

FINAL

**ENVIRONMENTAL ASSESSMENT
FOR CONSTRUCTION OF AN
ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 05
RECOMMENDATIONS IN THE VICINITY OF
GREENWOOD AND FRANKLIN, INDIANA**



Prepared for:

Indiana Army National Guard

Prepared by:

**AGEISS, Inc.
P.O. Box 3516
Evergreen, Colorado 80437**

and

**U.S. Army Corps of Engineers, Mobile District
P.O. Box 2288
Mobile, Alabama 36628**

June 2009

This page intentionally left blank.

**FINDING OF NO SIGNIFICANT IMPACT (FNSI) FOR THE
CONSTRUCTION OF AN
ARMED FORCES RESERVE CENTER AND
IMPLEMENTATION OF BRAC 05 RECOMMENDATIONS IN THE VICINITY OF
GREENWOOD AND FRANKLIN, INDIANA**

Introduction.

The Indiana Army National Guard (INARNG) prepared an Environmental Assessment (EA) to identify and evaluate potential effects from the Franklin, Indiana Armed Forces Reserve Center (AFRC) associated with the restructuring of military bases recommended by the Defense Base Closure and Realignment (BRAC) Commission. The INARNG prepared the EA in accordance with the National Environmental Policy Act (NEPA) (42 USC § 4321 to 4370e), the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA (CEQ Regulations) (40 CFR Parts 1500-1508), and *Environmental Analysis of Army Actions* (32 CFR 651). The Defense Base Closure and Realignment Commission (BRAC Commission) made the following recommendations concerning Greenwood-Franklin, Indiana:

“Realign Charles H. Seston United States Army Reserve Center by relocating the 402nd Engineer Company and Detachment 1 of the 417th Petroleum Company into a new Armed Forces Reserve Center in the vicinity of Greenwood and Franklin, IN, if the Army is able to acquire land suitable for the construction of the facility. The new AFRC shall have the capability to accommodate the Indiana National Guard units from the Camp Atterbury Army National Guard Readiness Center (Building #500), and the 219th Area Support Group Readiness Center (Building #4), Camp Atterbury, IN, if the state decides to relocate those National Guard units.”

1. Description of the Proposed Action and Alternative

Proposed Action. The Proposed Action is the INARNG’s Preferred Alternative. The Proposed Action consists of implementing BRAC recommendations to construct a new AFRC and related facilities at a site in the vicinity of Greenwood and Franklin, Indiana at the Hougham North Tract, Franklin Indiana. The Proposed Action includes land acquisition, construction, and future use of an AFRC. The AFRC would provide administrative, educational, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for eight INARNG units and two United States Army Reserve (USAR) units. As a result of a separate space allocation permitted in NGB Pamphlet 415-12 for special exam functions, a 5,200-square-foot Physical Examination Center will be incorporated into the AFRC. The INARNG Medical Command is anticipated to provide physical examinations for every member of the INARNG (approximately 10,000 per year) at a rate of approximately 400 per day during a drill weekend. Activities at the AFRC will be training-related, with no weapons firing. The facility would employ approximately 36 permanent full-time personnel, and would serve about 982 personnel on a rotating basis, mostly on weekends.

Alternative Considered. In addition to the Proposed Action, the INARNG analyzed a No Action alternative. Under the No Action alternative, the proposed facilities would not be constructed to accommodate the BRAC recommendations. The No Action alternative would not ensure that adequate training and administrative space is available to support reserve units realigned from area facilities and to support the INARNG's Federal, state, and community missions. Under the No Action alternative, the Army would not implement the Proposed Action. An environmental analysis of the No Action Alternative is performed to serve as a benchmark against which the Proposed Action can be evaluated.

2. Environmental Analysis

Based on the analysis contained in the EA, the INARNG has determined that construction and operation of the AFRC will not have any significant adverse impacts on the human or natural environment.

Mitigation. No mitigation measures are necessary to reduce potential adverse environmental impacts to below significant levels, because no significant adverse effects are expected from implementation of the Proposed Action. To guard against the development of circumstances that could, in limited cases, result in site-specific adverse effects, the NGB and INARNG organizations will maintain their environmental stewardship role by implementing best management practices designed to safeguard environmental resources.

3. Regulations

The Proposed Action will not violate NEPA, the CEQ Regulations, 32 CFR 651, or any other Federal, state, or local environmental regulations.

4. Commitment to Implementation

The National Guard Bureau (NGB) and INARNG affirm their commitment to implement this EA in accordance with NEPA for the recommended BRAC action. Implementation is dependent on funding. The INARNG and the NGB's Environmental Programs Division will ensure that adequate funds are requested in future years' budgets to achieve the goals and objectives set forth in this EA.

5. Public Review and Comment

The final EA and Draft Finding of No Significant Impact (FNSI) were made available for public review and comments from 4 July through 2 August, 2009 at locations listed in the public notices. No comments were received. For further information, contact the Office of the Adjutant General, Indiana, ATTN: JFHQ-IN-FE-EN (LTC Richard Jones), 3764 W. Morris Street, Indianapolis, Indiana 46241, (317) 241-1714.

6. Finding of No Significant Impact

After careful review of the EA, I have concluded that implementation of the Proposed Action would not generate significant controversy or have a significant impact on the quality of the human or natural environment. This analysis fulfills the requirements of NEPA and the CEQ Regulations. An Environmental Impact Statement will not be prepared, and the National Guard Bureau is issuing this Finding of No Significant Impact.

6 Aug 09
Date

Michael J. Bennett
MICHAEL J. BENNETT
COL, NGB
Chief, Environmental
Programs Division

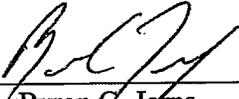
This page intentionally left blank.

ENVIRONMENTAL ASSESSMENT

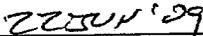
**CONSTRUCTION OF AN
ARMED FORCES RESERVE CENTER AND IMPLEMENTATION
OF BRAC 05 RECOMMENDATIONS IN THE VICINITY OF
GREENWOOD AND FRANKLIN, INDIANA**

Prepared for:

U.S. Army Corps of Engineers, Mobile District



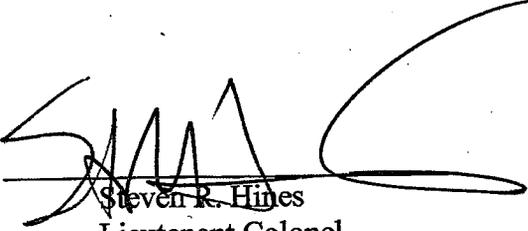
Byron G. Jorns
Colonel, U.S. Army Corp of Engineers
Commanding



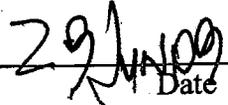
Date

Approved by:

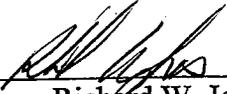
Indiana Army National Guard



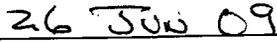
Steven R. Hines
Lieutenant Colonel
Director of Facilities, Engineering,
and Environmental



Date



Richard W. Jones
Lieutenant Colonel
Supervisory Environmental Specialist



Date

This page intentionally left blank.

ENVIRONMENTAL ASSESSMENT

LEAD AGENCY: National Guard Bureau (NGB)

COOPERATING AGENCIES: None

TITLE OF PROPOSED ACTION: Construction of an Armed Forces Reserve Center (AFRC) and Implementation of BRAC 05 Recommendations in the Vicinity of Greenwood and Franklin, Indiana

AFFECTED JURISDICTION: Franklin, Johnson County, Indiana

POINT OF CONTACT: LTC Richard Jones at (317) 247-3300 X85447 or richard.w.jones@us.army.mil. Joint Forces Headquarters – Indiana (JFHQ-IN-FMO-EN)

PROPOSERS: Indiana Army National Guard (INARNG)

APPROVED BY: Approval by Colonel Jeffery G. Phillips is pending.

DOCUMENT DESIGNATION: Draft Environmental Assessment

ABSTRACT:

The NGB and INARNG are preparing environmental documentation for the proposed AFRC near Franklin, Indiana as part of the restructuring of military bases recommended by the Defense Base Closure and Realignment Act. This Environmental Assessment (EA) addresses the potential environmental, socioeconomic, and cultural impacts of this proposal and its alternatives. The Proposed Action is necessary to support the INARNG Federal, state, and community missions. The proposed AFRC building would provide training for approximately 651 INARNG personnel from eight units and approximately 331 U.S. Army Reserve (USAR) personnel from two units.

This EA evaluates the individual and cumulative effects of the Proposed Action (construction and operation of the Franklin AFRC) and the No Action Alternative with respect to the following criteria: land use, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomic environment, infrastructure, and hazardous and toxic materials/wastes.

The evaluation performed in this EA concludes that there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the implementation of the Proposed Action, provided that best management practices specified in this EA are implemented.

This page intentionally left blank.

EXECUTIVE SUMMARY

Environmental Assessment for the Construction of an Armed Forces Reserve Center in Franklin, Indiana

On September 8, 2005, the Defense Base Closure and Realignment Commission (BRAC Commission) recommended that certain realignment actions occur in the vicinity of Greenwood and Franklin, Indiana. To implement these recommendations, the U.S. Army National Guard (ARNG) proposes to construct a new Armed Forces Reserve Center (AFRC) and related facilities at a site in the vicinity of Greenwood and Franklin, Indiana to support the changes in force structure. This Environmental Assessment (EA) has been prepared to identify, document, and discuss the possible environmental, cultural, and socioeconomic impacts associated with the proposed construction and operation of an AFRC in Franklin, Johnson County, Indiana. This EA provides the necessary information to properly and fully assess the potential effects of proposed construction and operation of the Franklin AFRC as required under the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 *et seq.*); the President's Council of Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] 1500-1508); and 32 CFR Part 651.

OVERVIEW OF PROJECT PURPOSE AND NEED

The Proposed Action is necessary to support the Indiana Army National Guard (INARNG) Federal, state, and community missions. The proposed AFRC would provide administrative office and storage space for approximately 982 part-time individuals as well as 36 full-time personnel. The purpose of the Proposed Action is to rapidly and cost-effectively provide the INARNG with a facility of sufficient size and modern design to efficiently attain required mobilization readiness levels for the assigned units. The action is needed to address a shortfall in administrative space, classrooms, military vehicles, and maintenance areas within the State of Indiana, and within the Indianapolis region (Central Indiana) specifically. The AFRC is needed to house the following INARNG units: the 215th Medical Company; 1313th Engineer Company; 1438th Transportation Company; Detachment 1, 1413th Engineer Company (Vertical); 219th Battlefield Surveillance Brigade HHC; 120th Public Affairs Detachment; Company F, 3-238 ATS; and INARNG Medical Command. It was determined that their current facility would be re-utilized by the Camp Atterbury command and tenant units supporting the day-to-day operations of this mobilization station. This would allow the Camp Atterbury command to vacate World War II era facilities that are currently being occupied. The United States Army Reserve (USAR) units to be housed at this facility are Detachment 1 of the 417th Petroleum Company and 478th Engineer Company (DPTRK). The USAR units are currently stationed in the 37-year old Charles H. Seston USAR Center in Edinburg, Indiana. This facility is considered inadequate and unfeasible for rehabilitation.

OVERVIEW OF CONSIDERED PROJECT ALTERNATIVES

This EA evaluates the individual and cumulative effects of the Preferred Alternative (construction and operation of the Franklin AFRC; the Proposed Action) and the No Action Alternative with respect to the following criteria: geographic setting and land use, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomic environment, environmental justice, infrastructure, and hazardous and toxic substances.

Under the Preferred Alternative, activities would include land use alterations throughout the approximately 40-acre project site. In addition to the proposed 162,616-square-foot AFRC training building, the project would include construction of 363-square-foot flammable materials facility, a 299-square-foot controlled waste facility, and a 4,013-square-foot unheated storage

building. The AFRC would provide administrative, educational, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for eight INARNG units and two USAR units. USAR sole use space would provide administrative, unit storage with weapons vault, maintenance office and shops, unheated storage, and maintenance bays. Activities at the AFRC will be training-related, with no weapons firing. As a result of a separate space allocation permitted in National Guard Bureau Pamphlet 415-12 for special exam functions, a 5,200-square-foot Physical Examination Center will be incorporated into the AFRC. The INARNG Medical Command is anticipated to provide physical examinations for every member of the INARNG (approximately 10,000 per year) at a rate of approximately 400 per day during a drill weekend.

The Proposed Action would also provide approximately 47,483 square yards of parking space for military vehicles and approximately 22,607 square yards for privately-owned vehicles. Approximately 500 vehicles including high mobility multi-purpose wheeled vehicles (HMMWVs or Humvees), semi tractors, and commercial cars and trucks are anticipated as a result of the realignment of INARNG and USAR units to the new AFRC. In addition, a maximum of approximately 100 flat bed, cargo, and specialty trailers are also anticipated. The military vehicles and equipment kept on-site would generally be parked empty or loaded with equipment relevant for training. Occasionally, some of these vehicles could be staged and then moved as a convoy for off-site training.

Under the No Action Alternative, the proposed facilities would not be constructed to accommodate the Base Realignment and Closure (BRAC) recommendations. The INARNG would continue to use the facilities at Camp Atterbury, thereby not allowing reutilization of these facilities by the Camp Atterbury command and tenant units who are currently housed in inadequate facilities. The USAR would continue to use the Charles H. Seston USAR Center in Edinburgh, Indiana, which is considered inadequate to meet current unit organization and mission requirements.

ENVIRONMENTAL CONSEQUENCES

Eleven resource areas were characterized and evaluated for potential impacts from the Preferred Alternative and the No Action alternative. Short-term impacts to the affected environments listed in Chapter 4 are mainly confined to the time frame during the construction of the site and the effects on land use and aesthetics, air, noise, hazardous waste, infrastructure, and biological resources. Although development of the AFRC would be compatible with the future land use plans of the City of Franklin, long-term adverse impacts from the conversion of the land resources from rural/agriculture to urban and industrial would be an irreversible use of the land. The Proposed Action would cause short-term incremental adverse impacts to soils and some prime farmland would be lost; however, the impacts would not be significant due to the size of the area relative to average size farms in Johnson County. No adverse impacts to any federally-listed threatened or endangered species would occur under the Preferred Alternative, for no such species are known to occur on the site. The Preferred Alternative would provide beneficial socioeconomic impacts to Johnson County with development and potential increase in jobs. No potential impacts were classified as significant.

CONCLUSION

The evaluation performed in this EA concludes that there would be no significant adverse impact, either individually or cumulatively, to the local environment or quality of life associated with the implementation of the Preferred Alternative, provided that best management practices discussed in this EA are implemented. This EA's analysis determines, therefore, that an environmental impact statement is unnecessary for implementation of the Preferred Alternative, and that a Finding of No Significant Impact (FNSI) is appropriate.

TABLE OF CONTENTS

Section	Page
1.0	PURPOSE, NEED AND SCOPE 1
1.1	Introduction 1
1.2	Purpose and Need 1
1.3	Scope 3
1.4	Decision to be Made 4
1.5	Public Involvement 4
1.5.1	Public Involvement/Scoping 4
1.5.2	Agency Participation 5
1.5.3	Native American Consultation 5
1.6	Regulatory Framework 6
2.0	PROPOSED ACTION 7
2.1	Introduction 7
2.2	Facilities and Operations 7
2.3	Equipment 8
2.4	Personnel 8
3.0	ALTERNATIVES CONSIDERED 9
3.1	Introduction 9
3.2	Screening Criteria 9
3.3	Alternatives Evaluated 10
3.3.1	Alternative 1 – Preferred Alternative 10
3.3.2	No Action Alternative 14
3.4	Alternatives Considered and Eliminated 14
3.4.1	Other Sites Considered 14
3.4.2	Existing Facilities 15
4.0	AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES 17
4.1	Location Description 17
4.2	Land Use 18
4.2.1	Affected Environment 18
4.2.2	Consequences 19
4.3	Air Quality 22
4.3.1	Affected Environment 22
4.3.2	Consequences 25
4.4	Noise 26
4.4.1	Affected Environment 26
4.4.2	Consequences 27
4.5	Geology and Soils 28
4.5.1	Affected Environment 28
4.5.2	Consequences 29

TABLE OF CONTENTS

Section	Page
4.6 Water Resources	31
4.6.1 Affected Environment	31
4.6.2 Consequences	33
4.7 Biological Resources	34
4.7.1 Affected Environment	34
4.7.2 Consequences	37
4.8 Cultural Resources	38
4.8.1 Affected Environment	38
4.8.2 Consequences	40
4.9 Socioeconomics	41
4.9.1 Affected Environment	41
4.9.2 Consequences	44
4.10 Environmental Justice	46
4.10.1 Affected Environment	46
4.10.2 Consequences	47
4.11 Infrastructure	48
4.11.1 Affected Environment	48
4.11.2 Consequences	50
4.12 Hazardous and Toxic Substances	52
4.12.1 Affected Environment	52
4.12.2 Consequences	53
4.13 Cumulative Effects	54
4.13.1 Past, Present, and Reasonably Foreseeable Actions.....	55
4.13.2 Cumulative Effects Summary	56
4.14 Mitigation Summary.....	58
5.0 FINDINGS AND CONCLUSIONS	59
6.0 REFERENCES	60
7.0 GLOSSARY	64
8.0 LIST OF PREPARERS.....	68
9.0 AGENCIES AND INDIVIDUALS CONSULTED	69
APPENDIX A	CONSULTATION AND COORDINATION
APPENDIX B	ECONOMIC IMPACT FORECAST SYSTEM REPORT

