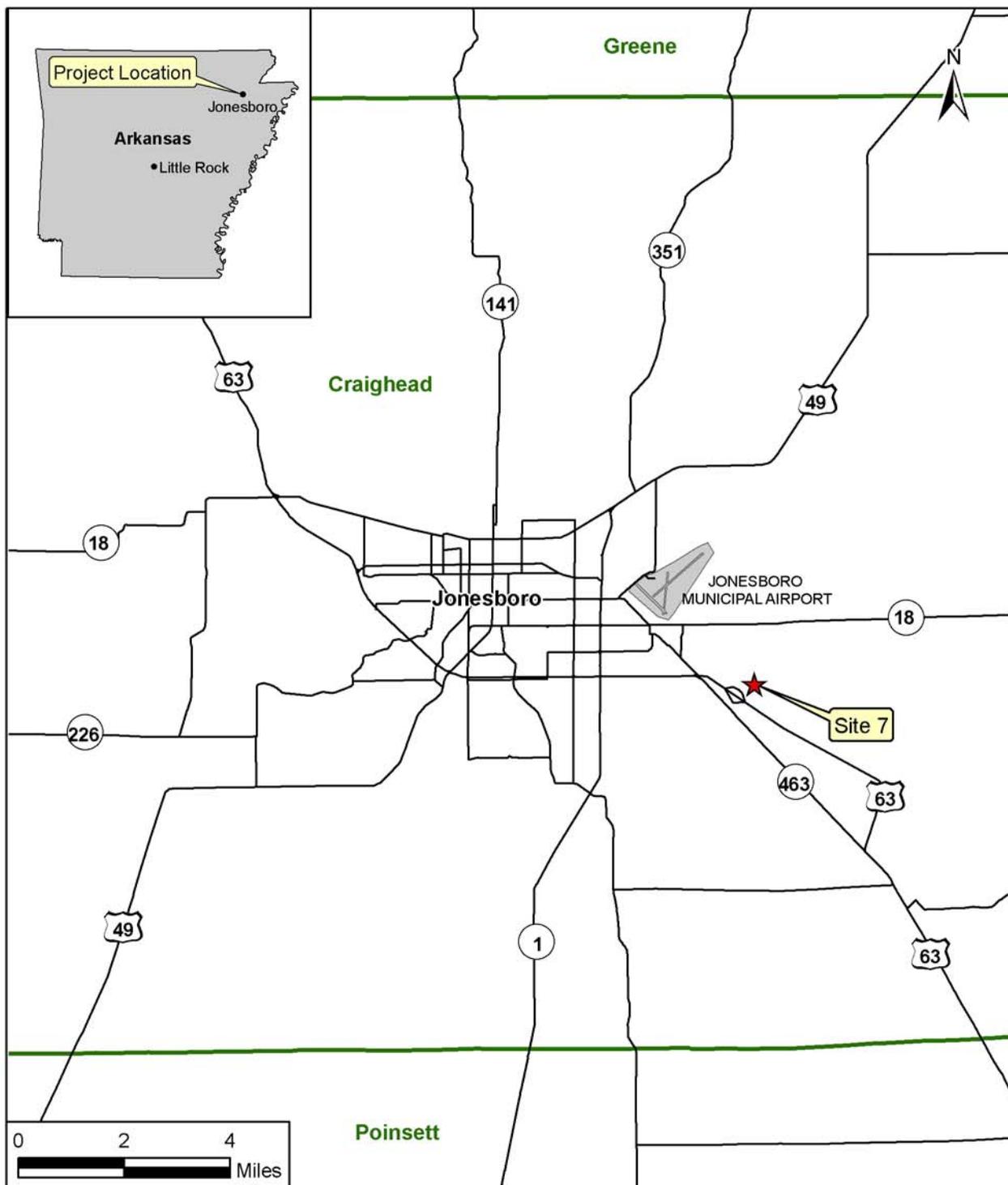
This letter is provided to notify you of the proposed action and to request your input regarding any environmental concerns you might have with respect to the action. Please provide your input within 30 days of receipt of this letter if you are interested in this matter. If you have questions or concerns about the project, please do not hesitate to call me at (501) 771-7992.

Sincerely,

A handwritten signature in cursive script, appearing to read "James Wheeler II".

James Wheeler II
Chief, Environmental Division
90th RRC

Enclosures



- LEGEND**
- ★ Contending Site
 - ▭ County Boundary
 - ∧ Road

Location Map

Enclosure 1



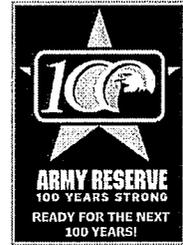
Site 7 (Preferred Alternative)

LEGEND
[Red Outline] Site Boundary

Enclosure 2



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Robert Leonard, Biologist
Arkansas Game and Fish Commission
2 Natural Resources Drive
Little Rock, AR 72205

Dear Mr. Leonard:

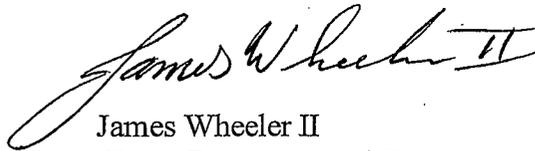
The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers, Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Protection Act, Endangered Species Act, Bald and Golden Eagle Protection Act, and other wildlife protection laws and regulations. A preliminary investigation of the site indicates that there is insufficient habitat on the site to support the fat pocketbook (*Potamilus capax*), the only federally listed species for Craighead County, Arkansas, where the AFRC would be located.

This letter is provided to notify you of the proposed action and to request your input regarding any environmental concerns you might have with respect to the action. Please provide your input within 30 days of receipt of this letter if you are interested in this matter. If you have questions or concerns about the project, please do not hesitate to call me at (501) 771-7992.

Sincerely,

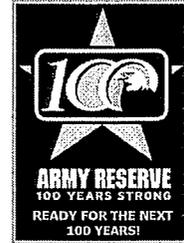
A handwritten signature in cursive script that reads "James Wheeler II". The signature is written in dark ink and is positioned above the printed name and title.

James Wheeler II
Chief, Environmental Division
90th RRC

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Cindy Osborne
Arkansas Natural Heritage Commission
1500 Tower Building
323 Center Street
Little Rock, AR 72201

Dear Ms. Osborne:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

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Sincerely,

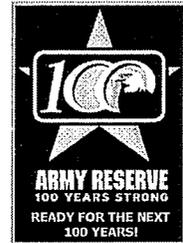
A handwritten signature in cursive script that reads "James Wheeler II".

James Wheeler II
Chief, Environmental Division
90th RRC

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Ms. Cathie Matthews
State Historic Preservation Officer
Department of Arkansas Heritage
323 Center Street
Suite 1500
Little Rock, AR 72201

Dear Ms. Matthews:

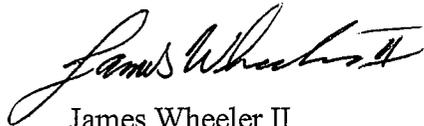
The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers (USACE), Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Protection Act (NEPA). Tetra Tech has subcontracted New South Associates to complete a cultural resources survey of the site in accordance with NEPA and Section 106 of the National Historic Preservation Act.