LIST OF TABLES

Table	Page
4-1. National Ambient Air Quality Standards.....	22
4-2. Air Emissions Reported for Johnson County, Indiana, for Calendar Year 2002..	24
4-3. Regional Income for Year 2000.....	42
4-4. Regional Educational Attainment of Persons 25 Years and Older for Year 2000.	43
4-5. Regional Housing Characteristics for Year 2000.	43
4-6. Total Population Versus Population Under Age 18 for Year 2000.	44
4-7. Regional Population by Race for Year 2000.	47
4-8. Potential Cumulative Effects Associated with the Proposed Action.	56

LIST OF FIGURES

Figure	Page
1-1. Franklin, Indiana Location Map.	2
3-1. Sites Screened for Inclusion in this Environmental Assessment.	11
3-2. Aerial Photograph of the Hougham North Tract Site – Preferred Alternative.	12
3-3. Preliminary AFRC Site Layout – Preferred Alternative.....	13
4-1. Land Use Map – Preferred Alternative.....	20
4-2. Soil Mapping Units – Preferred Alternative.....	30
4-3. Wetland Areas – Preferred Alternative.....	36
4-4. Existing Site Utilities – Preferred Alternative.....	49

LIST OF ACRONYMS

° F	degrees Fahrenheit
µg/m ³	micrograms per cubic meter
AAI	All Appropriate Inquiries
AFRC	Armed Forces Reserve Center
AIRFA	American Indian Religious Freedom Act
APE	Area of Potential Effect
ARNG	U.S. Army National Guard
ARPA	Archaeological Resources Protection Act
AST	above ground storage tank
ASTM	American Society of Testing and Materials
ATFP	Anti-terrorism/Force Protection
BMP	best management practice
BRAC	Base Realignment and Closure
BRAC Commission	Defense Base Closure and Realignment Commission
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
CWA	Clean Water Act
dB	decibel(s)
dba	A-weighted decibel(s)
DoD	U.S. Department of Defense
DoDI	Department of Defense Instruction
EA	Environmental Assessment
ECOP	Environmental Condition of Property
EIFS	Economic Impact Forecast System
EO	Executive Order
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
GPM	gallon(s) per minute
HMMWV	high mobility multi-purpose wheeled vehicle
HVAC	heating, ventilation, and air conditioning
I-65	Interstate 65
IBC	International Building Code 2000 Edition
IDNR	Indiana Department of Natural Resources
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
INARNG	Indiana Army National Guard

LIST OF ACRONYMS (continued)

LIRC	Louisville & Indiana Railroad Company
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O ₃	ozone
OWS	oil/water separator
Pb	lead
PM ₁₀	particulate matter with an aerodynamic size less than or equal to 10 microns
PM _{2.5}	particulate matter with an aerodynamic size less than or equal to 2.5 microns
ppm	parts per million
PSD	Prevention of Significant Deterioration
RCRA	Resource Conservation and Recovery Act
ROI	region of influence
RTV	rational threshold value
SARA	Superfund Amendments and Reauthorization Act
SO ₂	sulfur dioxide
SPCC	Spill Prevention Control and Countermeasures
STRACNET	Strategic Rail Corridor Network
SWPPP	Storm Water Pollution Prevention Plan
tpy	ton(s) per year
TSCA	Toxic Substance Control Act
TSD	transport, storage, and disposal
USACE	U.S. Army Corps of Engineers
USAR	United States Army Reserve
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
WWTP	Wastewater Treatment Plant

This page intentionally left blank.

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 in the vicinity of Greenwood and Franklin, Indiana. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The Congress did not alter any of the BRAC Commission's recommendations, and on November 9, 2005, the recommendations became law. 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. This environmental assessment (EA) analyzes the potential environmental impacts associated with the U.S. Army National Guard's (ARNG's) Proposed Action in the vicinity of Greenwood and Franklin, Indiana.

The BRAC Commission made the following recommendations concerning Greenwood-Franklin, Indiana:

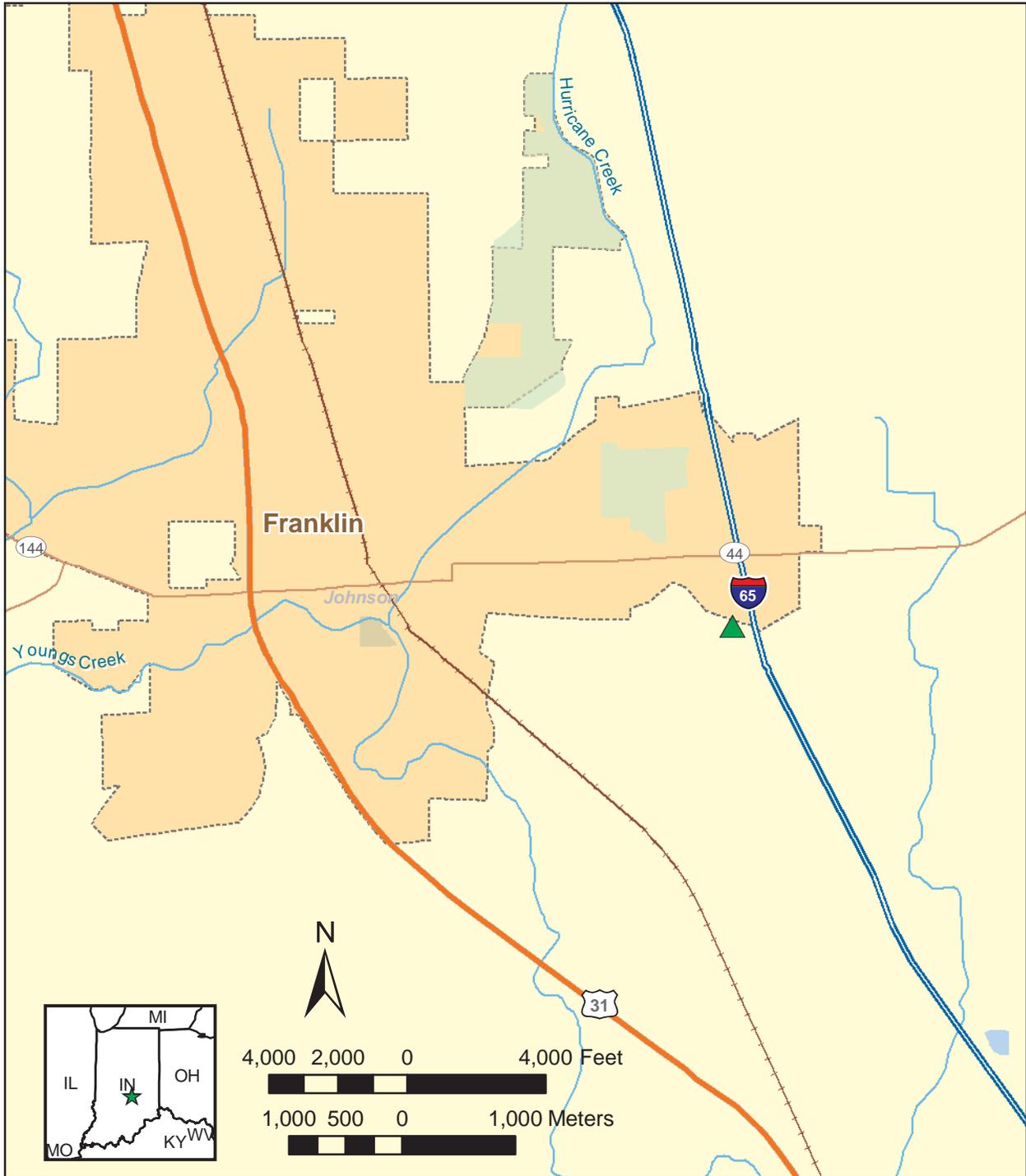
“Realign Charles H. Seston United States Army Reserve Center by relocating the 402nd Engineer Company and Detachment 1 of the 417th Petroleum Company into a new Armed Forces Reserve Center in the vicinity of Greenwood and Franklin, IN, if the Army is able to acquire land suitable for the construction of the facility. The new AFRC shall have the capability to accommodate the Indiana National Guard units from the Camp Atterbury Army National Guard Readiness Center (Building #500), and the 219th Area Support Group Readiness Center (Building #4), Camp Atterbury, IN, if the state decides to relocate those National Guard units.”

To implement these recommendations, the ARNG proposes to construct a new Armed Forces Reserve Center (AFRC) and related facilities at a site in the vicinity of Greenwood and Franklin, Indiana to support the changes in force structure. The project area is located in Franklin, Johnson County, Indiana, approximately 20 miles south of the City of Indianapolis, Indiana (Figure 1-1). Details on the Proposed Action are provided in Section 2.0.

1.2 Purpose and Need

The purpose of the Proposed Action is to provide a new AFRC in the vicinity of Greenwood and Franklin, Indiana as directed by the BRAC Commission's recommendations. The AFRC is needed to ensure that adequate training and administrative space is available to support reserve units realigned from area facilities and to support the Indiana Army National Guard's (INARNG's) Federal and state missions as follows:

- The Federal role is to support the United States military objectives through participation in America's Armed Forces.



▲ Location of site

Prepared For:
 U.S Army Corps of Engineers, Mobile District

Figure 1-1
 Franklin, Indiana Location Map



- The state role is to support the Governor of Indiana by providing trained units and equipment capable of protecting life and property and preserving peace, order, and public safety.

The need for the Proposed Action is to improve the ability of the Nation to respond rapidly to challenges of the 21st century. The Army's mission is to defend the United States and its territories, support national policies and objectives, and defeat nations and other parties 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 following paragraphs discuss the major initiatives that contribute to the Army's need for the Proposed Action in the vicinity of Greenwood and Franklin, Indiana.

Base Realignment and Closure. In previous rounds of Base Realignment and Closure (BRAC), the explicit goal was to save money and downsize the military to reap a "peace dividend." In the 2005 BRAC round, U.S. Department of Defense (DoD) 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 recommendations in the vicinity of Greenwood and Franklin, Indiana to achieve the objectives for which Congress established the BRAC process.

Installation Sustainability. On October 1, 2004, the Secretary of the Army and the Chief of Staff issued *The Army Strategy for the Environment*. The strategy focuses on the interrelationships of mission, environment, and community. A sustainable installation simultaneously meets current and future mission requirements, safeguards human health, improves quality of life, and enhances the natural environment. A sustained natural environment is necessary to allow the Army to train and maintain military readiness.

1.3 Scope

This EA was developed in accordance with the *National Environmental Policy Act* (NEPA) (42 U.S.C. § 4321 et seq.); implementing regulations issued by the President's Council on Environmental Quality (CEQ), 40 Code of Federal Regulations (CFR) Parts 1500-1508; and *Environmental Effects of Army Actions*, 32 CFR Part 651. Its purpose is to inform decision makers and the public of the likely environmental consequences of the Proposed Action and alternatives.

This EA identifies, documents, and evaluates environmental effects of the proposed realignment in the vicinity of Greenwood and Franklin, Indiana. An interdisciplinary team of environmental scientists, biologists, planners, economists, engineers, archaeologists, historians, and military technicians analyzed the Proposed Action and alternatives in light of existing conditions and identified relevant beneficial and adverse effects associated with the actions. The Proposed Action is described in Section 2.0 and the alternatives are described in Section 3.0. Conditions considered to be the

“environmental baseline” are described in Section 4.0, Affected Environment and Consequences. The expected effects of the Proposed Action, also described in Section 4.0, are presented immediately following the description of the environmental baseline conditions for each resource addressed in the EA. Section 4.0 also addresses the potential for cumulative effects, and mitigation measures are identified where appropriate. Section 5.0 provides conclusions summarizing the magnitude of expected effects and identifies the environmentally preferred alternative. References cited in this document are provided in Section 6.0, a glossary is presented in Section 7.0, the list of preparers of this EA is presented in Section 8.0, and the agencies and individuals consulted are presented in Section 9.0.

The Defense Base Closure and Realignment Act of 1990 specifies that 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 (Sec. 2905(c)(2)(A), Public Law 101-510, as amended).” The law further specifies that in applying the provisions of NEPA 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 (Sec. 2905(c)(2)(B)).” The Commission’s deliberation and decision, as well as the need for closing or realigning a military installation, are exempt from NEPA. Accordingly, this EA does not address the need for realignment.

1.4 Decision to be Made

The decision to be made is how the INARNG will implement the BRAC recommendations in the vicinity of Greenwood and Franklin, Indiana and, as appropriate, carry out mitigation measures that would reduce effects on resources. The decision on how to implement the realignment will be based on strategic, operational, environmental, and other considerations, including the results of this analysis.

1.5 Public Involvement

1.5.1 PUBLIC INVOLVEMENT/SCOPING

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 32 CFR Part 651.14. Upon completion of this EA, the Notice of Availability was published in a local newspaper, the *Daily Journal*, and a regional newspaper, *The Indianapolis Star*. At that point, the EA is made available to the

public for 30 days, along with a draft Finding of No Significant Impact (FNSI) at the Franklin Branch of the Johnson County Public Library, in Franklin, Indiana and on the BRAC website at http://www.hqda.army.mil/acsim/brac/env_ea_review.htm. At the end of the 30-day public review period, the Army will consider all comments submitted by individuals, agencies, or organizations on the Proposed Action, the EA, and draft FNSI. As appropriate, the ARNG may then execute the FNSI and proceed with implementation of the Proposed Action. If it is determined prior to issuance of a final FNSI that implementation of the Proposed Action would result in significant impacts, the ARNG will publish in the *Federal Register* a notice of intent to prepare an environmental impact statement, commit to mitigation actions sufficient to reduce impacts below significance levels, or not take the action.

The public may obtain information on the status and progress of the Proposed Action and the EA through the INARNG by contacting LTC Richard Jones at (317) 247-3300 X85447 or richard.w.jones@us.army.mil.

1.5.2 AGENCY PARTICIPATION

In conjunction with the preparation of this EA, and to comply with NEPA, written correspondence will be sent to Federal, state, and local agencies with jurisdictions that could possibly be affected by the proposal. This coordination fulfills requirements under Executive Order (EO) 12372 (superseded by EO 12416, and subsequently supplemented by EO 13132), which requires Federal agencies to cooperate with and consider state and local views in implementing a Federal proposal. It also constitutes the Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) process for this EA.

Section 9.0 contains a list of agencies contacted regarding the Proposed Action and any sensitive resources at or near the proposed AFRC in the vicinity of Greenwood and Franklin, Indiana. These agencies include, but are not limited to, the U.S. Fish and Wildlife Service; U.S. Environmental Protection Agency; U.S. Department of Agriculture, Natural Resources Conservation Service; Indiana Department of Natural Resources; and the Indiana Division of Historic Preservation and Archaeology. Data on local species of special concern, threatened and endangered species, soils, water resources, and other data pertinent to environmental resources in the vicinity of Greenwood and Franklin, Indiana were requested. These data were used in developing this EA. Copies of IICEP correspondence, including sample data request letters and all received agency responses, are included in Appendix A.

1.5.3 NATIVE AMERICAN CONSULTATION

The INARNG is conducting formal consultation with federally recognized Native American tribes as required under Department of Defense Instruction (DoDI) 4710.02 (*DoD Interactions with Federally Recognized Tribes*), which implements the *Annotated DoD American Indian and Alaska Native Policy* (dated 27 October 1999). These entities were invited by the INARNG to participate as Sovereign Nations per EO 13175 (*Consultation and Coordination with Indian Tribal Governments*) in both the EA and the National Historic Preservation Act (NHPA) Section 106 process. Consultations with

these tribes were conducted by the INARNG in accordance with the protocol set forth in the National Guard Bureau's NEPA Handbook (2006).

Section 9.0 lists the federally recognized Native American tribes that were notified of the Proposed Action and invited to consult.

1.6 Regulatory Framework

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 EOs that establish standards and provide guidance on environmental and natural resources management and planning. These include the Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act, Endangered Species Act (ESA), NHPA, Archaeological Resources Protection Act (ARPA), Native American Graves Protection and Repatriation Act (NAGPRA), American Indian Religious Freedom Act (AIRFA), Resource Conservation and Recovery Act (RCRA), Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), Superfund Amendments and Reauthorization Act (SARA), and Toxic Substance Control Act (TSCA). 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*), EO 12372 (*Intergovernmental Review of Federal Programs*), and EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*). These authorities are addressed in various sections throughout this EA when relevant to particular environmental resources and conditions. The full texts of the laws, regulations, and EOs are available on the Defense Environmental Network & Information Exchange web site at <https://www.denix.osd.mil>.

2.0 PROPOSED ACTION

2.1 Introduction

This section describes the Army's Proposed Action for carrying out the BRAC Commission's recommendations. The Proposed Action includes land acquisition, construction, and future use of an AFRC. The details of the facilities and operations, equipment, and personnel for the Proposed Action are described below.

2.2 Facilities and Operations

The Proposed Action includes the construction and operation of the following facilities:

- 162,616-square-foot AFRC training building
- 363-square-foot flammable materials facility
- 299-square-foot controlled waste facility
- 4,013-square-foot unheated storage building

INARNG units to be housed at this facility are the 215th Medical Company; 1313th Engineer Company; 1438th Transportation Company; Detachment 1, 1413th Engineer Company (Vertical); 219th Battlefield Surveillance Brigade HHC; 120th Public Affairs Detachment; Company F, 3-238 ATS; and INARNG Medical Command. United States Army Reserve (USAR) units to be housed at this facility are Detachment 1 of the 417th Petroleum Company and 478th Engineer Company (DPTRK).

The AFRC would provide administrative, educational, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for eight INARNG units and two USAR units. USAR sole use space would provide administrative, unit storage with weapons vault, maintenance office and shops, unheated storage, and maintenance bays.

Future site improvements are expected to occupy approximately 40 acres. The State of Indiana would acquire new land for construction of these facilities. The Army estimates that construction would begin in July 2009 and would be completed by Fiscal Year 2011.

Activities at the AFRC will be training-related, with no weapons firing. There would be no firing range or weapons qualification testing or training. Maintenance training workbays would be used to perform training for vehicle maintenance functions.

As a result of a separate space allocation permitted in National Guard Bureau Pamphlet 415-12 for special exam functions, a 5,200-square-foot Physical Examination Center will be incorporated into the AFRC. The INARNG Medical Command is anticipated to provide physical examinations for every member of the INARNG (approximately 10,000 per year) at a rate of approximately 400 per day during a drill weekend.

The facilities would be permanent construction with reinforced concrete foundations; concrete floor slabs; structural steel frames; masonry veneer walls; single membrane roof

combined with a sheet metal roof; heating, ventilation, and air conditioning (HVAC) systems; and plumbing, mechanical, electrical, and security systems.

The Proposed Action would also provide approximately 47,483 square yards of parking space for military vehicles and approximately 22,607 square yards for privately-owned vehicles.

Supporting improvements are also proposed to complement the facilities, including approximately 1,444 square yards of walkways, grading, clearing and landscaping, extension of utility services, security fencing, security gates, pump house, access control center, storm drainage and stormwater retention, and general site improvements. Anti-terrorism/Force Protection (ATFP) safety and security regulations would be incorporated into the facility designs and siting.

2.3 Equipment

Approximately 500 vehicles including high mobility multi-purpose wheeled vehicles (HMMWVs or Humvees), semi tractors, and commercial cars and trucks are anticipated as a result of the realignment of INARNG and USAR units to the new AFRC. In addition, a maximum of approximately 100 flat bed, cargo, and specialty trailers are also anticipated. The military vehicles and equipment kept on-site would generally be parked empty or loaded with equipment relevant for training. Occasionally, some of these vehicles could be staged and then moved as a convoy for off-site training.

2.4 Personnel

The new facility would realign Detachment 1 of the 417th Petroleum Company and 478th Engineer Company (DPTRK) from the Charles H. Seston USAR Center in Edinburg, Indiana, as directed by BRAC 05 and INARNG units from Camp Atterbury Army National Guard Readiness Center (Building #500), and the 219th Area Support Group Readiness Center (Building #4), in Camp Atterbury, Indiana.

The facility would employ approximately 36 permanent full-time personnel, and would serve about 982 personnel on a rotating basis, mostly on weekends. The maximum expected use of the new facility would be about 640 members per weekend, and there would be parking for 577 privately-owned vehicles (taking into account those that would use public transportation or carpool). On training weekends, reservists would either commute to the AFRC or stay in local hotels.

3.0 ALTERNATIVES CONSIDERED

3.1 Introduction

BRAC Commission recommendations direct the acquisition of land and construction of a new AFRC in the vicinity of Greenwood and Franklin, Indiana. In response to this directive, the INARNG proposes to construct the AFRC as described in Section 2.0. Development of screening criteria, alternatives evaluated, and alternatives considered but eliminated from detailed evaluation are discussed in this section of the EA.

3.2 Screening Criteria

NEPA and CEQ regulations require exploration and objective evaluation of all reasonable alternatives. Identification of those alternatives eliminated from detailed evaluation along with brief justification for elimination is required.

An alternative is considered reasonable only if, as a result of its implementation, it meets essential requirements of affording land and facilities to mitigate deficiencies of administrative space, educational space and resources, assembly space, physical examination center, and maintenance training areas in the vicinity of Greenwood and Franklin, Indiana. Alternatives that would not achieve essential requirements are considered unreasonable.

Greenwood-Franklin, Johnson County, Indiana was selected as the location for a new AFRC because Johnson County is one of the fastest growing counties in Indiana, and has been under represented in INARNG presence. The BRAC Commission determined the vicinity of Greenwood and Franklin, Indiana was the best location because it optimizes the Reserve Components ability to recruit and retain Reserve Component soldiers. Available property in and around the Interstate 65 (I-65) Franklin, Indiana interchange was considered for ease of access to the interstate and estimated cost of land. Land with easy interstate access north of the Franklin interchange was valued significantly higher than the land surrounding the Franklin interchange. The following summary captures the screening criteria used to evaluate various locations considered.

- **Land use/availability** – Availability of sufficient land area and configuration to accommodate an anticipated footprint of at least 40 acres, site access, and security requirements, including those for AFTP; compatibility with current local planning, development, and zoning; efficient use of land; proximity to related activities; and distance from incompatible activities.
- **Safety** – Engineering and operational safety, including vehicle traffic and circulation patterns including access roads.
- **Geographic and Environmental** – Topographic considerations, including special engineering and site preparation requirements; and consideration of potentially environmentally sensitive areas within the anticipated footprint.

- **Operational** – Potential future mission requirements; location and commute of workforce; visibility of AFRC; infrastructure demand (water, electricity, and other needs); and demolition costs (estimated costs to demolish any existing improvements).

After an examination of four properties within the Greenwood-Franklin area (Figure 3-1), the INARNG determined that the property identified as the Hougham North Tract in this EA met all of the screening criteria to support the INARNG's mission in the Greenwood-Franklin area. Implementation of the Proposed Action (i.e., construction and operation of an AFRC in the Greenwood-Franklin area) at the Hougham North Tract is the INARNG's Preferred Alternative. The other three properties did not meet the screening criteria and are, therefore, not evaluated fully in this EA as explained in Section 3.4.

3.3 Alternatives Evaluated

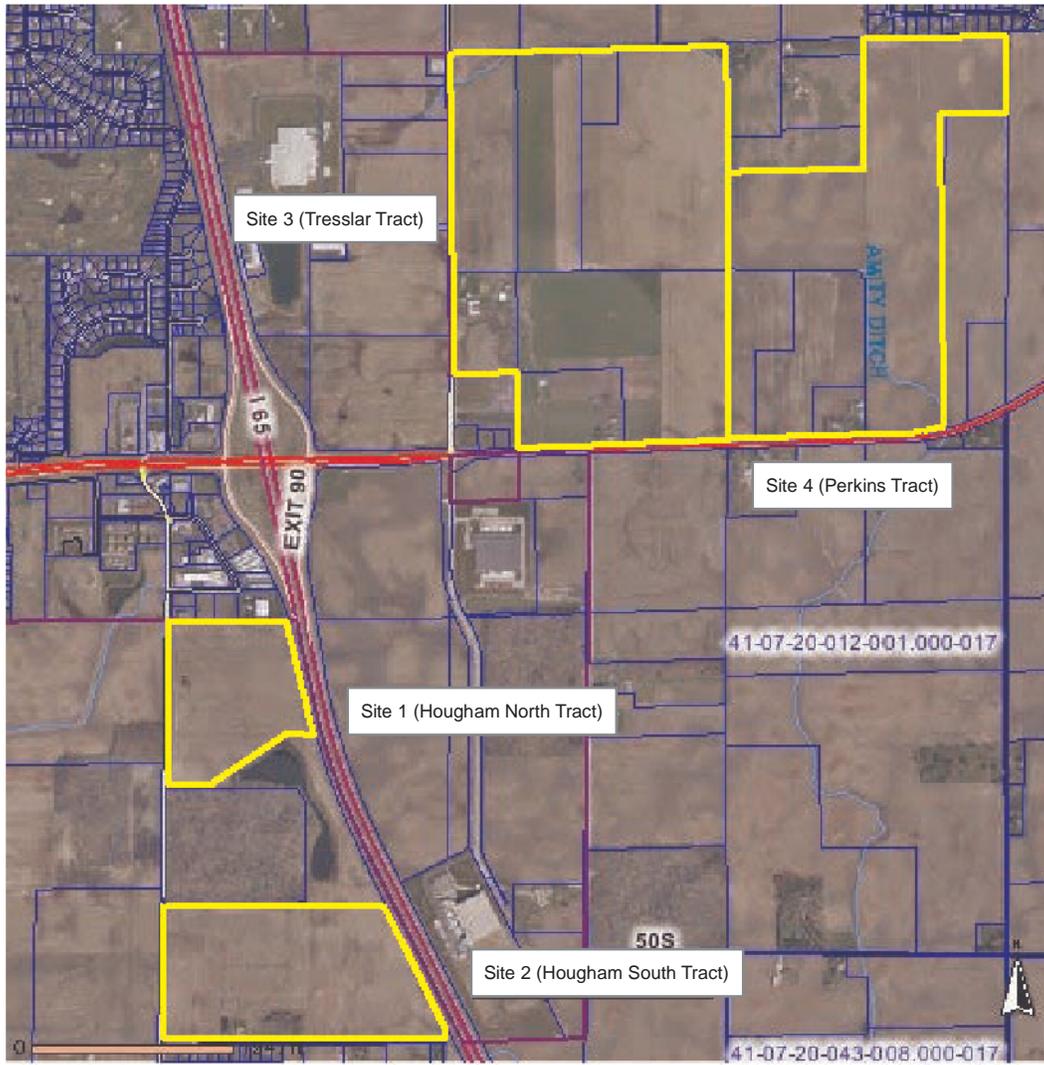
This EA evaluates the Preferred Alternative (Alternative 1) and the No Action Alternative (Alternative 2), as required by law.

3.3.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

The Army's Preferred Alternative is to construct the AFRC and associated facilities at the Hougham North Tract, shown as Site 1 on Figure 3-1. The Hougham North Tract consists of approximately 40 acres of irregularly shaped land located 0.3 mile south of the intersection of I-65 and State Road 44, approximately 2 miles east of Franklin, Indiana. The site lies between County Road 450 East and I-65. Access to the site is from County Road 450 East. Figure 3-2 shows an aerial photograph of the Hougham North Tract. Figure 3-3 shows the preliminary site layout of the proposed facilities.

The Hougham North Tract is the INARNG's Preferred Alternative because it meets the screening criteria set forth in Section 3.2 of this EA. It effectively provides the necessary combination of land and resources to sustain quality military training and to maintain and improve the units' readiness postures. The Hougham North Tract meets the screening criteria, as described below:

- The property is of sufficient acreage. The property was privately owned (leased for agricultural use), purchased by the State of Indiana and annexed by the City of Franklin, Indiana.
- Zoning and current land use of the land surrounding the property is Industrial-Light and Residential Traditional and is considered compatible with the INARNG's proposed land use.
- Utilities are readily available at the northwest corner of the parcel and four stormwater drains are in place.
- No environmentally sensitive areas were observed.
- The property is visible from both County Road 450 East and I-65.



Prepared For:
 U.S Army Corps of Engineers, Mobile District

Figure 3-1
 Sites Screened for Inclusion in this Environmental Assessment

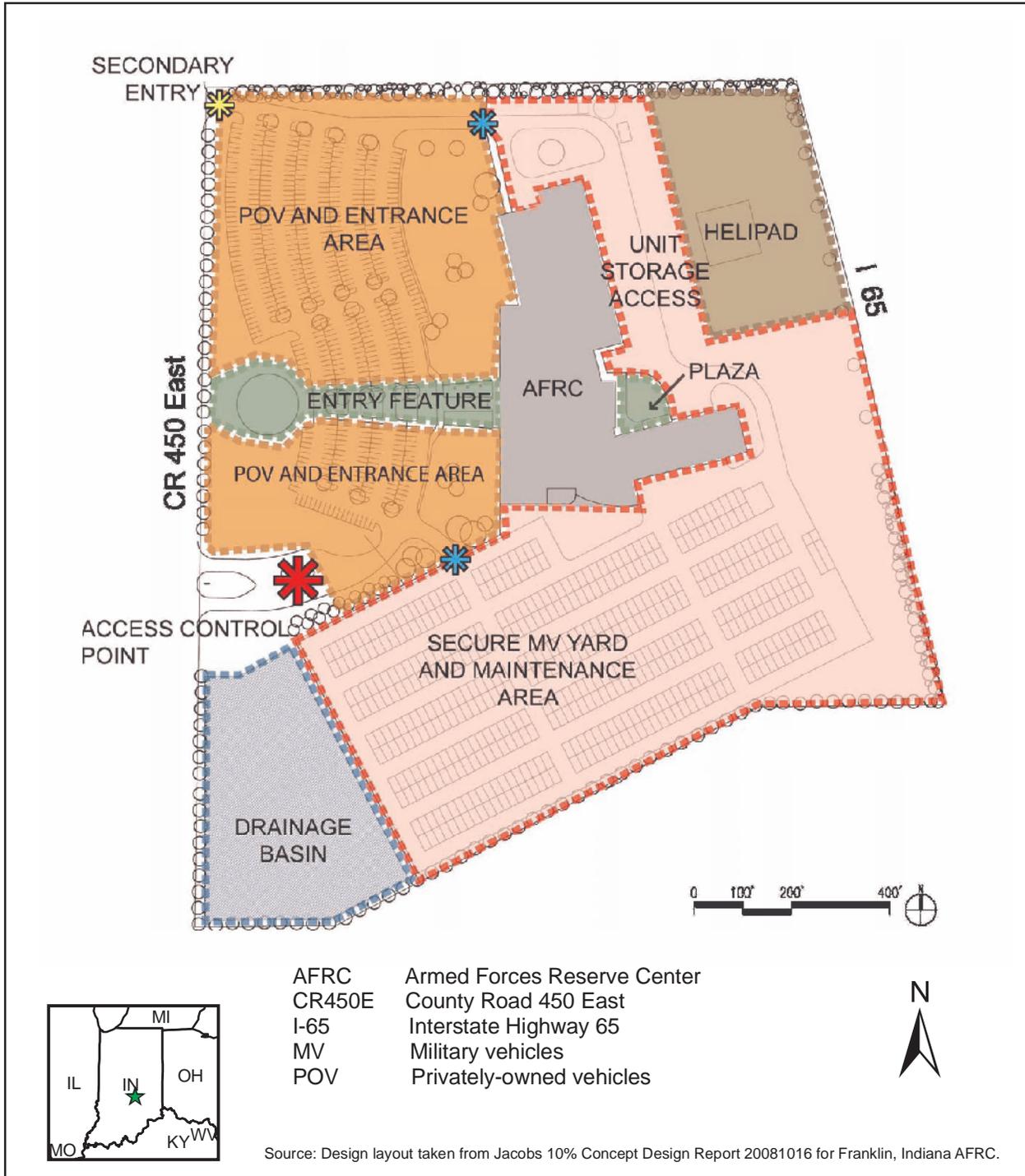




Prepared For:
U.S Army Corps of Engineers, Mobile District

Figure 3-2
Aerial Photograph of the Hougham North Tract Site --
Preferred Alternative





Prepared For:
 U.S Army Corps of Engineers, Mobile District

Figure 3-3
 Preliminary AFRC Site Layout - Preferred Alternative



Seven potential site plans, including varying floor plans were developed for this site. The site plan analyzed in this EA was selected based on the following criteria: a central assembly hall with all other spaces rotated around it; significant daylight for lobby, administrative, classrooms and assembly hall; arrangement of and proximity of the administrative and storage spaces; efficient two-story administrative area; location of classrooms on first floor for easy access; location of training device/simulator center allows for ease of loading; good visibility from both County Road 450 East and I-65; and a strong visual connection between the building entrance and the large oak tree on the site.

3.3.2 NO ACTION ALTERNATIVE

CEQ regulations require analysis of the No Action Alternative in an EA, for it serves as the baseline against which the impacts of the Proposed Action and alternatives will be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

Under the No Action Alternative, the Army would not implement the Proposed Action. USAR units as well as the INARNG units would continue to train at and operate from their current locations which are over utilized and not properly configured to allow the most effective training of personnel to complete mission requirements. However, routine replacement or renovation actions could occur through normal military maintenance and construction procedures as circumstances independently warrant.

3.4 Alternatives Considered and Eliminated

3.4.1 OTHER SITES CONSIDERED

Three other alternative sites were considered in the vicinity of Greenwood and Franklin, Indiana for the construction of the proposed AFRC (Figure 3-1). Sites 2, 3, and 4 were eliminated from further study during the screening process as they did not meet screening criteria as described below. Therefore, these sites are not evaluated in this EA.

Site 2 (Hougham South Tract) is privately owned and consists of approximately 75 acres of irregularly shaped land located 0.5 mile south of Site 1 (Preferred Alternative) on the east side of County Road 450 East, approximately 2 miles east of the City of Franklin, Indiana. It is the southern portion of the same parcel containing the Preferred Alternative. The site is open and plowed for agricultural use and is currently planted with corn. A residence is located on the south side of Site 2. A rural residential area is located across the street from the southern boundary of Site 2. Utility extension and possible upgrade would be necessary. Site 2 does not meet Land Use screening criteria due to the residence on the parcel and proximity to residential area (incompatible activities) or Operational screening criteria due to potential demolition costs to demolish residence.

Site 3 (Tresslar Track) is privately owned and consists of approximately 199 acres of irregularly shaped land located approximately 0.5 mile east of the intersection of I-65 and State Road 44 on the north side of State Road 44, approximately 2.5 miles east of the City of Franklin, Indiana. Two residences and associated farm buildings are located on the parcel. Utility extension and possible upgrade would be necessary. There is no visibility of Site 3 from I-65. Site 3 does not meet Land Use screening criteria due to the

residences on the parcel (incompatible activities) or Operational screening criteria due to potential demolition costs to demolish residences.

Site 4 (Perkins Tract) is privately owned and consists of approximately 165 acres of irregularly shaped land located approximately 1 mile east of the intersection of I-65 and State Road 44 on the north side of State Road 44, approximately 3 miles east of the City of Franklin, Indiana. Amity Ditch Creek runs centrally from northwest to southeast through Site 4 and its surrounding area is within the 100-year floodplain. A gas pipeline easement runs northwest to southeast across the northern portion of the site. A residence and associated farm buildings are located on Site 4. A subdivision is located across the street from the northern boundary of Site 4. Significant utility extension and possible upgrade would be necessary; likely requiring easements from neighboring property owners. There is no visibility of Site 4 from I-65. Site 4 does not meet Land Use screening criteria due to the residence on the parcel and proximity to subdivision (incompatible activities); Operational screening criteria due to potential demolition costs to demolish residence, easement requirement for utility extension, and existing gas pipeline; Geographic and Environmental screening criteria due to Amity Ditch Creek and surrounding area within the 100-year floodplain.