This letter is provided to notify you of the proposed action and to request your input regarding any concerns you might have with respect to the action. If you are aware of any archaeological sites, historic structures, cultural landscapes, or Native American resources within or adjacent to the project area that should be considered during the NEPA process, please contact David Pugh of the USACE, Mobile District, at 109 St. Joseph Street, Mobile, Alabama 36602 and Dr. J. W. Joseph of New South Associates at 6150 East Ponce de Leon Avenue, Stone Mountain, Georgia 30083. Please provide your input within 30 days of receipt of this letter if you are interested in this matter. We thank you for time and consideration.

Sincerely,

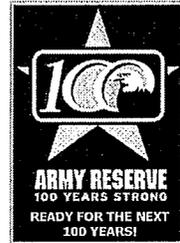
A handwritten signature in black ink, appearing to read "James Wheeler II". The signature is written in a cursive style with a large initial "J" and "W".

James Wheeler II
Chief, Environmental Division
90th RRC

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Mr. Mark Sattelberg, Field Supervisor
U.S. Fish and Wildlife Service
Ecological Services Field Office
Southeast Region (4)
110 South Amity Suite 300
Conway, AR 72032-8975

Dear Mr. Sattelberg:

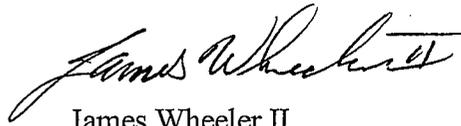
The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers, Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Protection Act, Endangered Species Act, Bald and Golden Eagle Protection Act, and other wildlife protection laws and regulations. A preliminary investigation of the site indicates that there is insufficient habitat on the site to support the fat pocketbook (*Potamilus capax*), the only federally listed species for Craighead County, Arkansas, where the AFRC would be located.

This letter is provided to notify you of the proposed action and to request your input regarding any environmental concerns you might have with respect to the action. Please provide your input within 30 days of receipt of this letter if you are interested in this matter. If you have questions or concerns about the project, please do not hesitate to call me at (501) 771-7992.

Sincerely,

A handwritten signature in cursive script, appearing to read "James Wheeler II".

James Wheeler II
Chief, Environmental Division
90th RRC

Enclosures



January 29, 2009

Re: Farmland Conversion Impact Assessment for the proposed Armed Forces Reserve Center in Jonesboro, Arkansas

Mr. Mersiovsky:

On behalf of the U.S. Army Corps of Engineers, Mobile District, who is acting for the Government to prepare an environmental assessment of a Base Closure and Realignment (BRAC) action requiring relocation of Army and state reserve forces to a new Armed Forces Reserve Center in Jonesboro, Arkansas; we are forwarding to you for your evaluation a Farmland Conversion Impact Rating Form AD-1006. We have determined that the soils on the preferred site are rated as prime farmland, subject to the Farmland Protection Policy Act of 1981. The soils are classified as Calhoun silt loam and Fountain silt loam. Attached are figures depicting the site location and the results from the Web Soil Survey.

Please review and assess the attached information, and advise if additional information or clarification is required. Please return all correspondence to my attention at the address below or by email at greg.hippert@tetrattech.com.

Thank you very much for assistance on this important project.

Sincerely,

Greg Hippert
Project Manager

attachments

Pett, Sam

From: Mersiovsky, Edgar - Little Rock, AR [Edgar.Mersiovsky@ar.usda.gov]
Sent: Monday, February 09, 2009 1:43 PM
To: Hippert, Greg
Subject: RE: Jonesboro Arkansas Proposed Armed Forces Reserve Center

Greg,

Everything looks in order. Just submit the completed AD-1006 form with your environmental assesment. I don't think that there is any protection by state or local government.

Edgar

From: Hippert, Greg [mailto:greg.hippert@tetrattech.com]
Sent: Monday, February 09, 2009 10:20 AM
To: Mersiovsky, Edgar - Little Rock, AR
Cc: Pett, Sam
Subject: RE: Jonesboro Arkansas Proposed Armed Forces Reserve Center
Importance: High

Edgar,

Attached please find the completed AD1006 form for the subject project for your review and finalization. For criteria #4 under Part VI I used the maximum allowable points because I am not sure if the proposed parcel falls under any state or local protection. It is my understanding that sites receiving a total score of less than 160 need not be given further consideration for protection. Additionally, it is my understanding that the proposed project would not be expected to cause an adverse effect to prime farmland. Do you concur?

Please let me know you need further information.

Thank you very much for your help on this important project.

Sincerely,

Greg Hippert | Project Manager

Phone: 704.633.9552 | Fax: 704.642.0476
 Mobile: 704.433.1524
 greg.hippert@tetrattech-ffx.com

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www.tetrattech.com

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From: Mersiovsky, Edgar - Little Rock, AR [mailto:Edgar.Mersiovsky@ar.usda.gov]
Sent: Monday, February 02, 2009 1:30 PM
To: Hippert, Greg
Subject: RE: Jonesboro Arkansas Proposed Armed Forces Reserve Center

Greg,

It would not be a major impact. You may need to fill out the bottom portion of the form. Prime Farmland is only a portion of the the form. If you need the instructions for the rest of the form, the website is below.

http://www.nrcs.usda.gov/programs/fppa/pdf_files/AD1006.pdf

Edgar

From: Hippert, Greg [mailto:greg.hippert@tetrattech.com]
Sent: Monday, February 02, 2009 11:25 AM
To: Mersiovsky, Edgar - Little Rock, AR
Subject: RE: Jonesboro Arkansas Proposed Armed Forces Reserve Center
Importance: High

Edgar,

Based on the AD 1006 that you completed, only 0.007% of prime farmland in the county would be converted/impacted. For the Army Reserve AFRC environmental assessment would it be safe to say that minor adverse effects on prime farmland would be expected if the AFRC were constructed on the proposed site?.

Is there anything else that I need to do to make sure we (the Army) are compliant with the FPPA?

Thanks.

Greg Hippert | Project Manager
Phone: 704.633.9552 | Fax: 704.642.0476
Mobile: 704.433.1524
greg.hippert@tetrattech-ffx.com

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www.tetrattech.com

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From: Mersiovsky, Edgar - Little Rock, AR [mailto:Edgar.Mersiovsky@ar.usda.gov]
Sent: Monday, February 02, 2009 10:36 AM
To: Hippert, Greg
Subject: RE: Jonesboro Arkansas Proposed Armed Forces Reserve Center

Greg,

Attached is the AD1006 form with the items completed that NRCS has responsibility for. The area is within the city limits of Jonesboro, but this area has been farmed and there are several areas of farmed land near this location. If you have any questions, please let me know.

Edgar

Edgar Mersiovsky

USDA-NRCS
Assistant State Soil Scientist
700 W. Capitol Ave.
Rm. 3416 Fed. Bldg
Little Rock, AR 72201

501-301-3172

From: Hippert, Greg [mailto:greg.hippert@tetrattech.com]
Sent: Thursday, January 29, 2009 1:01 PM
To: Mersiovsky, Edgar - Little Rock, AR
Cc: Pett, Sam
Subject: Jonesboro Arkansas Proposed Armed Forces Reserve Center
Importance: High

Edgar,

Thank you for taking the time to speak with me today. As discussed I have provided a letter, Form AD 1006, and supporting information concerning the Prime Farmland soil rating for the proposed project. The project site is zoned industrial and approximately 20 acres of the 27 acre parcel will be disturbed. Please let me know at your earliest convenience if the proposed site is exempt from the FPPA.

Sincerely,

Greg Hippert | Project Manager
Phone: 704.633.9552 | Fax: 704.642.0476
Mobile: 704.433.1524
greg.hippert@tetrattech-ffx.com

Tetra Tech | Complex World, Clear Solutions
www.tetrattech.com

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FARMLAND CONVERSION IMPACT RATING

| | |
|--|---------------------------------|
| PART I <i>(To be completed by Federal Agency)</i> | Date Of Land Evaluation Request |
| Name Of Project | Federal Agency Involved |
| Proposed Land Use | County And State |

| | | | |
|--|---|--|-----------------|
| PART II <i>(To be completed by NRCS)</i> | | Date Request Received By NRCS | |
| Does the site contain prime, unique, statewide or local important farmland? <i>(If no, the FPPA does not apply -- do not complete additional parts of this form).</i> | Yes <input type="checkbox"/> | No <input type="checkbox"/> | Acres Irrigated |
| Major Crop(s) | Farmable Land In Govt. Jurisdiction Acres: % | Average Farm Size Amount Of Farmland As Defined in FPPA Acres: % | |
| Name Of Land Evaluation System Used | Name Of Local Site Assessment System | Date Land Evaluation Returned By NRCS | |

| | | | | |
|--|-------------------------|--------|--------|--------|
| PART III <i>(To be completed by Federal Agency)</i> | Alternative Site Rating | | | |
| | Site A | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly | | | | |
| B. Total Acres To Be Converted Indirectly | | | | |
| C. Total Acres In Site | | | | |

| | | | | |
|--|--|--|--|--|
| PART IV <i>(To be completed by NRCS)</i> Land Evaluation Information | | | | |
| A. Total Acres Prime And Unique Farmland | | | | |
| B. Total Acres Statewide And Local Important Farmland | | | | |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted | | | | |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value | | | | |

| | | | | |
|--|--|--|--|--|
| PART V <i>(To be completed by NRCS)</i> Land Evaluation Criterion Relative Value Of Farmland To Be Converted <i>(Scale of 0 to 100 Points)</i> | | | | |
|--|--|--|--|--|

| | | | | | |
|---|----------------|--|--|--|--|
| PART VI <i>(To be completed by Federal Agency)</i> Site Assessment Criteria <i>(These criteria are explained in 7 CFR 658.5(b))</i> | Maximum Points | | | | |
| 1. Area In Nonurban Use | | | | | |
| 2. Perimeter In Nonurban Use | | | | | |
| 3. Percent Of Site Being Farmed | | | | | |
| 4. Protection Provided By State And Local Government | | | | | |
| 5. Distance From Urban Builtup Area | | | | | |
| 6. Distance To Urban Support Services | | | | | |
| 7. Size Of Present Farm Unit Compared To Average | | | | | |
| 8. Creation Of Nonfarmable Farmland | | | | | |
| 9. Availability Of Farm Support Services | | | | | |
| 10. On-Farm Investments | | | | | |
| 11. Effects Of Conversion On Farm Support Services | | | | | |
| 12. Compatibility With Existing Agricultural Use | | | | | |
| TOTAL SITE ASSESSMENT POINTS | 160 | | | | |

| | | | | | |
|--|------------|--|--|--|--|
| PART VII <i>(To be completed by Federal Agency)</i> | | | | | |
| Relative Value Of Farmland <i>(From Part V)</i> | 100 | | | | |
| Total Site Assessment <i>(From Part VI above or a local site assessment)</i> | 160 | | | | |
| TOTAL POINTS <i>(Total of above 2 lines)</i> | 260 | | | | |

| | | |
|----------------|-------------------|---|
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/> |
|----------------|-------------------|---|

Reason For Selection:



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

January 24, 2009

Reply to the Attention of the Environmental Office

Ms. Carrie V. Wilson
NAGPRA and Section 106 Review Coordinator
Quapaw Tribe of Oklahoma
223 E. Lafayette Street
Fayetteville, AR 72701

Dear Ms. Wilson:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers, Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Policy Act (NEPA). Tetra Tech has subcontracted New South Associates to complete a cultural resources survey of the site in accordance with NEPA and Section 106 of the National Historic Preservation Act.

This letter is provided to notify you of the proposed action and to invite your Tribe to participate in the cultural resources consultation during the NEPA process. The Army wishes to ensure that issues of concern to your Tribe are addressed, and welcomes any comments you may have about the proposed AFRC construction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the proposed site of our project, please contact Mr. James Wheeler II, Environmental Manager, 90th Regional Readiness Command at (501) 771-7992, within 30 days of receipt of this letter. We thank you for time and consideration.

Sincerely,



Philip L. Hanrahan
Brigadier General, U.S. Army Reserve
Commanding

Enclosures



DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
8000 CAMP ROBINSON ROAD
NORTH LITTLE ROCK, ARKANSAS 72118-2205

January 24, 2009

Reply to the Attention of the Environmental Office

Ms. Gingy Nail, Historic Preservation Officer
The Chickasaw Nation
P.O. Box 1548
Ada, OK 74821

Dear Ms. Nail:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

After a review of 14 potential locations in Jonesboro, the Army has identified one preferred site as suitable for the construction of the AFRC (see Enclosure 1). The proposed site, referred to as Site #7 (see Enclosures 1 and 2), consists of approximately 27 acres near the intersection of CW Post Road and Moore Road, southeast of central Jonesboro. The site is undeveloped, open grassland with no buildings or trees. Surrounding the site is farmland north of CW Post Road, open grassland to the west, a commercial establishment to the south, and farmland to the east across Moore Road.

The U.S. Army Corps of Engineers, Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Policy Act (NEPA). Tetra Tech has subcontracted New South Associates to complete a cultural resources survey of the site in accordance with NEPA and Section 106 of the National Historic Preservation Act.