3.4.2 EXISTING FACILITIES

Relocation of units and establishment of new units involves ensuring adequate physical accommodations for personnel and their operational requirements. The Army considers four means of meeting increased space requirements.

- Use of existing facilities
- Modernization or renovation of existing facilities
- Leasing of off-post facilities
- Construction of new facilities

Army Regulation 210-20, *Master Planning for Army Installations*, establishes Army policy to maximize use of existing facilities. The regulation directs that new construction will not be authorized to meet a mission that can be supported by existing underutilized adequate facilities, provided that the use of such facilities does not degrade operational efficiency. Under this policy, selection and use of facilities to support mission requirements adheres to the foregoing four choices in the order in which they are listed. That is, if there are adequate existing facilities to accommodate requirements, and absent other overriding considerations, further examination of renovation, leasing, or construction alternatives is not required. Similarly, if a combination of use of existing facilities and renovation satisfies the Army's needs, leasing or new construction need not be addressed. New construction may proceed only when use of existing facilities, renovation, leasing, or a combination of such measures are inadequate to meet mission requirements.

Various alternatives were considered as a means to accommodate realigned units in the vicinity of Greenwood and Franklin, Indiana, as described below.

- **Use of existing facilities** – There are no existing facilities available that could adequately house or support the Proposed Action. No suitable DoD installations are in the area and moving to somewhere other than the vicinity of Greenwood and Franklin, Indiana would not be in compliance with the BRAC language. Therefore, use of existing facilities is not feasible.
- **Modernization or renovation of existing facilities** – The USAR units are currently stationed in the 37-year old Charles H. Seston USAR Center in Edinburgh, Indiana. This facility is considered unfeasible for rehabilitation. The facility requires significant upgrades to the structure in conformance with seismic requirements, mechanical and electrical systems, building information systems, roofs, interior and exterior finishes, and ATFP standards. In addition, changes to the building's interior layout would be required to meet current unit organization and mission requirements. The non-functional layout of the building perpetuates organizational inefficiencies. Therefore, this is not a feasible alternative to meet the project objective.

The INARNG units, Camp Atterbury INARNG Readiness Center (Building #500) and the 219th Area Support Group Readiness Center (Building #4), are also stationed in Edinburgh, Indiana adjacent to Camp Atterbury. It was determined that their facility would be re-utilized by the Camp Atterbury command and tenant units supporting the day-to-day operations of this mobilization station. This would allow the Camp Atterbury command to vacate World War II era facilities that are currently being occupied. Therefore, this alternative is not feasible.

No other suitable DoD training facilities exist in the vicinity of Greenwood and Franklin, Indiana that are available for a Full Facility Revitalization or construction addition/alteration. Therefore, modernization or renovation of existing facilities is not feasible.

- **Lease or contract of other facilities** – No appropriate facilities currently exist in the vicinity of Greenwood and Franklin, Indiana that are capable of meeting the purpose and need for the Proposed Action. Therefore, lease or contract of other facilities is not feasible.

4.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter describes the existing environmental and human resources that could potentially be affected by the Proposed Action and alternatives. The environment described in this chapter is the baseline for the consequences that are presented for each resource and each alternative. The region of influence (ROI), or study area for each resource category is the Hougham North Tract and immediate surroundings, unless stated otherwise in the individual resource category discussion. Most of the baseline information was taken from existing documentation.

This chapter also describes potential impacts for each environmental and human resource. An impact is defined as a consequence from modification to the existing environment due to a proposed action or alternative. Impacts can be beneficial or adverse, can be a primary result of an action (direct) or a secondary result (indirect), and can be permanent or long lasting (long term) or temporary and of short duration (short term). Impacts can vary in degree from a slightly noticeable change to a total change in the environment.

For this EA, short-term impacts are defined as those impacts resulting from construction, renovation, or demolition activities (e.g., those that are of temporary duration), whereas long-term impacts are those resulting from the presence of new facilities and operation of the proposed new facilities once they are constructed and commissioned for operation.

Significance criteria were developed for the affected resource categories, and for many resource categories, are necessarily qualitative in nature. Quantitative criteria can be established when there are specific numerical limits established by regulation or industry standard. These criteria are based on existing regulatory standards, scientific and environmental documentation, and/or professional judgment. Impacts are classified as significant or not significant based on the significance criteria. Significant impacts are those which would exceed the quantitative or qualitative limits of the established criteria, such as actions that would threaten a violation of Federal, state or local law or requirements imposed for the protection of the environment, or that would have adverse effects upon public health or safety. Impacts do not necessarily mean negative changes, and any detectable change is not, in and of itself, considered to be negative. In the following discussions, to highlight adverse impacts for the decision maker, the impacts are considered adverse unless identified as beneficial.

The affected environment and baseline conditions are described for each resource in general terms for the Hougham North Tract or the resource-specific ROI. The affected environment description for each resource is followed by the potential impacts to the resource from the Preferred Alternative (Alternative 1) and the No Action Alternative (Alternative 2).

4.1 Location Description

The proposed project area (site) for the AFRC construction, designated the Hougham North Tract, is located approximately 2 miles east of Franklin, Indiana. The 40-acre

farmland site is bordered on the west by County Road 450 East and the east by I-65. Access to the site is from County Road 450 East located 0.3 mile south of the intersection of I-65 and State Road 44.

Topography of the area is relatively flat with an increase in slope towards the eastern portion of the site. Indiana has marked seasons, with local climate variations depending upon topography, soils, latitude and proximity to large bodies of water. In Johnson County, minimum temperatures are usually reached in January [average 28 degrees Fahrenheit (° F)] and maximum temperatures in July (average 75° F). Precipitation occurs throughout the year with a greater amount of precipitation occurring from May through July (4 to 4.5 inches per month; City of Franklin 2006).

4.2 Land Use

4.2.1 AFFECTED ENVIRONMENT

This section describes existing land use conditions on and surrounding the Hougham North Tract. It considers natural land uses and land uses that reflect human modification. Natural land use classifications include wildlife areas, forests, and other open or undeveloped areas. Human land uses include residential, commercial, industrial, utilities, agricultural, recreational, and other developed uses. Management plans, policies, ordinances, and regulations determine the types of uses that are allowable, or protect specially designated or environmentally sensitive uses.

The following sections discuss the historical and current land use, surrounding land use, zoning, and the existing aesthetic and visual resource conditions in the area of the Hougham North Tract. The ROI for land use is the land within and adjacent to the limits of the Proposed Action project areas, areas visible from the Proposed Action construction locations, and areas from which the Proposed Action construction locations are visible.

4.2.1.1 Historical and Current Land Use

Historically, the Hougham North Tract was used for crop production. The earliest ownership of the property was documented in 1834 (Sewall 2008), at which time the site contained one residential structure. By 1900, the property did not contain a resident and became entirely undeveloped farmland leased for agricultural production. Corn was the most recent crop produced at the Hougham North Tract. Of the approximately 40 acres of farmland, 1 acre is considered prime farmland and the rest of the acreage is considered prime farmland if drained (USDA 2008). The Hougham North Tract has been purchased by the State of Indiana for construction and operation of the AFRC.

4.2.1.2 Surrounding Land Use

Land use surrounding the proposed site is varied. The southern border of the site is a mixed conifer-hardwood woodland and man-made pond, remnants of a borrow pit from I-65 construction. Franklin College is located 1 mile west of the proposed site. The site's western border is agricultural land with limited wooded area that has currently been annexed for possible expansion for Franklin College. This western land was most recently planted in corn. To the north is an industrial area occupied by Early Interstate

Park. I-65 borders the eastern side of the proposed site. A Cooper Tire distribution center is currently being constructed on the land just adjacent to the eastern side of I-65.

4.2.1.3 Local Zoning

Lands surrounding the proposed site are a mix of Natural Resources and Industrial Light zoning. The Early Interstate Park occupies the land immediately north of the Hougham North Tract. The land immediately east of the Hougham North Tract is currently zoned as Natural Resource. Areas south and west of the Hougham North Tract are comprised of agricultural land with limited forested land (Figure 4-1). The City of Franklin has voted to annex the proposed area and re-zoning from Natural Resource to Institutional or Industrial Light use is likely to occur.

4.2.1.4 Visual and Aesthetic Resources

This section describes the existing aesthetic and visual resource conditions in the area of the Hougham North Tract. Visual resources include natural and manmade physical features that provide the landscape its character and value as an environmental resource. Landscape features that form a viewer's overall impression about an area include landform, vegetation, water, color, adjacent scenery, scarcity, and constructed modifications to the natural setting. The ROI for aesthetics includes the areas visible from the Proposed Action construction locations and areas from which the Proposed Action construction locations are visible.

The Indiana Department of Natural Resources (IDNR) and other state and Federal agencies were contacted to determine if public lands, federally protected areas, or other visually sensitive areas occur within the vicinity of the site. In a letter dated December 11, 2008, the IDNR concluded that no significant areas occur within the vicinity of the Hougham North Tract. IDNR's letter is included in Appendix A of this EA. The Hougham North Tract is in a rural area. The property is cleared for agricultural use and is planted with corn. There is one large oak tree remaining on the property, along the western boundary. Views to the north include a small industrial area, to the east I-65 with a wooded area beyond the interstate, to the south a privately-owned wooded lot, and to the west County Road 450 East with planted corn beyond the road.

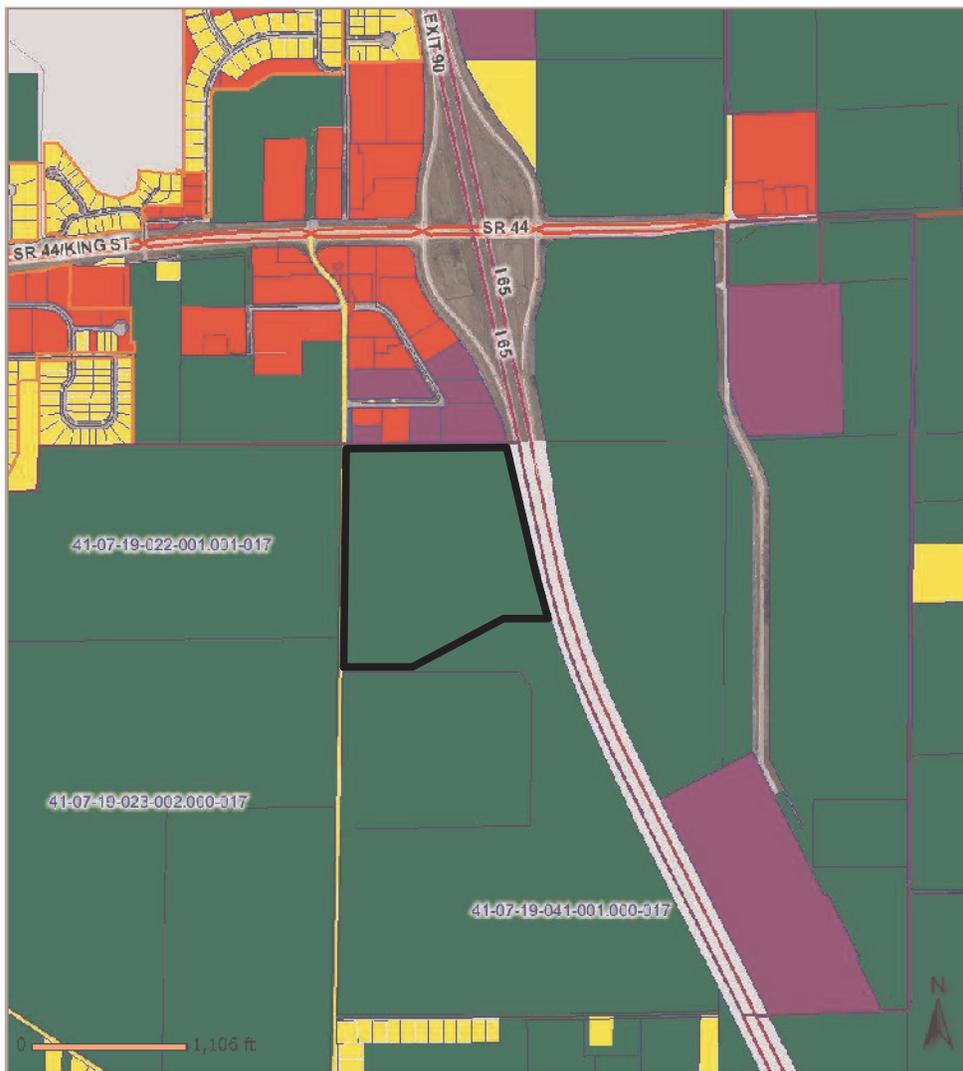
4.2.2 CONSEQUENCES

Considerations for impacts to land use include the land on and adjacent to each Proposed Action project area, the physical features that influence current or proposed uses, pertinent land use plans and regulations, and land availability. Conformity with existing land use is of utmost importance.

Potential impacts to land use are considered significant if the Proposed Action would:

- Conflict with applicable ordinances and/or permit requirements;
- Cause nonconformance with the current general plans and land use plans, or preclude adjacent or nearby properties from being used for existing activities;
- Conflict with established uses of an area requiring mitigation; or

Date Created: 12/1/2008
 Map Scale: 1 in = 1,106 ft



Overview



Legend

- Townships
- Land Use
 - RESIDENTIAL
 - COMMERCIAL
 - INDUSTRIAL
 - INSTITUTIONAL
 - TRANSPORTATION
 - RECREATION
 - NATURAL RESOURCES
 - NO ACTIVITY
- Railroads
- TRAILS
 - Hiking/Biking Trail
 - Sidewalk
 - Trail
- ROADS
 - Interstate
 - Major Arterial
 - Minor Arterial
 - Major Collector
 - Minor Collector
 - Local
 - Access Ramp
 - Private Road
- Subdivisions
- Cities
- RAILROAD CROSSINGS
 - No Markings
 - RR Xing Symbols
 - Stop Lines
 - Stop Lines/RR Xing
- Approximate Boundary of Preferred Alternative



Source: Land use information from <http://beacon.schneidercorp/?site=JohnsonCountyIN>



Prepared For:
 U.S Army Corps of Engineers, Mobile District

Figure 4-1
 Land Use Map - Preferred Alternative



- Substantially degrade the natural or constructed physical features in the area of the Hougham North Tract that provide the area its character and value as an environmental resource. The magnitude of any impact would be primarily determined by the number of viewers affected, viewer sensitivity to changes, distance of viewing, and compatibility with existing land use.

4.2.2.1. Alternative 1 – Preferred Alternative

Potential impacts to land use from the Preferred Alternative would not be significant even though land use would change under the Preferred Alternative and the impacts, therefore, would be long-term. The site would be converted from agriculture use to industrial use, which is still consistent with surrounding land use. Additionally, even with the possible expansion of Franklin College and annexation of the area by the City of Franklin, the potential re-zoning of the area to Industrial Light would be consistent with the Preferred Alternative.

Public input to the Needham Land Use plan recognized the need to preserve the rural farm character within Needham Township (Johnson County 1997). Although loss of potential prime farmland would occur, this loss is minimized by the size of the tract being converted to light industrial use. Only 1 acre of the proposed site is considered prime farmland, and the remainder only if drained. Additionally, the Hougham North Tract is considerably smaller than the average size farm in Franklin County (150 acres) (Catt 2008), and impacts to corn production for Johnson County would be minimal.

Potential impacts to visual and aesthetic resources from the Preferred Alternative would not be significant. The Preferred Alternative would cause minor short-term visual impacts resulting from ground disturbance and the presence of workers, vehicles, and equipment and the generation of dust and vehicle exhaust associated with construction of the proposed facilities. However, once construction is complete, the reclamation of disturbed areas would remove these visual impacts.

Construction of the AFRC at the Hougham North Tract would result in some long-term visual impacts to the site. Buildings and parking areas would replace a cornfield. However, the AFRC would be compatible with the industrial area to the north and therefore viewers would likely be less sensitive to the visual impact of the new AFRC. Aesthetic resources would be considered during the design of the facilities. The facilities would be modern and landscaped. The architecture would consist of red brick and limestone. The AFRC would be visible from I-65 and County Road 450 East. The building's front will face County Road 450 and the back side of the building would also look like an entrance to maintain an attractive appearance from I-65. Parking would be arranged accordingly to maintain a pleasant visual appearance from the road. Additionally, force protection measures would be incorporated as practicable into the design of the facility, such that aesthetically-unappealing bollards would be unnecessary. The AFRC would not be visible from any residential area. The existing oak tree on the western border of the property will remain and be incorporated into the facility design.

Operations at the AFRC would result in minor adverse aesthetic impacts, including increased traffic and nighttime light on weekends when the facilities are in use. The

maximum number of individuals reporting on any given weekend is expected to be approximately 640; only 36 full-time personnel would commute to the site daily.

Under the Preferred Alternative, there would be a relatively long-term commitment of the land resources required for construction and operation of new facilities. This commitment of land resources is irreversible because the land likely cannot be completely restored to its original condition and other uses would be precluded during the time the land is being used for the proposed use, but it does not constitute an irretrievable commitment of resources because the use is not consumptive and the land would remain available to future generations.

4.2.2.2. Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to land use.

4.3 Air Quality

4.3.1 AFFECTED ENVIRONMENT

This section describes the existing air quality conditions at and surrounding the Hougham North Tract. Ambient air quality conditions are discussed first followed by emission sources in the area, and conformity to applicable implementation plans.