This letter is provided to notify you of the proposed action and to invite your Tribe to participate in the cultural resources consultation during the NEPA process. The Army wishes to ensure that issues of concern to your Tribe are addressed, and welcomes any comments you may have about the proposed AFRC construction. If your Tribe, or members of your Tribe, have knowledge of traditional cultural properties, sacred sites, or burials on or near the proposed site of our project, please contact Mr. James Wheeler II, Environmental Manager, 90th Regional Readiness Command at (501) 771-7992, within 30 days of receipt of this letter. We thank you for time and consideration.

Sincerely,



Philip L. Hanrahan

Brigadier General, U.S. Army Reserve
Commanding

Enclosures



Keeping the Natural State natural.

Arkansas Game and Fish Commission

Scott Henderson
Director

Mike Gibson
Deputy Director

David Goad
Deputy Director

Loren Hitchcock
Deputy Director

January 12, 2009

Mr. James Wheeler II
Chief Environmental Division
Department of The Army
800 Camp Robinson Road
North Little Rock, Arkansas 72118-2205

Dear Mr. Wheeler:

Your letter requesting a review of the preferred site for the new Armed Forces Reserve Center, which is located in Jonesboro, Craighead County, Arkansas, has been referred to me for reply.

Biologists from our agency have reviewed the proposed project and we anticipate insignificant adverse impacts to fish and wildlife resources associated with these proposed activities.

If our agency can be of further assistance with the proposed project, don't hesitate to call us. We appreciate the opportunity to review this project proposal.

Sincerely,

Robert K. Leonard, Biologist
River Basins Division

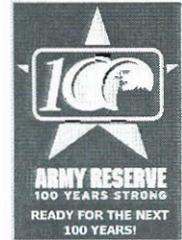
Cc: Doyle Shook
Mike Armstrong
USFWS, Conway Office

2 Natural Resources Drive • Little Rock, AR 72205 • www.agfc.com
Phone (800) 364-4263 • (501) 223-6300 • Fax (501) 223-6448

The mission of the Arkansas Game and Fish Commission is to wisely manage all the fish and wildlife resources of Arkansas while providing maximum enjoyment for the people.



DEPARTMENT OF THE ARMY
 HEADQUARTERS, UNITED STATES ARMY 90TH REGIONAL READINESS COMMAND
 CAPTAIN MAURICE L. BRITT UNITED STATES ARMY RESERVE CENTER
 8000 CAMP ROBINSON ROAD
 NORTH LITTLE ROCK, ARKANSAS 72118-2205



January 6, 2009

Reply to the Attention of the Environmental Office

Date 1/13/09
 No known historic properties will be affected by this undertaking; this effect determination could change should new information come to light.
Frances McSwain
 Frances McSwain, Deputy State Historic Preservation Officer

RECEIVED

68372
 12A

JAN 08 2009

Director's Office

Ms. Cathie Matthews
 State Historic Preservation Officer
 Department of Arkansas Heritage
 323 Center Street
 Suite 1500
 Little Rock, AR 72201

AHPP
 JAN 09 2009

Dear Ms. Matthews:

The Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended, implements recommendations made in fall 2005 by the Defense Base Closure and Realignment Commission (BRAC Commission). One of the proposed BRAC actions is to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro, Arkansas, if the Army is able to acquire suitable land for the facility construction. The new AFRC would be able to accommodate Arkansas National Guard units from the Arkansas Army National Guard Readiness Center, Jonesboro; the Arkansas Army National Guard Readiness Center, Paragould, Arkansas; and the FMS, Jonesboro (if the state decides to relocate those National Guard units).

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The U.S. Army Corps of Engineers (USACE), Mobile District, has contracted with Tetra Tech, Inc., to complete environmental studies of the AFRC site in compliance with the National Environmental Protection Act (NEPA). Tetra Tech has subcontracted New South Associates to complete a cultural resources survey of the site in accordance with NEPA and Section 106 of the National Historic Preservation Act.



The Department of
**Arkansas
Heritage**

Mike Beebe
Governor

Cathie Matthews
Director

Arkansas Arts Council

*

Arkansas Natural Heritage
Commission

*

Delta Cultural Center

*

Historic Arkansas Museum

*

Mosaic Templars
Cultural Center

*

Old State House Museum



Arkansas Historic
Preservation Program

1500 Tower Building
323 Center Street
Little Rock, AR 72201
(501) 324-9880
fax: (501) 324-9184
tdd: (501) 324-9811

e-mail:

info@arkansaspreservation.org

website:

www.arkansaspreservation.com

An Equal Opportunity Employer



March 16, 2009

Mr. David W. Pugh
USACE/SA/PD-M
Post Office Box 2288
Mobile, Alabama 36628-0001

RE: Craighead County - Jonesboro
Section 106 Review - USA
Proposed Army Reserve Center
AHPP Tracking No: 68794

Dear Mr. Pugh:

My staff has reviewed the draft/final report entitled "Phase I cultural Resources Survey of the Proposed Jonesboro Armed forces Reserve Center Site, Cragihead County, Arkansas" by New South Associates. This report documents a negative-finding cultural resources survey of the above-referenced undertaking and is acceptable. On the basis of the information contained in this report, we find that this undertaking will have no effect on historic properties.

Thank you for the opportunity to comment on this undertaking. If you have any questions, please contact Steve Imhoff of my staff at (501) 324-9880.

Sincerely,

Frances McSwain
Deputy State Historic Preservation Officer

cc: Dr. Ann M. Early, Arkansas Archeological Survey
Dr. J. W. Joseph, New South Associates
Ms. Carrie V. Wilson, Quapaw Tribe of Oklahoma



IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE

110 S. Amity Road, Suite 300

Conway, Arkansas 72032

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

January 28, 2009

Mr. James Wheeler II
Chief, Environmental Division
90th Regional Readiness Command
8000 Camp Robinson Road
North Little Rock, AR 72118-2205

Dear Mr. Wheeler:

The U.S. Fish and Wildlife Service (Service) has reviewed your letter of January 6, 2009 regarding the implementation of the Base Realignment and Closure (BRAC) program action to close the United States Army Reserve Center, Jonesboro, Arkansas, and relocate units into a new Armed Forces Reserve Center (AFRC) and Field Maintenance Site (FMS) in Jonesboro. Our comments and recommendations are submitted in accordance with the National Environmental Policy Act of 1969, Executive Order 12372, Endangered Species Act of 1973 (Public Law 93-205, as amended) and the Fish and Wildlife Coordination Act (Public Law 85-624; 16 U.S.C. 661-666e.).

According to our records, there are no federally listed or proposed threatened or endangered species occurring in the impact area of the project. Therefore, no further consultation regarding Section 7 of the Endangered Species Act is required. Furthermore, the Service has no additional objections or concerns with the proposed action. If you have any questions, please contact me at (501) 513-4489.

Sincerely,

Lindsey Lewis
Environmental Coordinator

C:\Documents and Settings\LCL\My Documents\PROJECTS\FY2009\Environmental Assessmenets\Comments_BRAC_Jonesboro.doc

United States Department of Agriculture



Natural Resources Conservation Service
Room 3416, Federal Building
700 West Capitol Avenue
Little Rock, Arkansas 72201-3225

FEB 02 2009

Greg Hippert
Tetra Tech
100 West Innes Street
Salisbury, North Carolina 28144

Dear Mr. Hippert:

This letter is in response to your request for comments for the proposed new Armed Forces Reserve Center in the City of Jonesboro, AR. The site contains 15 acres of soil map unit 8 – Calhoun silt loam, which is Prime Farmland if drained. The area around the site has been drained with ditches. The site also contains 12 acres of soil map unit 23 – Fountain silt loam, which is Prime Farmland. Enclosed is Form AD1006 for your use.

Should you have any questions or need additional information, please call me at (501) 301-3172 or email at edgar.mersiovsky@ar.usda.gov.

Sincerely,

A handwritten signature in cursive script that reads "Edgar Mersiovsky".

EDGAR P. MERSIOVSKY
Assistant State Soil Scientist

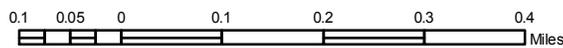
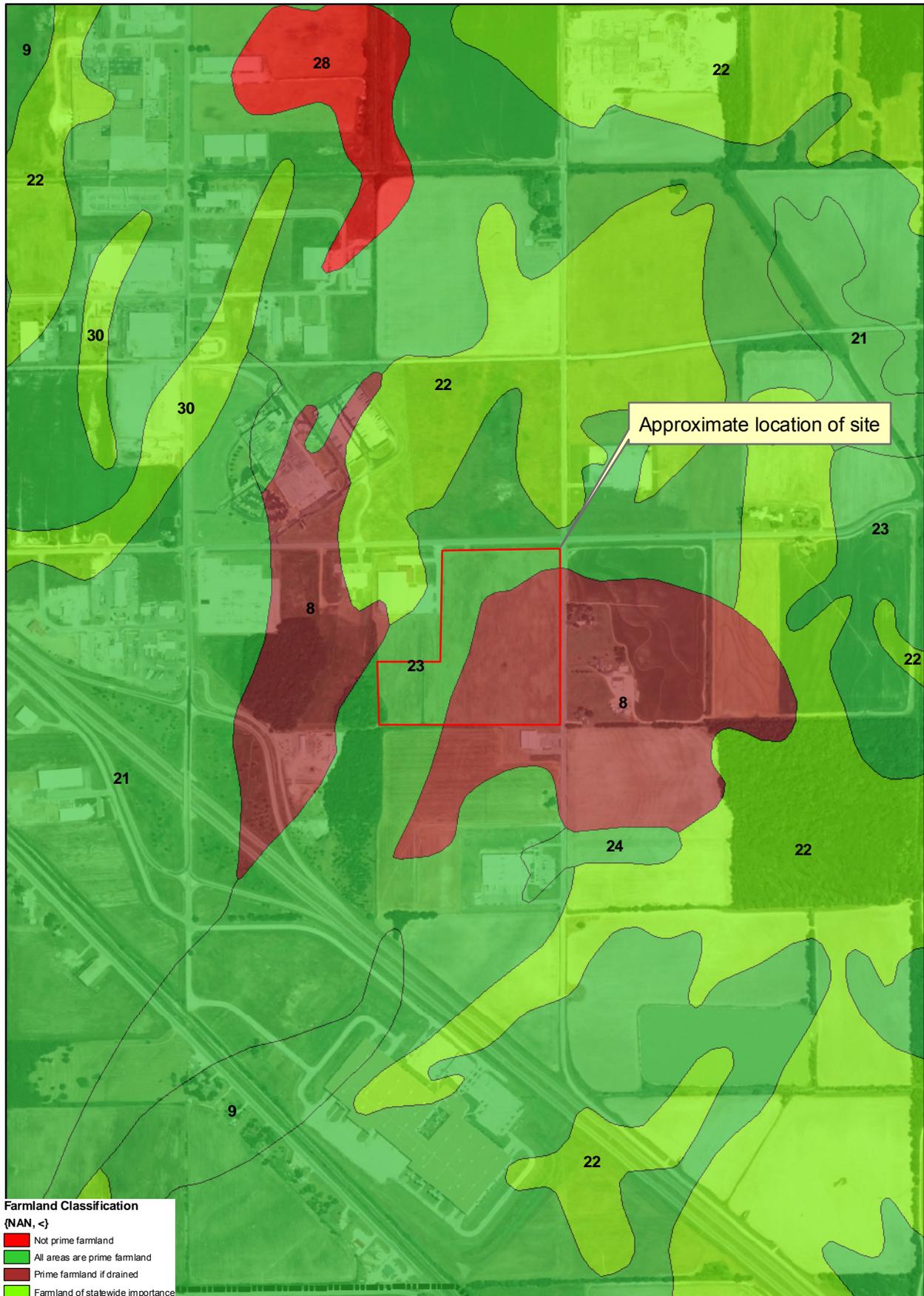
Enclosures

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

| | | | | | |
|--|--|---|-----------------------------|-------------------------|-----------------------------|
| PART I (To be completed by Federal Agency) | | Date Of Land Evaluation Request 1/29/09 | | | |
| Name Of Project Jonesboro, AR AFRC | | Federal Agency Involved Department of the Army | | | |
| Proposed Land Use New Armed Forces Reserve Center | | County And State Craighead County, Arkansas | | | |
| PART II (To be completed by NRCS) | | Date Request Received By NRCS 1/29/09 | | | |
| 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 <input checked="" type="checkbox"/> | No <input type="checkbox"/> | Acres Irrigated 240,295 | Average Farm Size 480 acres |
| Major Crop(s) Soy beans | Farmable Land In Govt. Jurisdiction Acres: 392,640 % 86 | Amount Of Farmland As Defined in FPPA Acres: 400,340 % 88 | | | |
| Name Of Land Evaluation System Used SCS-LESA | Name Of Local Site Assessment System | Date Land Evaluation Returned By NRCS 2/2/09 | | | |
| 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 | | 20.0 | | | |
| B. Total Acres To Be Converted Indirectly | | 7.0 | | | |
| C. Total Acres In Site | | 27.0 | 0.0 | 0.0 | 0.0 |
| PART IV (To be completed by NRCS) Land Evaluation Information | | | | | |
| A. Total Acres Prime And Unique Farmland | | 27 | | | |
| B. Total Acres Statewide And Local Important Farmland | | 0 | | | |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted | | 0.007% | | | |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value | | 84% | | | |
| PART V (To be completed by NRCS) Land Evaluation Criterion Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) | | 75 | 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 | | | | | |
| 2. Perimeter In Nonurban Use | | | | | |
| 3. Percent Of Site Being Farmed | | | | | |
| 4. Protection Provided By State And Local Government | | | | | |
| 5. Distance From Urban Builtup Area | | | | | |
| 6. Distance To Urban Support Services | | | | | |
| 7. Size Of Present Farm Unit Compared To Average | | | | | |
| 8. Creation Of Nonfarmable Farmland | | | | | |
| 9. Availability Of Farm Support Services | | | | | |
| 10. On-Farm Investments | | | | | |
| 11. Effects Of Conversion On Farm Support Services | | | | | |
| 12. Compatibility With Existing Agricultural Use | | | | | |
| TOTAL SITE ASSESSMENT POINTS | | 160 | 0 | 0 | 0 |
| PART VII (To be completed by Federal Agency) | | | | | |
| Relative Value Of Farmland (From Part V) | | 100 | 0 | 0 | 0 |
| Total Site Assessment (From Part VI above or a local site assessment) | | 160 | 0 | 0 | 0 |
| TOTAL POINTS (Total of above 2 lines) | | 260 | 0 | 0 | 0 |
| Site Selected: | Date Of Selection | Was A Local Site Assessment Used? Yes <input type="checkbox"/> No <input type="checkbox"/> | | | |
| Reason For Selection: | | | | | |