4.3.1.1 Ambient Air Quality Conditions

The ambient air quality in an area can be characterized in terms of whether it complies with the primary and secondary National Ambient Air Quality Standards (NAAQS). The CAA (42 U.S.C. 7401 et seq.) requires the U.S. Environmental Protection Agency (EPA) to set NAAQS for pollutants considered harmful to public health and the environment. National primary ambient air quality standards define levels of air quality which the EPA has determined as necessary to provide an adequate margin of safety to protect public health, including the health of “sensitive” populations such as children and the elderly. National secondary ambient air quality standards define levels of air quality which are deemed necessary to protect the public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. NAAQS have been established for six criteria pollutants: carbon monoxide (CO); lead (Pb); nitrogen dioxide (NO₂); ozone (O₃); particulate matter (which includes both particulate matter with an aerodynamic size less than or equal to 10 microns [PM₁₀] and particulate matter with an aerodynamic size less than or equal to 2.5 microns [PM_{2.5}]); and sulfur dioxide (SO₂). Table 4-1 lists the NAAQS primary standards for each criteria pollutant.

Table 4-1. National Ambient Air Quality Standards.

Pollutant	Standard Value
Carbon monoxide (CO)	
8-hour average	9 ppm
1-hour average	35 ppm
Lead (Pb)	
Quarterly average	1.5 µg/m ³

Pollutant	Standard Value
Nitrogen dioxide (NO₂)	
Annual arithmetic mean	0.053 ppm
Ozone (O₃)	
8-hour average (2008 standard)	0.075 ppm
Particulate matter less than 10 microns (PM₁₀)	
24-hour average	150 µg/m ³
Particulate matter less than 2.5 microns (PM_{2.5})	
Annual arithmetic mean	15.0 µg/m ³
24-hour average	35 µg/m ³
Sulfur dioxide (SO₂)	
Annual arithmetic mean	0.03 ppm
24-hour average	0.14 ppm

Source: 40 CFR 50.4 through 50.13
 µg/m³ micrograms per cubic meter
 ppm parts per million

The primary regulatory authority for air quality in Indiana is the Indiana Department of Environmental Management. Applicable regulations are set in Title 326, “Air Pollution Control Board”, of the Indiana Administrative Code.

General air quality monitoring is conducted in areas of high population density and near major sources of air pollutant emissions. Rural areas are typically not considered in such monitoring. Regions that are in compliance with the NAAQS are designated as attainment areas. Areas for which no monitoring data is available are designated as unclassified and are considered to be in attainment of the NAAQS. A nonattainment status is designated for areas where the applicable NAAQS are not being met. A maintenance status is designated for areas that have had a history of nonattainment, but are now consistently meeting the NAAQS. Maintenance areas have been re-designated by the EPA from “nonattainment” to “attainment with a maintenance plan”.

Franklin, Indiana is located within Johnson County and is part of the Metropolitan Indianapolis Intrastate Air Quality Control Region. Johnson County’s air quality meets the NAAQS and is thus classified as being in attainment for CO, Pb, NO₂, SO₂, and PM₁₀. Johnson County is in nonattainment for PM_{2.5} (40 CFR Part 81). Johnson County was reclassified as “in attainment” with the 8-hour O₃ standard on October 19, 2007 (*Federal Register*, Vol. 72, No. 202, 59210-59213). With that reclassification, the EPA accepted the State of Indiana’s ozone maintenance plan for the area.

4.3.1.2 Regional Air Pollutant Emissions Summary

Regional air pollutant emissions from reported sources are listed below in Table 4-2 for Johnson County, Indiana, for the year 2002, the most recent year available.

Table 4-2. Air Emissions Reported for Johnson County, Indiana, for Calendar Year 2002.

Pollutant	2002 Emissions (tpy)		
	Area Source ^a	Point Source ^b	Total
Particulate matter less than 2.5 microns (PM _{2.5})	1,385	0.21	1,385
Particulate matter less than 10 microns (PM ₁₀)	8,223	0.21	8,223
Carbon monoxide (CO)	41,255	6.43	41,261
Nitrogen oxides (NO _x)	5,653	7.66	5,661
Sulfur dioxides (SO ₂)	1,026	0.05	1,026

Source: EPA 2008a

tpy tons per year

- a. Any source of air pollution that is released over a relatively small area but which cannot be classified as a point source, and which may include vehicles and other small engines, small businesses, and household activities that release hydrocarbons. The category includes nonpoint and mobile source emissions.
- b. A stationary location or fixed facility from which pollutants are discharged, such as a factory smokestack.

The Title V Operating Permit Program under 40 CFR 70 requires sources that meet the definition of a “major source” of criteria pollutants or hazardous air pollutants to apply for and obtain a Title V operating permit. The definition of a major source for criteria pollutants is dependent on the air quality attainment status of the region where the source is located; that is, whether the region is in attainment or nonattainment with the NAAQS. Major sources in an attainment area are those with the potential to emit more than 100 tons per year (tpy) of any criteria pollutant. Lower thresholds apply in non-attainment areas, but only for the pollutants that are in nonattainment. Hazardous air pollutants have a major source threshold of 10 tpy for a single hazardous air pollutant or 25 tpy for any combination of hazardous air pollutants. The Indiana Department of Environmental Management lists four Title V permits in Johnson County, Indiana (IDEM 2008). Two of the permits are in Edinburgh and two of the permits are in Franklin, Indiana.

4.3.1.3 Conformity

Section 176(c)(1) of the CAA requires Federal agencies to ensure that their actions conform to applicable implementation plans for the achievement and maintenance of the NAAQS for criteria pollutants. To achieve conformity, a Federal action must not contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern (for example, a state or a smaller air quality region). The EPA general conformity regulations (40 CFR 93, Subpart B) contain guidance for determination of whether a proposed Federal action would cause emissions to be above certain levels in locations designated as nonattainment or maintenance areas. By definition, a “maintenance area” is a region that was previously in nonattainment, but that EPA or the state has redesignated as an attainment area with a requirement to develop a maintenance plan.

Federal agencies prepare written Conformity Determinations for Federal actions that are in or affect NAAQS nonattainment areas or maintenance areas when the total direct or indirect emissions of nonattainment pollutants (or their precursors in the case of O₃) exceed specified thresholds. Conformity with the EPA-approved State Implementation Plan is demonstrated if the project emissions fall below the threshold value *de minimus* emissions. The Proposed Action in Johnson County, Indiana, is located in an area that

has been designated as a maintenance area for O₃ (8-hour standard) and a nonattainment area for PM_{2.5}. The CAA conformity threshold values for this area are 100 tpy for the O₃ precursor NO_x, 100 tpy for the O₃ precursor SO₂, and 100 tpy for PM₁₀ (EPA 2008b). PM_{2.5} is a subset of PM₁₀ and, by definition, a source is considered to be major for PM_{2.5} if it emits or has the potential to emit 100 tpy of PM₁₀ (EPA 2005).

4.3.2 CONSEQUENCES

Potential impacts to air quality are considered significant if the Proposed Action would:

- Increase ambient air pollution above any NAAQS;
- Contribute to an existing violation of any NAAQS;
- Interfere with or delay timely attainment of NAAQS; or
- Impair visibility within any federally mandated Prevention of Significant Deterioration (PSD) Class I area.

4.3.2.1 Alternative 1 – Preferred Alternative

Overall, potential impacts to air quality from the Preferred Alternative would not be significant. Short-term air quality impacts would occur from construction activities associated with the movement of heavy equipment. Construction activities would be temporary and would occur in a localized area. Contaminants generated from construction would include particulate matter, vehicle emissions, and increased wind-borne dust (i.e. fugitive dust). Best management practices (BMPs) would be implemented to minimize generation of fugitive dust. Within the construction site, appropriate BMPs would be identified that would provide optimum dust suppression. BMPs typically utilize (but are not limited to) either wind speed reduction or water suppression strategies (or both) during construction by fencing or wetting areas of soil disturbance. Vehicular and construction equipment exhaust would be a source of pollutant emissions, but would have a negligible impact on air quality. The emissions from construction activities and workers traveling to and from the site would be minor compared to the total existing vehicular emissions in the area.

Long-term impacts associated with operation of the proposed AFRC and associated facilities are not likely to occur. No fueling facilities, underground storage tanks (USTs), or paint booths would be required for the AFRC and associated facilities. The vehicles associated with the use of these facilities by approximately 640 reservists per weekend would not be expected to result in significant impacts to air quality because the additional traffic would be spread across all weekends of the month and would be minor compared to the total existing vehicular emissions in the area. The incremental increase in motor vehicle emissions would not increase criteria pollutant concentrations above the NAAQS.

Johnson County, Indiana, is a nonattainment area for PM_{2.5}. Therefore, a written Conformity Determination is required if the PM_{2.5} emissions of the Proposed Action are greater than the threshold value of 100 tpy. The greatest PM_{2.5} emissions would occur as the result of land disturbance during construction activities. As stated in Section 4.3.1.3 of this EA, PM_{2.5} is a subset of PM₁₀ and, by definition, a source is considered to be

major for PM_{2.5} if it emits or has the potential to emit 100 tpy of PM₁₀ (EPA 2005). Emissions of PM₁₀ can be estimated by using previously calculated emission factors of PM₁₀ resulting from land disturbance. Assuming a PM₁₀ emission factor of 0.00011 kilograms per square meter per hour during land disturbance (approximately 0.00050 tons per acre per hour) (DOE 2002, p. G-7) and assuming all 40 acres of the Proposed Action would be continually disturbed at the same time, 8 hours of construction per day, and 250 days of construction per year, the annual PM₁₀ emissions due to land disturbance would be about 39 tpy. This is 39 percent of the threshold value of 100 tpy that is required for the creation of a written Conformity Determination.

The Proposed Action should not produce emissions that are greater than the threshold *de minimus* values for criteria pollutants. Therefore, the Proposed Action falls into conformity with the EPA-approved State Implementation plans and a written Conformity Determination is not required.

Sensitive populations, with regards to air quality, include (but are not limited to) people with asthma, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers. These sensitive populations and facilities correspond with those that the primary NAAQS are intended to protect. The site of the Preferred Alternative is currently being used for agricultural purposes and is bordered on the north by a light industrial park, on the west by agricultural land, on the south by a wooded area and pond, and on the east by I-65. Because no sensitive populations are in the immediate vicinity of the Preferred Alternative, there should be no impacts to that population.

4.3.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to air quality.

4.4 Noise

4.4.1 AFFECTED ENVIRONMENT

This section describes the existing noise conditions in the area of the Hougham North Tract. Noise measurement is discussed first, followed by noise sources in the area of the Hougham North Tract.

4.4.1.1 Noise Measurement

Noise is generally defined as unwanted sound. Sound is all around us; it becomes noise when it interferes with normal activities such as speech, concentration, or sleep. Noise associated with military installations is a factor in land use planning both on- and off-post. Noise emanates from vehicular traffic associated with new facilities and from project sites during construction. Ambient noise (the existing background noise environment) can be generated by a number of noise sources, including mobile sources, such as automobiles and trucks, and stationary sources such as construction sites, machinery, or industrial operations. In addition, there is an existing and variable level of natural ambient noise from sources such as wind, streams and rivers, wildlife and other sources.

Sound is measured with instruments that record instantaneous sound levels in decibels (dB). A-weighted sound level measurements (dBA) are used to characterize sound levels that can be sensed by the human ear. The typical measurement for quieter sounds, such as rustling leaves or a quiet room, is from 20 to 30 dBA. Conversational speech is commonly 60 dBA, and a home lawn mower measures approximately 98 dBA. All sound levels discussed in this EA are A-weighted.

4.4.1.2 Noise Sources in the area of the Hougham North Tract

Sources of noise in the area of the Hougham North Tract include road traffic along I-65 and County Road 450 East. Small towns and rural communities typically have background sound levels of 45 to 55 dBA. Existing noise 50 feet from an interstate highway is typically 75 dBA. Highway noise attenuates to about 60 dBA at 400 feet and to 50 dBA at a distance of 800 feet.

4.4.2 CONSEQUENCES

Potential noise impacts resulting from the Proposed Action are evaluated with respect to the potential for:

- Annoyance – noise can impact the performance of various every day activities such as communication and watching television in residential areas. Sound levels that cause annoyance vary greatly by individual and background conditions.
- Hearing loss – one-time exposure to an intense “impulse” sound such as an explosion or by long or repeated exposure to sounds at or above 85 dBA can cause hearing loss (NIDCD 2007).
- Sleep interference, which is of great concern in residential areas.

4.4.2.1 Alternative 1 – Preferred Alternative

Potential noise impacts from the Preferred Alternative would not be significant. Minor adverse short-term noise impacts related to the construction of the AFRC and associated facilities would occur. There are no residences adjacent to the site. Short-term noise impacts during construction would include noise from large machinery such as bulldozers, graders, excavators, dump trucks, and cement trucks. This type of construction equipment generates noise levels of about 85 dBA at 50 feet (Hanson et al. 2006). Noise and sound levels would be typical of new construction activities and would be intermittent. Effects of construction noise could be reduced by employing BMPs, such as confining construction activities to normal working hours and employing noise-controlled construction equipment to the extent possible.

Once the facilities become operational, adverse long-term noise effects would not be expected from their day-to-day use. Once facilities are constructed, noise would be generated by facility operations and the vehicles associated with these facilities. Aside from negligible HVAC-related noise, the facilities would not generate high levels of noise themselves. During power outages, operation of emergency generators could cause minor, short-term noise impacts. Most noise is usually created by vehicles associated with these facilities, including organizational vehicles used for training and operations,

government and private delivery vehicles, commuter shuttles or buses, and personal vehicles used for commuting purposes. Again, however, the noise impact created by facility and vehicle operations would not be significant compared to existing traffic noise.

Under the Proposed Action, approximately 982 personnel would use the AFRC. However, as a reserve center, the majority of these individuals would report to the site on weekends and not all would report on the same weekend. The maximum number of individuals reporting on any given weekend is expected to be approximately 640 and would only contribute small amounts of noise to the current environment. The estimated 36 full-time personnel commuting to the site daily would contribute negligible amounts of traffic noise to the current noise environment.

4.4.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to noise levels on or surrounding the Hougham North Tract.

4.5 Geology and Soils

4.5.1 AFFECTED ENVIRONMENT

This section describes the existing geology and soil conditions in the area of the Hougham North Tract. Geologic and topographic conditions are discussed first, followed by soils, and prime farmland. The ROI for geology and soils is the land within the Proposed Action project areas.

4.5.1.1 Geologic and Topographic Conditions

The Hougham North Tract site is flat to very gently sloping towards the east. The elevation of the site ranges from 730 to 740 feet above mean sea level (MSL). The average gradient at the surface is approximately 0.07 sloping down to the east (Gravity College 2008). The bedrock at the Hougham North Tract site is composed of Devonian rocks known as the Muscatatuck Group. This Group is primarily made of limestone, a sedimentary rock consisting chiefly of calcium carbonate in the form of the mineral calcite (USGS 2008a).

Historical data of seismic activity in Indiana indicate that the Hougham North Tract site has felt the effects of seismic activities originating inside as well as outside Indiana. Three damaging earthquakes hit Indiana in 1887, 1899, and 1909 that originated within the state. The 1887 earthquake was centered in Vincennes, Indiana and was felt over an area exceeding 75,000 square miles. The 1899 earthquake was felt strongest in the area of Jeffersonville and Shelbyville, Indiana, and had a strength of VI to VII on the Modified Mercalli Scale. The 1909 earthquake originated near the Illinois' border between Vincennes and Terre Haute and was felt over a 30,000-square-mile area including Indianapolis and Oakland City (USGS 2008b). Several earthquakes with strengths ranging from V to VI originated in neighboring states and were felt in Indiana. The strongest such earthquake occurred in 1968 centered near Dale, Illinois. It had a strength of 5.3 on the Richter Scale and was felt over 580,000 square miles in 23 states including the entire State of Indiana (USGS 2008b).

4.5.1.2 Soils

The Hougham North Tract site is covered by soils represented by four mapping units (Figure 4-2). The entire site is covered by alternating swaths of the Crosby silt loam and the Brookston silt clay units except in the northwestern corner of the site. The Crosby silt loam unit is characterized by somewhat poor drainage, high potential for surface runoff, and moderate susceptibility to wind erosion (USDA NRCS 2008). The Brookston silty clay loam unit is characterized by poor drainage, moderate potential for surface runoff, and moderately low susceptibility to wind erosion. A small area in the southwestern part of the northwestern quarter of the Hougham North Tract site is covered by the Miami silt loam. This unit is characterized by moderate drainage, moderately high potential for surface runoff, and moderate susceptibility to wind erosion. Another small area on the northwestern corner of the site is covered by the Crosby-Miami silt loam unit which is characterized by somewhat poor drainage, moderately high potential for surface runoff, and moderate susceptibility to wind erosion (USDA NRCS 2008). The Crosby silt loam, Brookston silty clay loam, Miami silt loam, and Crosby-Miami silt loam units cover approximately 54, 40, 3, and 3 percent of the Hougham North Tract site, respectively (USDA NRCS 2008).