Farmland Classification of Soils in the Area of the Proposed Armed Forces Reserve Center in Jonesboro, AR



1:12,000
C-30



APPENDIX D
ECONOMIC IMPACT FORECAST SYSTEM MODEL RESULTS

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Economic Impact Forecast System (EIFS) Model

Socioeconomic Impact Assessment

Socioeconomic impacts are linked through cause-and-effect relationships. Military payrolls and local procurement contribute to the economic base for the ROI. In this regard, construction of an AFRC and associated facilities in Jonesboro would have a multiplier effect on the local and regional economy. With the proposed action, direct jobs would be created (e.g., construction jobs), generating new income and increasing personal spending. This spending generally creates secondary jobs, increases business volume, and increases revenues for schools and other social services.

The Economic Impact Forecast System

The U.S. Army, with the assistance of many academic and professional economists and regional scientists, developed EIFS to address the economic impacts of NEPA-requiring actions and to measure their significance. As a result of its designed applicability, and in the interest of uniformity, EIFS should be used in NEPA assessments. The entire system is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS was developed under a joint project of the U.S. Army Corps of Engineers, the U.S. Army Environmental Policy Institute, and the Computer and Information Science Department of Clark Atlanta University. EIFS is implemented as an on-line system supported by the U.S. Army Corps of Engineers, Mobile District. The system is available to anyone with an approved user identification and password. U.S. Army Corps of Engineers staff is available to assist with the use of EIFS.

The databases in EIFS are national in scope and cover the approximately 3,700 counties, parishes, and independent cities that are recognized as reporting units by federal agencies. EIFS allows the user to define an economic ROI by identifying the counties, parishes, or cities to be analyzed. Once the ROI is defined, the system aggregates the data, calculates multipliers and other variables used in the various models in EIFS, and prompts the user for forecast input data.

The EIFS Model

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used to estimate the impacts resulting from Army-related changes in local expenditures or employment. In calculating the multipliers, EIFS uses the economic base model approach, which relies on the ratio of total economic activity to basic economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the ROI or by federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future changes in economic activity can be forecast. This technique is especially appropriate for estimating aggregate impacts and makes the economic base model ideal for the EA and EIS process.

The multiplier is interpreted as the total impact on the economy of the region resulting from a unit change in its base sector; for example, a dollar increase in local expenditures due to an expansion

of its military installation. EIFS estimates its multipliers using a location quotient approach based on the concentration of industries within the region relative to the industrial concentrations for the nation.

The user inputs into the model the data elements which describe the Army action: the change in expenditures, or dollar volume of the construction project(s); change in civilian or military employment; average annual income of affected civilian or military employees; the percent of civilians expected to relocate due to the Army's action; and the percent of military living on-post. Once these are entered into the EIFS model, a projection of changes in the local economy is provided. These are projected changes in sales volume, income, employment, and population. These four indicator variables are used to measure and evaluate socioeconomic impacts. Sales volume is the direct and indirect change in local business activity and sales (total retail and wholesale trade sales, total selected service receipts, and value-added by manufacturing). Employment is the total change in local employment due to the proposed action, including not only the direct and secondary changes in local employment, but also those personnel who are initially affected by the military action. Income is the total change in local wages and salaries due to the proposed action, which includes the sum of the direct and indirect wages and salaries, plus the income of the civilian and military personnel affected by the proposed action. Population is the increase or decrease in the local population as a result of the proposed action.

The BRAC action in Jonesboro would require construction of an AFRC training building, OMS, storage building, military and privately owned vehicle parking area, and supporting facilities such electrical and mechanical systems, water, sewer, HVAC, plumbing, and force protection measures. The current working estimate for the cost of construction of these facilities (\$23,000,000) was divided over the estimated 2-year development period and entered in the EIFS model as the annual change in expenditures (\$11,500,000).

The Significance of Socioeconomic Impacts

Once model projections are obtained, the Rational Threshold Value (RTV) profile allows the user to evaluate the significance of the impacts. This analytical tool reviews the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, income, employment, and population. These evaluations identify the positive and negative changes within which a project can affect the local economy without creating a significant impact. The greatest historical changes define the boundaries that provide a basis for comparing an action's impact on the historical fluctuation in a particular area. Specifically, EIFS sets the boundaries by multiplying the maximum historical deviation of the following variables:

| | | Increase | Decrease |
|--------------|---|----------|----------|
| Sales Volume | X | 100% | 75% |
| Income | X | 100% | 67% |
| Employment | X | 100% | 67% |
| Population | X | 100% | 50% |

These boundaries determine the amount of change that will affect an area. The percentage allowances are arbitrary, but sensible. The maximum positive historical fluctuation is allowed with expansion because economic growth is beneficial. While cases of damaging economic growth have been cited, and although the zero-growth concept is being accepted by many local planning groups, military base reductions and closures generally are more injurious to local economics than are expansion.

The major strengths of the RTV are its specificity to the region under analysis and its basis on actual historical data for the region. The EIFS impact model, in combination with the RTV, has proven successful in addressing perceived socioeconomic impacts. The EIFS model and the RTV technique for measuring the intensity of impacts have been reviewed by economic experts and have been deemed theoretically sound.

The following are the EIFS input and output data for construction and the RTV values for the ROI. These data form the basis for the socioeconomic impact analysis presented in Section 4.9.2.1.