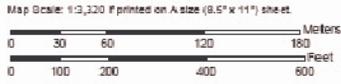
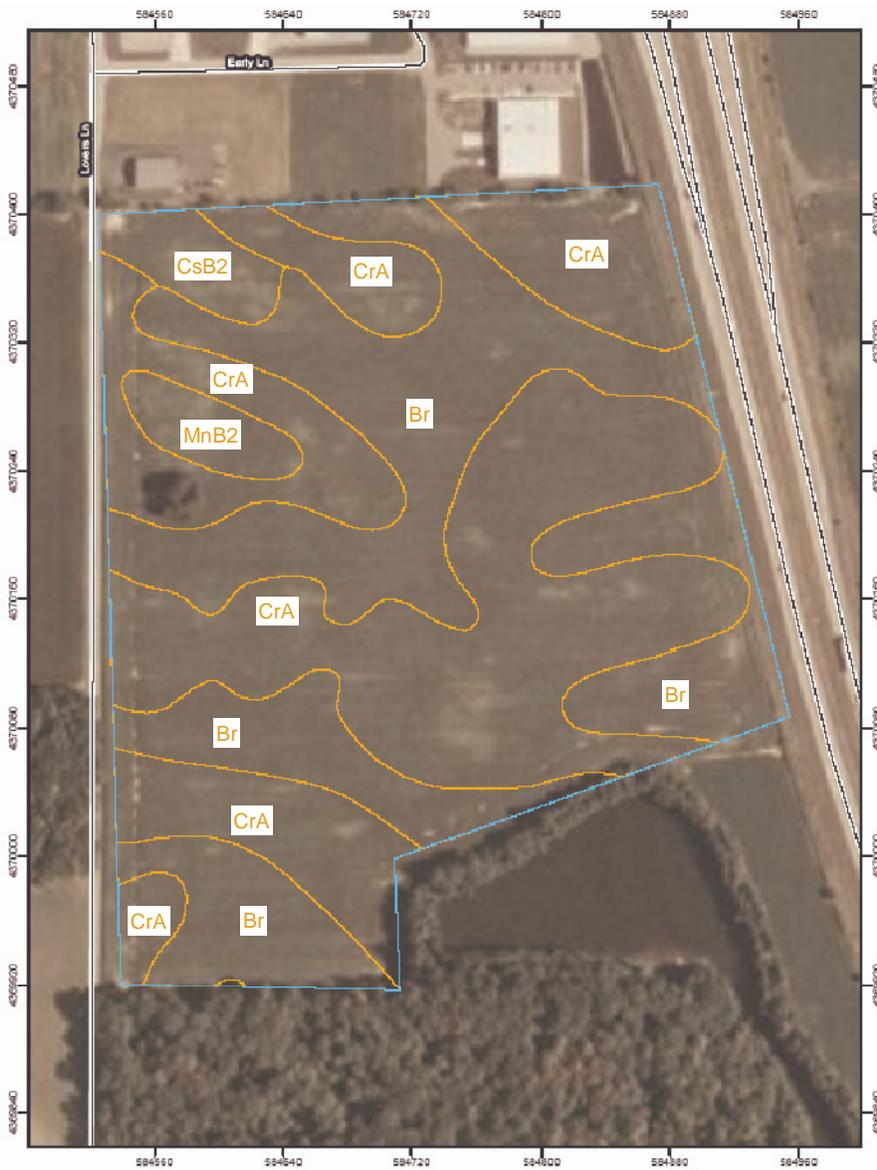
4.5.1.3 Prime Farmland

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is also available for these uses. Prime farmland could be cultivated land, pasture land, forest land, or other land, but it is not urban or built-up land or water areas (USDA NRCS 2008). Of the 40 acres considered for the AFRC at the Hougham North Tract site, 1.1 acres are considered prime farmlands and 38.1 acres are considered prime farmlands if drained (USDA NRCS 2008). Prime farmland is protected by the Farmland Protection Policy Act (7 CFR Parts 657 and 658); however, urban lands and lands that are used for national defense purposes are exempt [7 CFR 658.3(b)] from the provisions of the Farmland Protection Policy Act. Nonetheless, the ARNG provided the Natural Resources Conservation Service (NRCS) with a Farmland Impact Rating form for the construction of the AFRC at the Hougham North Tract site.

4.5.2 CONSEQUENCES

Potential impacts to geology or soils are considered significant if the Proposed Action would:

- Expose people or structures to major geologic hazards;
- Cause substantial erosion or siltation;
- Cause substantial land sliding; or
- Cause substantial damage to project structures/facilities.



Legend

- Soil Mapping Unit Boundary
- Br Brookston silty clay loam
- CrA Crosby silt loam, 0 to 2 percent slopes
- CsB2 Crosby-Miami silt loams, 2 to 4 percent slopes, eroded
- MnB2 Miami silt loam, 2 to 6 percent slopes, eroded

Source: Information from <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

Prepared For:
U.S Army Corps of Engineers, Mobile District

Figure 4-2
Soil Mapping Units - Preferred Alternative



4.5.2.1 Alternative 1 – Preferred Alternative

Overall, potential impacts to geology and soils from the Preferred Alternative would not be significant. The total site improvements associated with the AFRC would occupy about 40 acres, resulting in 40 acres of impervious surface. The effect of this on the regional infiltration at the vicinity of the site would not be significant.

Damaging earthquakes are infrequent in Indiana as discussed above. However, there is risk from collapsing of walls and chimneys of buildings (USGS 2008b). In order to avoid the risks to buildings associated with earthquakes, the State of Indiana adopted an amended version of the International Building Code 2000 Edition (IBC). The IBC was included in Chapter 16 of the Indiana Building Code (Indiana Sub. 2008). The AFRC would have to be constructed in accordance with the seismic requirements found in Chapter 16 of the Indiana Building Code.

The construction of the AFRC would involve excavation, grading, and movement of heavy equipment in the Hougham North Tract. These activities would disturb the surface soil, thereby increasing the potential for soil erosion by wind and runoff. Wind and water erosion of soil can be mitigated by implementing BMPs. The construction contract would state that BMPs for erosion control, top soil management, and revegetation would be required. Erosion control during construction activities would be undertaken with the use of hay bales and silt fencing, as appropriate, to prevent the movement of soils into low-lying areas, and could also include scheduling construction activities for periods of lowest precipitation. Once the facilities are operational and new vegetation is in place, additional erosion of topsoil would be minimal and would be limited or mitigated through adherence to a storm water management plan. Loss of approximately 1 acre of potential prime farmland would occur, as well as 38 acres of prime farmland if drained with the Proposed Action. However, this loss is minimized by the size of the tract being converted since the average farm size in Johnson County is considerably larger (150 acres).

4.5.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to geologic or soil resources.

4.6 Water Resources

4.6.1 AFFECTED ENVIRONMENT

This section describes existing water resources on and in the area of the Hougham North Tract, including surface and groundwater resources. Surface water includes lakes, rivers, and streams and is important for a variety of reasons, including economic, ecological, recreational, and human health. Groundwater comprises the subsurface hydrogeologic resources of the physical environment. This section also discusses floodplains. Wetlands are discussed in Section 4.8.1.4. The ROI for water resources includes the Hougham North Tract and areas downstream from the Proposed Action project areas.

4.6.1.1 Surface Water

There are no surface water features on the Hougham North Tract. The closest surface water feature is an approximate 6 acre man-made lake immediately south of the Hougham North Tract, originating from a borrow pit associated with construction of I-65. Surface drainage across the Hougham North Tract is to the southeast, based on local topography. Several culverts drain the site to the west under I-65.

4.6.1.2 Hydrogeology/Groundwater

Underlying the Hougham North Tract is the Devonian and Mississippian – New Albany Shale bedrock aquifer system. Two unconsolidated aquifer systems lie above the bedrock aquifer system on the Hougham North Tract. The New Castel Till unconsolidated aquifer system covers the western two-thirds of the site while the New Castle Complex unconsolidated aquifer system covers the eastern one-third of the site.

The Devonian and Mississippian – New Albany Shale bedrock aquifer system is an extremely limited groundwater resource generally described as an aquitard, consisting of mostly brownish-black carbon-rich shale, greenish-gray shale, and minor amounts of dolomite and dolomitic quartz sandstone.

The New Castle Till unconsolidated aquifer system materials potentially include outwash sands and/or gravels generally overlain by clay. The New Castle Till Aquifer is capable of meeting the needs of domestic and some high-capacity users, with typical domestic well yields ranging from 10 to 15 gallons per minute (GPM), and four registered significant water withdrawal facilities reporting capacities of 70 to 250 GPM.

The New Castle Complex unconsolidated aquifer system is characterized by unconsolidated deposits that are quite variable in materials and thickness. Sand and gravel aquifer deposits vary from thin to massive and are typically overlain by a thick till. However, the system also exhibits multiple layers of outwash and till of variable thickness. The New Castle Complex Aquifer is capable of meeting the needs of domestic and some high-capacity users, with typical domestic well yields ranging from 15 to 20 GPM, and three registered significant water withdrawal facilities reporting capacities of 70 to 700 GPM.

The unconsolidated glaciofluvial aquifer systems are less susceptible to surface contamination due to the low infiltration rates of overlying clays. Primary water quality issues in the White River basin are agricultural related, and on a more localized scale, urbanization. Water quality issues of the basin are related to the effects of nutrients transported by agricultural runoff, pesticide transportation by agricultural runoff, soil erosion from agricultural areas, urban storm runoff and combined-sewer overflows, and multiple anthropogenic sources of chemical compounds on regional groundwater quality. Groundwater flow direction is estimated to be to the west, towards Youngs Creek.

4.6.1.3 Floodplains

The Hougham North Tract is in an area determined by the Federal Emergency Management Agency (FEMA) to be outside the 0.2 percent annual chance floodplain

(Zone X) as shown on FEMA issued Flood Insurance Rate Maps (FEMA 2008). The Hougham North Tract is not located within the 100-year floodplain.

4.6.2 CONSEQUENCES

Potential impacts to water resources, including surface water and groundwater are considered significant if the Proposed Action would:

- Irreversibly diminish water resource availability, quality, and beneficial uses;
- Reduce water availability or interfere with a potable supply or water habitat;
- Create or contribute to overdraft of groundwater or exceed a safe annual yield of water supply sources;
- Result in an adverse effect on water quality or an endangerment to public health by creating or worsening adverse health hazard conditions;
- Result in a threat or damage to unique hydrological characteristics; or
- Violate an established law or regulation that has been adopted to protect or manage water resources of an area.

Potential impacts that would be considered significant related to floodplain management include:

- Potential damage to structures located in the floodplain; and
- Changes to the extent, elevation, or other features of the floodplain as a result of flood protection measures or other structures being silted in or removed from the floodplain.

4.6.2.1 Alternative 1 – Preferred Alternative

Potential impacts to water resources from the Preferred Alternative would not be significant. There would be no measurable reduction in surface water quality or availability. Additional runoff to surface water would occur as a result of an increase in impermeable surfaces associated with buildings, roads, and parking lots. Storm water collection measures incorporated in the design of the proposed AFRC would direct runoff to a storm water management area for temporary storage and eventual discharge to surface water. A Storm Water Pollution Prevention Plan (SWPPP) will address the management of runoff water at the Preferred Alternative site.

Local groundwater recharge would be slightly reduced due to the addition of impermeable surfaces and subsequent reduction of infiltrating precipitation. However, the reduction in groundwater recharge would not have a significant impact on the regional groundwater supply. Implementation of the Preferred Alternative would not result in a local increase of groundwater use as a well would not be necessary to supply potable water to the proposed AFRC.

Construction of the proposed AFRC would result in disturbance of ground cover, increasing potential soil erosion due to run-off. Implementation of BMPs and standard

construction erosion control measures would reduce potential impacts of eroded soil carried to surface water via run-off, such that they would not be significant.

Activities at the proposed AFRC would not impact groundwater quality beneath or in the area surrounding the proposed AFRC. Potential nonpoint storm water impacts would not be significant with implementation of BMPs, and as should be described in a SWPPP. Point discharges of wastewater are prohibited by existing National Pollutant Discharge Elimination System (NPDES) requirements under the CWA. Spills would be mitigated using procedures identified in a Spill Prevention Control and Countermeasures (SPCC) plan to reduce potential impacts to surface water or groundwater. Therefore no impact to groundwater resources would result from the Preferred Alternative.

Because the Proposed Action does not entail construction within the 100-year floodplain, there would be no impacts to floodplains from the Proposed Action, and there are no impacts to Proposed Action structures caused by building in a floodplain.

4.6.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to water resources.

4.7 Biological Resources

4.7.1 AFFECTED ENVIRONMENT

This section describes existing biological resources at the Hougham North Tract. It focuses on plant and animal species and habitat types that are typical or are an important element of the ecosystem, are of special category importance (of special interest due to societal concerns), or are protected under state or Federal law or statute regulatory requirement. Vegetation is discussed first, followed by wildlife, sensitive species, and wetlands. The ROI for biological resources is the land within the Proposed Action project areas.

4.7.1.1 Vegetation

The Hougham North Tract has been historically used for agricultural crop production. Naturally occurring vegetation is limited to the borders around the site and the lone white oak tree (*Quercus alba*) on the western border of the site. This white oak tree was estimated to be 180 years old based on bole diameter (Sewell 2008b). The most notable natural vegetation occurs on the southern border of the site and consists of mixed hardwood-conifer forest. Tree species include, but are not limited to, white oak, black walnut (*Juglans nigra*), aspen (*Populus* sp.), and pines (*Pinus* sp.). The forested area is interspersed with an understory shrub layer consisting of pokeweed (*Phytolacca americana*), goldenrod (*Solidago* sp.), and mixed grasses.

4.7.1.2 Wildlife

Since naturally occurring vegetation is limited at the Hougham North Tract, most wildlife species are transients through the area. Raccoon (*Procyon lotor*) tracks have been observed in the area most likely capitalizing on the available forage (crops). These animals may also be using the adjacent forested area on the southern border for shelter.

The forest and man-made pond at the site's southern border offer an attraction to local wildlife and may attract species through the Hougham North Tract. Barred owls (*Strix varia*) and mallards (*Anas platyrhynchos*) as well as the black and yellow garden spider (*Argiope aurantia*) have been seen in the area. Other opportunistic species likely to exist in this agriculture-residential interface include: coyotes (*Canis latrans*), opossums (*Didelphis virginiana*), white-tailed deer (*Odocoileus virginianus*), and skunks (*Mephitis mephitis*).

4.7.1.3 Sensitive Species

The U.S. Fish and Wildlife Service (USFWS) administers the ESA of 1973 as amended. This law provides Federal protection for species designated as federally endangered or threatened and defines an endangered species as “in danger of extinction throughout all or a significant portion of its range,” and a threatened species as “likely to become an endangered species within the foreseeable future.” Special status species are listed as threatened or endangered, are proposed for listing, or are candidates for listing by the state and/or Federal government.

According to the Indiana Natural Heritage Data Center, no endangered, threatened or rare bird or mammal species, high quality natural communities, or significant natural areas are known within the project site. The Indiana bat potentially could roost in the oak tree on the property or the southern border; however, according to the recovery plan, there are no known summer or winter roosts within Johnson County (IDNR 2001). Critical habitat for the bat is also not present in the county.

Additionally, based upon the Indiana Department of Natural Resource's Johnson County Threatened and Endangered species list, the majority of the state species of concern live in marsh or wetland areas, not found on the Hougham North Tract (IDNR 2005). Three bird species listed as state endangered, upland sandpiper (*Bartramia longicauda*), Northern harrier (*Circus cyaneus*), and Henslow's sparrow (*Ammodramus henslowii*) are associated with grassland habitats and open fields, and may be migrants through the area. All three species have been noted south of the Proposed Action site on Camp Atterbury (Keller et al. 1986).

4.7.1.4 Wetlands

Wetlands are classified by the U.S. Army Corp of Engineers (USACE) based on three criteria: hydrology, soil type, and vegetation. Specifically, wetlands are defined as those areas that are saturated or inundated by water that is sufficient to support vegetation typically adapted to saturated soils (USACE 1987). Wetlands and other surface water features, which may include intermittent and perennial streams, are generally considered “waters of the United States” by the USACE, and under their definition of “jurisdictional waters/features,” are protected under Section 404 of the CWA.

Several wetland areas occur south of the Hougham North Tract according to the National Wetlands Inventory Map (Figure 4-3; QEPI 2008). The large pond in this area south of the proposed site, is man-made resulting from a borrow pit formed during I-65



Source: Information from <http://www.fws.gov/wetlands/Data/Mapper.html>



- Legend
-  Freshwater Forested/Shrub Wetland
 -  Freshwater Pond

Prepared For:
 U.S Army Corps of Engineers, Mobile District

Figure 4-3
 Wetland Areas - Preferred Alternative



construction. The pond has been stocked with fish by the local farmer (Sewell 2008b). These wetlands are an attraction for local wildlife.

4.7.2 CONSEQUENCES

Potential impacts to biological resources are considered significant if the Proposed Action would:

- Affect a threatened or endangered species;
- Substantially diminish habitat for a plant or animal species;
- Substantially diminish a regionally or locally important plant or animal species;
- Interfere substantially with wildlife movement or reproductive behavior;
- Result in a substantial infusion of exotic plant or animal species; or
- Destroy, lose, or degrade jurisdictional wetlands (as defined by Section 404 of the CWA).

EO 11990, *Protection of Wetlands*, requires Federal agencies to avoid actions, to the extent practicable, which would result in the location of facilities in wetlands.

4.7.2.1 Alternative 1 – Preferred Alternative

Potential impacts to biological resources from the Preferred Alternative would not be significant. The Preferred Alternative would entail a change in the allocation of the land resources from agriculture to light industrial. No naturally occurring habitat would be affected since the lone white oak tree would be protected and maintained in its natural state.

Wildlife currently using the agricultural crop for forage would find other naturally occurring forage. Minimal short-term impacts to wildlife would result from disturbance from construction of the new facilities. The Preferred Alternative would not cause adverse impacts to any federally-listed threatened or endangered species, for no such species are known to occur on the Preferred Alternative site. The USFWS and the IDNR have reviewed the proposed project (Appendix A). The IDNR, in a letter dated December 11, 2008, concluded that no endangered, threatened, or rare species occur within 1 mile of the project area. In a letter dated December 19, 2008, the USFWS concluded that the proposed project is within the range of the federally endangered Indiana bat, as shown in Appendix A of this EA. Further, “There are no current records of Indiana bats near the site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period 1 April – 30 September.”

The wetland areas to the south would not be affected by the Preferred Alternative. However, USFWS recommended avoidance of the forested wetlands during site development in its December 19, 2008 letter. Additionally, “A minimal undisturbed buffer of 25 feet should be maintained between construction and the impoundment.”

4.7.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to biological resources.

4.8 Cultural Resources

4.8.1 AFFECTED ENVIRONMENT

This section describes the existing cultural resource conditions in the area of the Hougham North Tract site. Cultural resources are defined as historic properties as defined by the NHPA, cultural items as defined by the NAGPRA, archeological resources as defined by ARPA, sacred sites as defined in EO 13007 to which access is afforded under AIRFA, and collections and associated records as defined in 36 CFR 79. The ROI for cultural resources is equivalent to the Area of Potential Effect (APE) of 40 acres which includes the property within and immediately adjacent to the proposed project areas that would be affected by the action, either during construction only or permanently. The prehistoric and historic background of the area is summarized first, followed by the status of cultural resource inventories and Section 106 consultations, and Native American resources.

4.8.1.1 Prehistoric and Historic Background

Prehistoric occupation of Indiana covers ca. 9500 B.C. to ca. A.D. 1650 and is divided into four major periods: the Paleoindian Period (9500 B.C. to 8000 B.C.), the Archaic Period (8000 B.C. to 1000 BC), the Woodland Period (1000 B.C. to A.D. 1000), and the Mississippian Period (A.D. 1000 to 1650).

The Paleoindian Period is characterized primarily by its lithic assemblages. Fluted projectile points, usually produced from high quality chert, are generally considered the diagnostic marker of the time period, as well as other tools such as bifacial knives and awls.

The Archaic Period is characterized by dramatic climatic change that included a shift from coniferous to temperate forests. Technological innovation is also characteristic of the Archaic period, as is subsistence diversification. Ground stone tools such as axes, pitted stones, pestles, and grinding stones first appeared during this time. Settlement pattern data for the Late Archaic period demonstrate reduced mobility and settlements restricted to the lower reaches of drainage systems.

In the Midwest, the Early Woodland period is characterized by the appearance of ceramic vessels by 1000 B.C. Artifacts associated with some burials included items made of exotic raw materials, such as copper and galena, which indicate long-distance, regional trade. The Middle Woodland period is characterized by a sedentary hamlet or farmstead settlement system in the Midwest. People relied increasingly on domesticated crops, and evidence exists that trade for exotic resources spanned the continent. The Late Woodland period is marked by complex social change and accelerated cultural change increasing household and intra-community social complexity. The adoption of the bow and arrow and the extensive domestication of maize varied spatially and temporally throughout the Midwest.

The Mississippian Period, or Late Prehistoric period, spans roughly 650 years, when populations were organized into highly stratified, maize-based agricultural communities with large-scale public architecture and an elite ruling class. Agriculture and exchange of exotic pottery, marine shell gorgets, and masks dominated the life style of this period.

The early 1800s saw a wave of settlement across Indiana, mainly by incoming farmers from the Upland South. In 1800, the Indiana Territory was established and Indiana became a state in 1816. The tract of land including the project APE was purchased in 1834 by John Harding. Johnson County developed into an agricultural landscape in the years between 1830 and 1860, with the main urban development focused on the county seat. The county remained mainly agrarian in nature up to the 1940s. In southern Johnson County, Camp Atterbury was established during World War II to serve as a training facility and also as an internment camp for German and Italian prisoners of war. Urban sprawl began to develop with the construction of I-65 between 1961 and 1978.

4.8.1.2 Status of Cultural Resource Inventories and Section 106 Consultations

A Phase I Cultural Resource Survey of the Hougham North Tract site was conducted in accordance with Section 106 of 36 CFR 800 of NHPA in November 2008. As part of the cultural resources survey, background research was conducted at the Indiana Division of Historic Preservation and Archaeology offices to obtain information on the local archaeology and also at the Johnson County History Museum to obtain historical context information. The results of the archaeology literature review showed 10 previously identified archaeological sites within a 2-kilometer radius of the center of the APE, although none were identified within the project's APE. In summary, one archaeological site consisting of prehistoric and historical material was identified as a result of the archaeological survey at the Hougham North Tract. The prehistoric component of the site cannot be identified with any known cultural traditions or time periods due to a lack of diagnostic artifacts. The historical site correlates with a house location on the 1866 plat map of Johnson County, when the land was owned by John S. Hougham. It is unclear whether or not the site represents the residence of Hougham, although the relatively low density of artifacts suggests a short duration of occupation at this location, more in line with a tenant farmer. The information from the plat maps suggests that the house at the site location was probably moved or demolished between 1866 and 1880, and no structures at all were present within the APE by 1900. No artifacts were found in correlation with the location of the house on the 1880 plat map (summarized from Sewell 2008a).

Section 110 of the NHPA requires Federal agencies to locate, inventory, and nominate to the NRHP all resources that are recommended eligible for inclusion on the NRHP. One new archaeological site at the Hougham North Tract was identified: 12Jo594, an indeterminate prehistoric, nineteenth-century historical site. No other archaeological sites or materials were encountered during the survey. INARNG does not recommend 12Jo594 as eligible for inclusion on the NRHP because the site lacks integrity and fails to meet significance under Criterion D; therefore, there are no NRHP-eligible or listed historic archaeological properties at the proposed project area.

Section 106 consultation and coordination has been initiated with the State Historic Preservation Office via the Division of Historic Preservation and Archaeology. In a letter dated January 12, 2009, the Division of Historic Preservation and Archaeology stated “Based upon the information available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, districts, or objects listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects.” The letter is included in Appendix A.

4.8.1.3 Native American Resources

Notification letters were sent to 17 federally recognized tribes listed in Appendix A identified by INARNG. Letters to the tribes inquired if there are any known sites of sacred, religious, or cultural value within the Proposed Action area. Those tribes not responding to the initial letters received a second letter followed by a phone call or e-mail to obtain responses. All responses received from the tribes, as well as a Memorandum for the Record describing the tribal consultation process, are also contained in Appendix A. No Native American concerns regarding the Proposed Action have been identified.

4.8.2 CONSEQUENCES

Potential impacts to historic properties and/or archaeological resources are considered significant if the Proposed Action would:

- Physically destroy, damage, or alter all or part of the property;
- Physically destroy, damage, alter or remove items from archaeological contexts without a proper mitigation plan;
- Isolate the property from or alter the character of the property’s setting when that character contributes to the property’s qualification for the NRHP;
- Introduce visual, audible, or atmospheric elements that are out of character with the property or alter its setting;
- Neglect a property resulting in its deterioration or destruction; or
- Transfer, lease, or sell the property (36 CFR 800.9[b]) without a proper preservation plan.

4.8.2.1 Alternative 1 – Preferred Alternative

Overall potential impacts to cultural resources from the Preferred Alternative would not be significant. The Preferred Alternative would not affect any known NRHP-eligible archaeological or historical sites, and no such sites occur in the APE.

Based on the background study and field assessment, one new archaeological site was identified; however, it does not meet criteria to be eligible for inclusion on the NRHP. The INARNG has determined that no NRHP-eligible historic properties would be affected by the proposed construction of the Franklin AFRC at the Hougham North Tract site per 36 CFR 800.4(d). The Indiana SHPO concurred with the preliminary finding of no effect by the INARNG in a letter dated January 16, 2009, as shown in Appendix A. The SHPO included the following finding/stipulation: “...Site 12-Jo-594 does not appear eligible for inclusion in the National Register of Historic Places. Therefore, we concur

with the archaeological report that no further archaeological investigations are necessary.” If, during construction, any potential historic or archaeological resource is uncovered or inadvertent discoveries are made of Native American human remains and associated funerary objects, sacred objects, or objects of cultural concern, all work will be halted and the Cultural Resources Manager for the INARNG would be contacted, in accordance with typical standard operating procedure in INARNG’s Integrated Cultural Resources Management Plan (SOP No. 5 - Inadvertent Discovery of Cultural Materials or Human Remains) for the accidental discovery of archaeological resources or Native American artifacts.

If the federally recognized tribes contacted in connection with this undertaking respond and raise concerns regarding issues of importance to the respective tribes, the INARNG will address these concerns as soon as practical.

4.8.2.2 No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to cultural and archaeological resources.

4.9 Socioeconomics

4.9.1 AFFECTED ENVIRONMENT

The following subsections identify and describe the basic attributes and resources associated with the human environment surrounding the proposed AFRC. These data are presented in order to provide an understanding of the socioeconomic forces that have shaped, and continue to shape, the area. The cities of Greenwood and Franklin, located in Johnson County, Indiana would provide necessary goods and services for AFRC personnel, including food, gasoline, and miscellaneous supplies. This section describes the existing socioeconomic conditions for the ROI that includes the cities of Greenwood and Franklin and Johnson County, Indiana. Socioeconomic factors include economic development, demographics, housing, and protection of children.

4.9.1.1 Economic Development

Per capita income statistics from the 2000 U.S. Census indicate that Johnson County and the city of Greenwood have higher per capita incomes compared with the State of Indiana. Franklin is below the state per capita income. Median household income of Johnson County, Greenwood, and Franklin are higher and poverty levels are at the state average or lower in the project area. Johnson County and Greenwood both had unemployment levels below the state’s unemployment rate in 2000; Franklin’s unemployment rate was higher. The nationwide average was 3.7 percent in 2000 (U.S. Census Bureau 2000). Table 4-3 presents selected regional income statistics.

Table 4-3. Regional Income for Year 2000.

Area	Number of Households	Median Household Income (\$)	Per Capita Income (\$)	Percent of Population Below Poverty Level	Unemployment Rate (%)
State of Indiana	2,337,229	41,567	20,397	9.5	3.3
Johnson County	42,510	52,693	22,976	5.6	2.4
City of Greenwood	14,876	46,176	23,003	7.0	2.1
City of Franklin	6,957	45,414	18,937	7.6	4.0

Source: U.S. Census Bureau 2000

The top three industry sectors in the city of Greenwood include education, health, and social services (18 percent); retail trade (15 percent); and manufacturing (15 percent) (U.S. Census Bureau 2000). The top three industry sectors in the City of Franklin include manufacturing (21 percent); education, health, and social services (21 percent); and retail trade (13 percent) (U.S. Census Bureau 2000).

4.9.1.2 Demographics

Johnson County is the tenth largest county within the State of Indiana. The county grew by 30.8 percent between 1990 and 2000, ranking it third out of 92 Indiana counties on that measure (Stats Indiana 2007). Johnson County has eight cities and towns within its borders. The Hougham North Tract is located in the vicinity of Greenwood and Franklin (northern and central portion of Johnson County). The city of Greenwood is the largest city within the county, followed by Franklin. Population growth within both Greenwood and Franklin increased between 1990 and 2000 at a rate of 27 percent and 17 percent, respectively (Stats Indiana 2007). The Hougham North Tract is located within an area of high population growth within Johnson County between the two largest cities in the county.

According to the 2000 U.S. Census statistics, Johnson County has a higher percentage of individuals with a Bachelor's degree compared with the State of Indiana. The percentages of individuals with a high school diploma or higher in the cities of Greenwood and Franklin are higher than the state. Johnson County's percentage of high school graduates or higher is also larger than the state's. Greenwood also has a higher percentage of individuals with Bachelor's degrees or higher compared to the state and Johnson County. Franklin is below the state's percentage of individuals with a Bachelor's degree. Table 4-4 provides selected 2000 statistics of educational attainment for persons 25 years and older.

Table 4-4. Regional Educational Attainment of Persons 25 Years and Older for Year 2000.

Area	No Diploma (%)	High School Graduates or Higher (%)	Bachelor's Degree or Higher (%)
State of Indiana	14.8	85.2	21.6
Johnson County	10.9	89.1	24.8
City of Greenwood	10.3	89.7	26.1
City of Franklin	14.0	86.0	19.9

Source: U.S. Census Bureau 2000

4.9.1.3 Housing

Owner occupancy rates in the cities of Greenwood and Franklin are similar to state rates (U.S. Census Bureau 2000). Johnson County as a whole had a higher owner-occupancy rate compared to the state. Median home value for both Greenwood and Franklin is higher than the state median, but lower than Johnson County median home values. Table 4-5 presents selected housing characteristics.

Table 4-5. Regional Housing Characteristics for Year 2000.

Area	Housing Units Available	Occupied	Owner-Occupied	Median Value	Median Home Mortgage	Renter-Occupied	Median Contract Rent
State of Indiana	2,532,319	2,336,306	59%	\$94,300	\$869	27%	\$521
Johnson County	45,095	42,434	67%	\$122,500	\$1,078	23%	\$599
City of Greenwood	15,972	14,865	56%	\$116,400	\$1,059	37%	\$610
City of Franklin	7,457	6,950	56%	\$103,000	\$1,001	31%	\$579

Source: U.S. Census Bureau 2000

4.9.1.4 Public Services

The Franklin Fire Department provides fire and emergency services to the citizens of Franklin, Franklin Township, and surrounding communities encompassing 22.5 square miles. The Fire Department has a minimum staffing level of 11 firefighters for each 24 hour tour of duty. The two fire stations are located in the central areas of town and are equipped with a fire engine and ambulance. The department has two ambulances staffed by basic emergency medical technicians and paramedics that are assigned to non-transporting engines or rescue squads to provide advanced life support to individuals that are sick or injured. In addition, the department is equipped with a 95-foot E-One Ladder/Tower housed at Station 21, and a Special Operations Unit that responds to incidents involving dive/water rescue, rope rescue, and hazardous material incidents. Station 22 is equipped with 75-foot E-One Ladder, Paramedic Vehicle Chase 21, Engine 22, and Ambulance 22 (City of Franklin 2008a).

The Franklin Police Department headquarters is located on South Washington Avenue near downtown Franklin and the city's south side. The Police Department provides

police protection through three regular patrol shifts. The Police Department staff has 53 people with 37 officers.

Franklin has one hospital, Johnson Memorial Hospital, located at 1125 West Jefferson Street. Other hospitals/medical centers near the project area include BHC Valle Vista Hospital, Greenwood (about 10 miles away); Kindred Hospital Indianapolis South, Greenwood (about 11 miles away); and Community Hospital South, Greenwood (about 11 miles away). Johnson Memorial Hospital has 133 beds (Johnson Memorial Hospital 2008), BHC Valle Vista Hospital has 96 beds, Kindred Hospital Indianapolis South has 46 beds (Hospital-Data 2008), and Community Hospital South has 150 beds (eCommunity 2008).

4.9.1.5 Protection of Children

The Hougham North Tract is not bounded by any residential areas. The nearest residences are apartment complexes located across from the northwest corner of the parcel. There are no schools or recreational areas near the Hougham North Tract. Primary education facilities located in the surrounding area of Franklin include five public elementary schools (grades K-5), one public middle school (grades 6-8), and one public high school (grades 9-12). There are also two private schools, one of which provides pre-kindergarten to 5th grade education, and other is pre-kindergarten. Franklin has one institute of higher learning, the Franklin College of Indiana, with a full-time enrollment of 990 students.

The percentage of the population under age 18 in Franklin is about equal to the percentage under 18 in the state as a whole. The percentage of population under 18 years of age in Johnson County is slightly above the state average, but not disproportionately so as shown in Table 4-6.

Table 4-6. Total Population Versus Population Under Age 18 for Year 2000.

Area	Total Population	Population Under 18	% Population under 18
State of Indiana	6,080,485	1,574,396	25.9
Johnson County	115209	31333	27.2
City of Franklin	19,463	5,053	26.0
City of Greenwood	36,037	9,127	25.3

Source: U.S. Census Bureau 2000

4.9.2 CONSEQUENCES

Potential socioeconomic impacts are considered significant if the Proposed Action would cause:

- Substantial gains or losses in population and/or employment; or
- Disequilibrium in the housing market, such as severe housing shortages or surpluses, resulting in substantial property value changes.

Potential impacts to protection of children are considered significant if the Proposed Action would cause disproportionate effects on children.

4.9.2.1 Alternative 1 – Preferred Alternative

Overall, potential socioeconomic impacts from the Preferred Alternative would not be significant. The Preferred Alternative would cause beneficial short-term impacts during construction and beneficial long-term impacts upon completion.

The economic effects of the construction phase of the Proposed Action were 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 associated with the construction represent the direct effects of the action. Changes in expenditures related to this project were input into the EIFS model at \$39 million, the cost of construction listed in the DD Form 1390s1 (the Army's estimate of construction costs). Change in employment was input into the EIFS model as zero personnel because the new AFRC would employ personnel that are currently employed at Camp Atterbury who would commute to the new AFRC, located within 20 miles of Camp Atterbury. Based on the input data and calculated multipliers, the model estimates changes in sales volume, income, employment, and population in the ROI, 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 the historical range of economic variation, 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 to be significant. For this analysis, the ROI is Johnson County, Indiana and the change in local expenditures refers to the estimated construction spending for the new AFRC.

Based on the EIFS model, the Proposed Action would generate about 242 direct and 323 indirect jobs in the economic ROI during construction activities. This increase in employment would represent a 1.1 percent increase in the region's employment levels and would fall short of the positive RTV of 3.59 percent to make any significant positive difference. It should be noted that the increased employment and any other economic benefits associated with construction would only be short-term and would be spread out over the lifespan of the project construction. The Proposed Action would also generate positive changes in the other economic indicators estimated by the EIFS model, including a 3.12 percent increase in sales volume, and a 0.62 percent increase in regional personal income. However, these increases are very minor and do not exceed the positive RTVs for their respective categories, and are therefore not significant. The EIFS model output for the proposed BRAC actions at Franklin may be found in Appendix B.

Since incoming personnel under the Proposed Action would be coming from the Detachment 1 of the 417th Petroleum Company and 478th Engineer Company (DPTRK)

from the Charles H. Seston USAR Center in Edinburg, Indiana, INARNG units from Camp Atterbury Army National Guard Readiness Center, and the 219th Area Support Group Readiness Center, in Camp Atterbury, Indiana, and would be at the new Franklin AFRC only for weekend training, there would be no influx of personnel on a permanent basis into the ROI beyond approximately 36 permanent administrative personnel. The facility would serve about 982 personnel on a rotating basis, mostly on weekends. The maximum expected use of the new facility would be about 640 members per weekend, and there would be parking for 577 privately-owned vehicles (taking into account those that would use public transportation or carpool). On training weekends, reservists would either commute to the AFRC or stay in local hotels. No significant economic impact in the ROI would be expected during the operations phase of the Proposed Action.