EIFS REPORT

PROJECT NAME

Jonesboro BRAC AFRC EA

STUDY AREA

05031 Craighead County, AR

FORECAST INPUT

| | |
|-------------------------------------|--------------|
| Change In Local Expenditures | \$11,500,000 |
| Change In Civilian Employment | 0 |
| Average Income of Affected Civilian | \$0 |
| Percent Expected to Relocate | 0 |
| Change In Military Employment | 0 |
| Average Income of Affected Military | \$0 |
| Percent of Military Living On-post | 0 |

FORECAST OUTPUT

| | | |
|--------------------------------|--------------|-------|
| Employment Multiplier | 2.87 | |
| Income Multiplier | 2.87 | |
| Sales Volume – Direct | \$11,500,000 | |
| Sales Volume – Induced | \$21,505,000 | |
| Sales Volume – Total | \$33,005,000 | 1.25% |
| Income – Direct | \$2,210,067 | |
| Income - Induced | \$4,132,825 | |
| Income – Total (place of work) | \$6,342,892 | 0.41% |
| Employment – Direct | 62 | |
| Employment – Induced | 116 | |
| Employment – Total | 179 | 0.37% |
| Local Population | 0 | |
| Local Off-base Population | 0 | 0.00% |

RTV SUMMARY

| | Sales Volume | Income | Employment | Population |
|--------------|--------------|--------|------------|------------|
| Positive RTV | 11.62% | 9.83% | 3.30% | 3.03% |
| Negative RTV | -8.75% | -7.89% | -3.42% | -1.07% |

RTV DETAILED**SALES VOLUME**

| Year | Value | Adj_Value | Change | Deviation | %Deviation |
|-------------|--------------|------------------|---------------|------------------|-------------------|
| 1969 | 97217 | 424838 0 0 | | | 0 |
| 1970 | 1049 14 | 433295 | 8457 | -16581 | -3.83 |
| 1971 | 1173 93 | 464876 | 31581 | 6543 | 1.41 |
| 1972 | 1357 33 | 519857 | 54981 | 29943 | 5.76 |
| 1973 | 1487 41 | 536955 | 17098 | -7940 | -1.48 |
| 1974 | 1643 57 | 534160 | -2795 | -27833 | -5.21 |
| 1975 | 192981 | 575083 4092 | 3 1588 | 5 | 2.76 |
| 1976 | 227943 | 642799 6771 | 6 4267 | 8 | 6.64 |
| 1977 | 259332 | 684637 4183 | 7 1679 | 9 | 2.45 |
| 1978 | 297872 | 732765 4812 | 9 2309 | 1 | 3.15 |
| 1979 | 3306 82 | 730807 | -1958 | -26996 | -3.69 |
| 1980 | 348881 | 676829 -5397 | 8 -7901 | 6 | -11.67 |
| 1981 | 367782 | 647296 -2953 | 3 -5457 | 1 | -8.43 |
| 1982 | 381274 | 632915 -1438 | 1 -3941 | 9 | -6.23 |
| 1983 | 414968 | 668098 3518 | 4 1014 | 6 | 1.52 |
| 1984 | 467498 | 719947 5184 | 8 2681 | 0 | 3.72 |
| 1985 | 4978 13 | 741741 | 21794 | -3244 | -0.44 |
| 1986 | 532923 | 778068 3632 | 6 1128 | 8 | 1.45 |
| 1987 | 586228 9086 | 53 1305 | 86 1055 | 48 | 11.62 |
| 1988 | 627887 | 853926 -5472 | 7 -7976 | 5 | -9.34 |
| 1989 | 6764 77 | 872655 | 18729 | -6309 | -0.72 |
| 1990 | 7117 89 | 875500 | 2845 | -22193 | -2.53 |
| 1991 | 7539 39 | 889648 | 14147 | -10891 | -1.22 |
| 1992 | 829637 | 945786 5613 | 8 3110 | 0 | 3.29 |
| 1993 | 8830 21 | 980153 | 34367 | 9329 | 0.95 |
| 1994 | 9316 98 | 1006234 | 26081 | 1043 | 0.1 |
| 1995 | 999327 | 1049293 4305 | 9 1802 | 1 | 1.72 |
| 1996 | 1038 053 | 1058814 | 9521 | -15517 | -1.47 |
| 1997 | 1101 286 | 1101286 | 42472 | 17434 | 1.58 |
| 1998 | 1180134 | 1156531 5524 | 5 3020 | 7 | 2.61 |
| 1999 | 1259 441 | 1209063 | 52532 | 27494 | 2.27 |
| 2000 | 1318 355 | 1226070 | 17007 | -8031 | -0.66 |

| INCOME | | | | | |
|---------------|--------------|------------------|---------------|------------------|-------------------|
| Year | Value | Adj_Value | Change | Deviation | %Deviation |
| 1969 1371 | 11 | 599175 | 0 | 0 | 0 |
| 1970 1546 | 20 | 638581 | 39406 | 6035 | 0.94 |
| 1971 1697 | 21 | 672095 | 33515 | 144 | 0.02 |
| 1972 1904 | 37 | 729374 | 57279 | 23908 | 3.28 |
| 1973 2193 | 75 | 791944 | 62570 | 29199 | 3.69 |
| 1974 2476 | 35 | 804814 | 12870 | -20501 | -2.55 |
| 1975 2829 | 45 | 843176 | 38362 | 4991 | 0.59 |
| 1976 3165 | 64 | 892710 | 49534 | 16163 | 1.81 |
| 1977 3587 | 42 | 947079 | 54368 | 20997 | 2.22 |
| 1978 4378 | 67 | 1077153 | 130074 | 96703 | 8.98 |
| 1979 4547 | 51 | 1005000 | -72153 | -105524 | -10.5 |
| 1980 4788 | 20 | 928911 | -76089 | -109460 | -11.78 |
| 1981 5361 | 36 | 943599 | 14689 | -18682 | -1.98 |
| 1982 5605 | 91 | 930581 | -13018 | -46389 | -4.98 |
| 1983 5906 | 36 | 950924 | 20343 | -13028 | -1.37 |
| 1984 6731 | 89 | 1036711 | 85787 | 52416 | 5.06 |
| 1985 7184 | 68 | 1070517 | 33806 | 435 | 0.04 |
| 1986 7479 | 94 | 1092071 | 21554 | -11817 | -1.08 |
| 1987 8052 | 76 | 1248178 | 156106 | 122735 | 9.83 |
| 1988 8672 | 21 | 1179421 | -68757 | -102128 | -8.66 |
| 1989 9192 | 23 | 1185798 | 6377 | -26994 | -2.28 |
| 1990 9814 | 66 | 1207203 | 21406 | -11965 | -0.99 |
| 1991 1046 | 292 | 1234625 | 27421 | -5950 | -0.48 |
| 1992 1149 | 106 | 1309981 | 75356 | 41985 | 3.21 |
| 1993 1201 | 929 | 1334141 | 24160 | -9211 | -0.69 |
| 1994 1261 | 145 | 1362037 | 27895 | -5476 | -0.4 |
| 1995 1366 | 267 | 1434580 | 72544 | 39173 | 2.73 |
| 1996 1439 | 139 | 1467922 | 33341 | -30 | 0 |
| 1997 1529 | 105 | 1529105 | 61183 | 27812 | 1.82 |
| 1998 1614 | 712 | 1582418 | 53313 | 19942 | 1.26 |
| 1999 1699 | 215 | 1631246 | 48829 | 15458 | 0.95 |
| 2000 1792 | 518 | 1667042 | 35795 | 2424 | 0.15 |

EMPLOYMENT

| Year | Value | Change | Deviation | %Deviation |
|-------------|--------------|---------------|------------------|-------------------|
| 1969 2295 | 6 | 0 | 0 | 0 |
| 1970 2371 | 0 | 754 | -178 | -0.75 |
| 1971 2447 | 6 | 766 | -166 | -0.68 |
| 1972 2563 | 2 | 1156 | 224 | 0.87 |
| 1973 2603 | 5 | 403 | -529 | -2.03 |
| 1974 2627 | 4 | 239 | -693 | -2.64 |
| 1975 2742 | 0 | 1146 | 214 | 0.78 |
| 1976 2888 | 8 | 1468 | 536 | 1.86 |
| 1977 3036 | 7 | 1479 | 547 | 1.8 |
| 1978 3180 | 2 | 1435 | 503 | 1.58 |
| 1979 3196 | 3 | 161 | -771 | -2.41 |
| 1980 3130 | 0 | -663 | -1595 | -5.1 |
| 1981 3093 | 3 | -367 | -1299 | -4.2 |
| 1982 3082 | 8 | -105 | -1037 | -3.36 |
| 1983 3137 | 9 | 551 | -381 | -1.21 |
| 1984 3295 | 1 | 1572 | 640 | 1.94 |
| 1985 3374 | 5 | 794 | -138 | -0.41 |
| 1986 3509 | 7 | 1352 | 420 | 1.2 |
| 1987 3708 | 7 | 1990 | 1058 | 2.85 |
| 1988 3845 | 6 | 1369 | 437 | 1.14 |
| 1989 3954 | 2 | 1086 | 154 | 0.39 |
| 1990 4014 | 4 | 602 | -330 | -0.82 |
| 1991 4024 | 5 | 101 | -831 | -2.06 |
| 1992 4196 | 0 | 1715 | 783 | 1.87 |
| 1993 4363 | 4 | 1674 | 742 | 1.7 |
| 1994 4398 | 9 | 355 | -577 | -1.31 |
| 1995 4645 | 2 | 2463 | 1531 | 3.3 |
| 1996 4723 | 8 | 786 | -146 | -0.31 |
| 1997 4836 | 5 | 1127 | 195 | 0.4 |
| 1998 5029 | 7 | 1932 | 1000 | 1.99 |
| 1999 5191 | 0 | 1613 | 681 | 1.31 |
| 2000 5277 | 2 | 862 | -70 | -0.13 |

POPULATION

| Year | Value | Change | Deviation | %Deviation | |
|-------------|--------------|---------------|------------------|-------------------|-------|
| 1969 | 51733 | 0 0 0 | | | |
| 1970 | 5262 | 9 | 896 | -63 | -0.12 |
| 1971 | 5526 | 0 | 2631 | 1672 | 3.03 |
| 1972 | 5640 | 9 | 1149 | 190 | 0.34 |
| 1973 | 5749 | 4 | 1085 | 126 | 0.22 |
| 1974 | 5799 | 2 | 498 | -461 | -0.79 |
| 1975 | 5873 | 7 | 745 | -214 | -0.36 |
| 1976 | 6056 | 5 | 1828 | 869 | 1.43 |
| 1977 | 6163 | 9 | 1074 | 115 | 0.19 |
| 1978 | 6274 | 1 | 1102 | 143 | 0.23 |
| 1979 | 6334 | 0 | 599 | -360 | -0.57 |
| 1980 | 6330 | 4 | -36 | -995 | -1.57 |
| 1981 | 6342 | 8 | 124 | -835 | -1.32 |
| 1982 | 6304 | 6 | -382 | -1341 | -2.13 |
| 1983 | 6302 | 0 | -26 | -985 | -1.56 |
| 1984 | 6367 | 4 | 654 | -305 | -0.48 |
| 1985 | 6406 | 8 | 394 | -565 | -0.88 |
| 1986 | 6429 | 8 | 230 | -729 | -1.13 |
| 1987 | 6562 | 1 | 1323 | 364 | 0.55 |
| 1988 | 6678 | 8 | 1167 | 208 | 0.31 |
| 1989 | 6784 | 5 | 1057 | 98 | 0.14 |
| 1990 | 6935 | 6 | 1511 | 552 | 0.8 |
| 1991 | 6980 | 9 | 453 | -506 | -0.72 |
| 1992 | 7142 | 2 | 1613 | 654 | 0.92 |
| 1993 | 7318 | 0 | 1758 | 799 | 1.09 |
| 1994 | 7418 | 7 | 1007 | 48 | 0.06 |
| 1995 | 7585 | 6 | 1669 | 710 | 0.94 |
| 1996 | 7741 | 5 | 1559 | 600 | 0.78 |
| 1997 | 7882 | 3 | 1408 | 449 | 0.57 |
| 1998 | 8011 | 7 | 1294 | 335 | 0.42 |
| 1999 | 8103 | 8 | 921 | -38 | -0.05 |
| 2000 | 8243 | 6 | 1398 | 439 | 0.53 |

***** End of Report *****

ACRONYMS AND ABBREVIATIONS

| | |
|-------------------|--|
| ADEQ | Arkansas Department of Environmental Quality |
| AFRC | Armed Forces Reserve Center |
| AHNC | Arkansas Natural Heritage Commission |
| APE | area of potential effect |
| AQCR | Air Quality Control Region |
| AR | Army Regulation |
| ARARNG | Arkansas Army National Guard |
| BRAC Commission | Base Closure and Realignment Commission |
| CEQ | Council on Environmental Quality |
| CFR | Code of Federal Regulations |
| CO | Carbon Monoxide |
| dB | decibel |
| dBA | A-weighted decibel |
| <i>de minimis</i> | of minimal importance |
| DNL | Day-night Average Sound Level |
| DoD | Department of Defense |
| EA | environmental assessment |
| ECP | environmental condition of property |
| EIFS | Economic Impact Forecast System |
| EO | Executive Order |
| EPA | U.S. Environmental Protection Agency |
| FMS | Field Maintenance Site |
| FNSI | finding of no significant impact |
| FPPA | Farmland Protection Policy Act |
| L_{eq} | equivalent sound level |
| LOS | level of service |
| NAAQS | National Ambient Air Quality Standards |
| NEPA | National Environmental Policy Act |
| NHPA | National Historic Preservation Act |
| NO _x | nitrogen oxides |
| NRCS | Natural Resources Conservation Service |
| NRHP | National Register of Historic Places |
| O ₃ | ozone |
| PCPI | per capita personal income |
| PM ₁₀ | particulate matter less than 10 microns in diameter |
| PM _{2.5} | particulate matter less than 2.5 microns in diameter |
| POV | personal operating vehicle |
| ROI | region of influence |
| RTV | rational threshold value |
| SO ₂ | sulfur dioxide |