There would be no environmental health and safety risks that might disproportionately affect children, because children would be restricted from the areas proposed for construction and operation of the AFRC.

4.9.2.2 Alternative 2 – No Action Alternative

Implementation of the No Action Alternative would result in no construction and no increased revenue through military spending for the general area, and an expansion of the facility for other potential joint members would likely not occur. Short-term beneficial impacts would occur because the project area would remain undeveloped and available for agricultural use; however, the site is zoned and approved for an AFRC.

4.10 Environmental Justice

4.10.1 AFFECTED ENVIRONMENT

Environmental justice is the fair treatment for people of all races, cultures, and incomes, regarding the development and implementation (or lack thereof) of environmental laws, regulations, and policies. EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, directs Federal agencies to address environmental and human health conditions in minority and low-income communities. A memorandum from former President Clinton concerning EO 12898 stated that Federal agencies would collect and analyze information concerning a project's effects on minorities or low-income groups when required by NEPA. If such investigations find that minority or low-income groups experience a disproportionate adverse effect, then avoidance or mitigation measures are necessary.

4.10.1.1 Geographic Distribution of Minority Populations

Based upon the 2000 U.S. Census, populations in Johnson County and the cities of Greenwood and Franklin are comprised of 3.0, 3.5, and 3.3 percent minorities, respectively, which is significantly lower than the overall Indiana percentage of 12.5 percent minorities. The project site is located in the City of Franklin, which has a minority population similar to that of Johnson County. Table 4-7 presents regional demographics by race. For the City of Franklin, the major reported ancestries include: German (19.1 percent), United States or American (13.8 percent), Irish (12.3 percent), and 'Other' ancestries (12.6 percent) (U.S. Census Bureau 2000). Greenwood's major reported ancestries include German (24.8 percent), United States or American (14.6

percent), Irish (13.0 percent), English (10.7 percent), and ‘Other’ ancestries (10.7 percent) (U.S. Census Bureau 2000).

Table 4-7. Regional Population by Race for Year 2000.

Area	All Individuals	White (%)	African-American (%)	American Indian and Alaska Native (%)	Asian or Pacific Islander (%)	Other Race (%)	Hispanic or Latino*
State of Indiana	6,080,485	87.5	8.4	0.3	1.0	1.6	3.5
Johnson County	115,209	97.0	0.8	0.2	0.8	0.5	1.4
City of Greenwood	36,037	96.5	0.4	0.2	1.4	0.7	1.9
City of Franklin	19,463	96.7	1.2	0.2	0.6	0.6	1.3

Source: U.S. Census Bureau 2000

* Persons of Hispanic or Latino origin may be of any race.

4.10.1.2 Geographic Distribution of Low-Income Populations

Detailed information regarding income for the city of Franklin and Greenwood residents, as determined from the 2000 U.S. Census, is provided in Table 4-3. In 2000, 7.6 percent of residents in the city of Franklin and 7.0 percent of residents in the city of Greenwood were at or below the poverty level, which is higher than the percentage of Johnson County residents living in poverty (5.6 percent). In 2000, the poverty guideline for a family of four was an annual income of \$17,050 in the 48 contiguous states and Washington, D.C.; for a family of three, it was \$14,150. The national rate for people living in poverty was 12.4 percent in 2000 (U.S. Census Bureau, 2000). As shown in Table 4-3, median household incomes within the cities of Greenwood and Franklin were lower than Johnson County, but higher than the state median income. In addition, unemployment rates were lower in the Greenwood, but higher in Franklin than the county and state per capita incomes.

4.10.2 CONSEQUENCES

Potential environmental justice impacts are considered significant if the Proposed Action would cause disproportionate effects on low-income and/or minority populations.

4.10.2.1 Alternative 1 – Preferred Alternative

The cities of Greenwood and Franklin have a significantly lower percentage of minorities than the State of Indiana. Median household income, poverty levels, and per capita income within Greenwood and Franklin are lower than Johnson County, but higher than the state, and are indicative of a high-income area. Given that minority populations are lower than state levels and incomes are higher than the state median, no adverse impacts to disadvantaged segments of the population are anticipated under the Preferred Action Alternative.

Regional construction businesses would likely be used for the construction of the AFRC. Hiring regional business that may utilize minority and low-income employees would

provide jobs for such people within the region. This would constitute a minor, short-term positive impact to minority and low-income populations. However, the extent of this benefit would be dependent upon the degree to which minority or low-income persons are employed in these activities.

There would be no environmental justice impacts at Franklin or in the surrounding area, as impacts from the Proposed Action identified in this EA would not be localized or placed primarily on minority and/or low-income populations.

4.10.2.2 Alternative 2 – No Action Alternative

Implementation of the No Action Alternative would result in no construction and no increased revenue through military spending for the general area.

4.11 Infrastructure

4.11.1 AFFECTED ENVIRONMENT

This section describes both utilities and the existing transportation conditions at and surrounding the Hougham North Tract. In general, the utility systems are classified as distribution and collection systems including electrical, natural gas, telecommunications, potable water, sanitary sewer, storm drainage, and solid waste disposal. The ROI for infrastructure is Franklin, Indiana. Figure 4-4 illustrates utility systems present on Hougham North Tract in the area of Proposed Action construction project.

4.11.1.1 Energy Sources and Telecommunications

Electrical power is provided by Duke Energy Corporation or Johnson County Rural Electric Membership Corporation. Overhead three-phase electrical service is available along County Road 450 East at the north end of the Hougham North Tract.

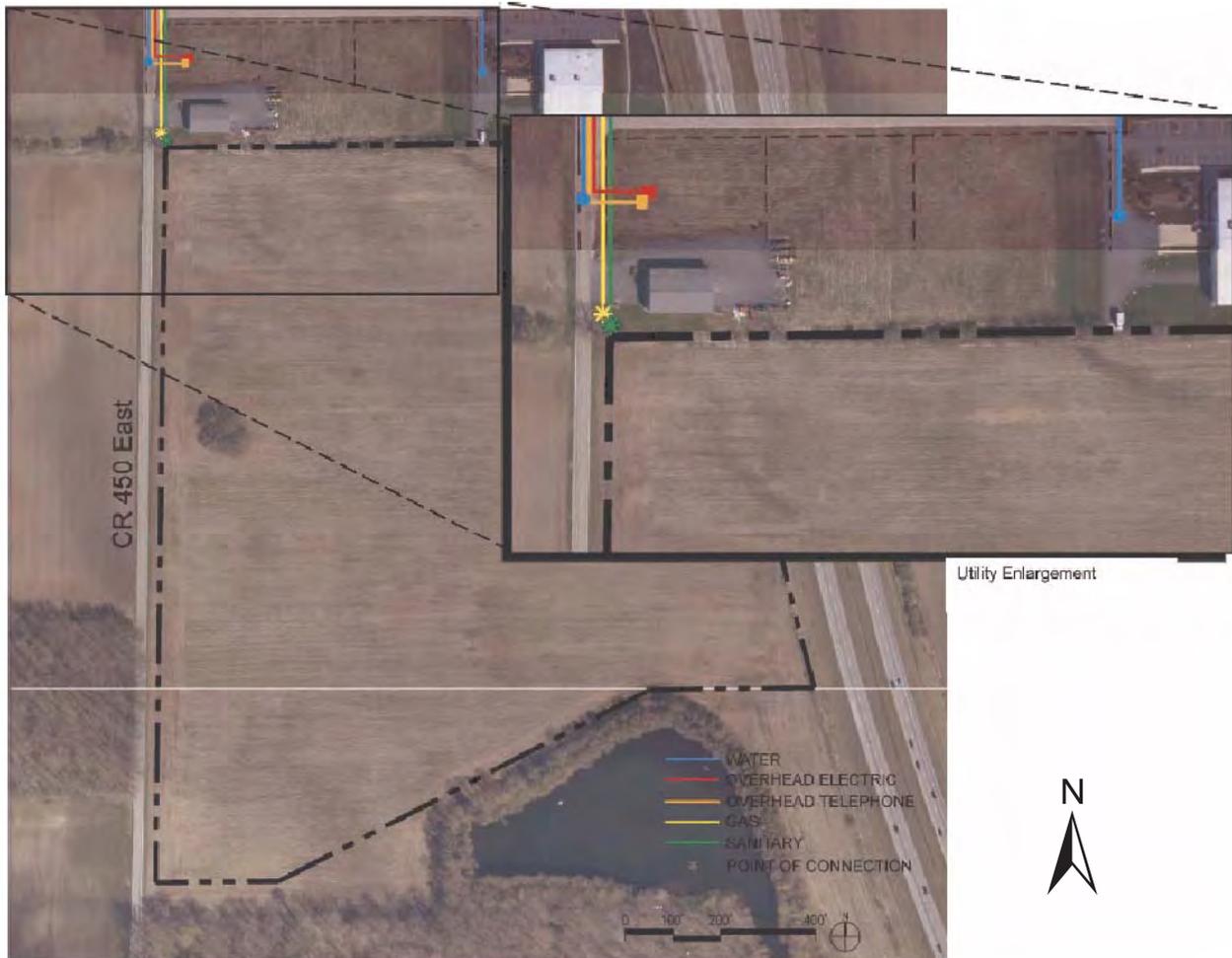
Natural gas service is supplied by Vectren Corporation. A natural gas line runs along County Road 450 East terminating at the northwest corner of the Hougham North Tract. Fuel oil is available from several commercial sources in the Franklin area.

Telecommunications service is provided by Embarq. There is telecommunications service ending at the northwest corner of the Hougham North Tract.

4.11.1.2 Potable Water Supply, Wastewater Treatment, Storm Water System, and Solid Waste Disposal

Potable water is supplied by the Indiana-American Water Company. Indiana-American Water Company has 16 registered significant groundwater withdrawal wells in Johnson County, Indiana providing capacity to serve the Franklin area, with a total pumping capacity of approximately 18,150 GPM. Potable water is available from a 12-inch main along County Road 450 East just north of the Hougham North Tract or from an 8-inch main located in the industrial park to the north of the Hougham North Tract.

The Franklin Public Works Department Storm Water Management Utility is tasked with providing safe, economical, and efficient management and protection of the City of Franklin's storm water conveyance system to its receiving waters. The Storm Water



Source: Information from Jacobs, Indiana National Guard Armed Forces Reserve Center, Concept Design Submittal, October 6 2008.

Legend

- Water
- Overhead Electric
- Overhead Telephone
- Gas
- Sanitary
- * Point of Connection



Prepared For:
U.S Army Corps of Engineers, Mobile District

Figure 4-4
Existing Site Utilities - Preferred Alternative



Utility provides management of Franklin's storm water infrastructure through BMP in storm water management; and is responsible for implementation of the Municipal Separated Storm Sewer System (MS4) Program mandated by the Indiana Department of Environmental Management.

Solid waste collection and recycling services are outsourced by the Franklin Public Works Department to Ray's Trash Service, Inc. Ray's Trash Service, Inc. provides solid waste disposal and recycling opportunities in the Franklin area.

4.11.1.3 Transportation

The central Indiana highway system is readily accessible from the Hougham North Tract via I-65. Indiana State Roads 44, 135, and 144 and US-31 provide additional access to the surrounding areas. The comprehensive highway system provides rapid travel opportunities in and out of the Franklin area. Average daily traffic volume for I-65 in 2002 was approximately 51,740 vehicles. Annual Average Daily Traffic flow for Indiana State Road 44 at the I-65 intersection in 2000 was approximately 15,930 vehicles. All major truck carriers service Franklin.

4.11.2 CONSEQUENCES

Effects on infrastructure are considered in terms of increases in demands on systems and the ability of existing systems to meet those demands. Potential effects to the environment could occur if the existing systems are insufficient to handle the increased demands requiring construction and operation of a new system. Utility demands include both construction and operations usage. Utility demands during the operations of the Proposed Action are based on the additional facility square footage and personnel requirements. Transportation impacts are also considered in terms of both construction and operations requirements. Individual segments that comprise the totality of the infrastructure are discussed below.

Potential impacts to the electrical systems are considered significant if the Proposed Action would:

- Change regional electricity demands requiring major new components such as transmission lines, transformers, and substations; or
- Cause long-term disruptions in available electrical services.

Potential impacts to liquid fuel systems are considered significant if the Proposed Action would:

- Cause unsafe, inadequate, or noncompliant temporary or long-term storage or distribution systems; or
- Cause unreliable distribution of liquid fuels that cannot meet the mission and support requirements.

Potential impacts to the potable water system are considered significant if the Proposed Action would:

- Reduce potable water availability;
- Disrupt potable water distribution systems;
- Change water demands that affect regional potable supplies; or
- Generate contaminants that cause negative effects on water quality.

Potential impacts to the wastewater system are considered significant if the Proposed Action would:

- Cause additional inflow and infiltration and increased loads on the wastewater treatment that cannot be adequately treated; or
- Change wastewater composition that would alter wastewater treatment processes or consistently cause upsets of the wastewater treatment system.

Potential impacts to storm water conveyance systems are considered significant if the Proposed Action would:

- Cause flow obstructions and increases to the storm water drainage system;
- Accelerate deterioration of the storm water drainage system; or
- Cause long-term interruptions of storm water drainage system components.

Potential impacts to solid waste are considered significant if the Proposed Action would increase solid waste such that it overwhelms local landfills.

Potential impacts to transportation are evaluated with respect to the potential for the Proposed Action to:

- Disrupt or improve current transportation patterns and systems;
- Deteriorate or improve existing levels of service; and
- Change existing levels of safety.

4.11.2.1 Alternative 1 – Preferred Alternative

Potential impacts to utilities from the Preferred Alternative would not be significant.

Energy Sources and Telecommunications – Electrical service and natural gas service at the northwest corner of the Hougham North Tract are likely of sufficient capacity to meet the needs of the proposed AFRC. Extension of the services to the AFRC would be necessary. Fuel oil is available for the Hougham North Tract, however it will likely not be required as natural gas service is preferred and available at the site.

Telecommunications service is also available at the northwest corner of the Hougham North Tract to meet the needs of the proposed AFRC.

Potable Water Supply, Wastewater Treatment, Storm Water System, and Solid Waste Disposal – Potable water is available at the northwest corner of the Hougham

North Tract and likely of sufficient capacity to meet the needs of the proposed AFRC. Wastewater collection sanitary mains are available at the northwest corner of the Hougham North Tract and of sufficient depth and likely of sufficient capacity to meet the needs of the proposed AFRC. Storm water would be intercepted by an onsite conveyance system consisting of pipes and ditches or channels and conveyed to an onsite retention pond. Discharge from the retention pond would be to existing culvert system associated with I-65. Approval of the storm drainage system by the Johnson County Drainage Board will be necessary if it would impact a legal drain. Solid waste collection and recycling services are sufficient to meet the needs of the proposed AFRC.

Transportation – Traffic flow along County Road 450 East will likely be minimally impacted by the increased traffic associated with construction and operation of the AFRC, primarily on weekends. In order to alleviate increased traffic and reduce associated delays on County Road 450 East, the construction of a new lane on the east side of County Road 450 East with access by north bound and south bound tapers is recommended; as well as a dedicated right-turn lane for north bound traffic.

4.11.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no changes or impacts would occur to infrastructure.

4.12 Hazardous and Toxic Substances

4.12.1 AFFECTED ENVIRONMENT

This section describes the existing conditions of hazardous and toxic substances at the Hougham North Tract. Management of hazardous materials and hazardous wastes are discussed also. The ROI for hazardous and toxic substances includes the Hougham North Tract.

4.12.1.1 Hazardous Materials

Hazardous materials are those useable corrosive, toxic, flammable, and reactive materials that, when spilled or released, are dangerous to public health or the environment. Hazardous materials are required to be handled managed, treated, or stored properly by trained personnel under the following regulations: Department of Transportation Hazardous Materials, 49 CFR 172.101; EPA, 40 CFR 260 et seq; and Occupational Safety and Health Administration Hazardous Communication, 29 CFR 1900.1200 and 29 CFR 1926.59.

A Phase I Environmental Site Assessment was completed to assist the Indiana Military Department in evaluating environmental risk relative to the Hougham North Tract. The assessment was conducted in conformance with American Society of Testing and Materials (ASTM) Standards for Phase I Environmental Site Assessments (ASTM E 1527-05) as well as the EPA's All Appropriate Inquiries (AAI) Rule. The assessment included environmental regulatory records review as well as a visual site inspection of the Hougham North Tract. Relevant issues included site history, adjacent properties and their potential impact on the Hougham North Tract, wetlands, presence of asbestos-containing materials, presence of other hazardous materials, above and underground

storage tanks (ASTs and USTs), and CERCLA/Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) involvement and spills.

The Phase I Environmental Site Assessment identified two leaking UST facilities within 0.5 mile of the Hougham North Tract; however, Indiana Department of Environmental Management information indicated petroleum contamination on both facilities was limited to the individual facilities (QEPI 2008). Five orphan facilities were identified outside the ASTM minimum search radius surrounding the Hougham North Tract. Four of the sites were at least 5 miles and one was at least 2 miles from the Hougham North Tract. The EPA classified the property under the Hougham North Tract as Radon Zone 1 (Highest Potential for elevated indoor radon levels); indicating radon levels found indoors in Zone 1 are typically greater than 4 picocuries per liter.

An Environmental Condition of Property (ECOP) Category 1 was assigned to the Hougham North Tract, which is described as “Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).”

4.12.1.2 Hazardous Waste Disposal

Hazardous wastes are generated when substances, usually originating as hazardous materials, are disposed of and are no longer useable or recyclable and exhibit hazardous characteristics as define by the EPA.

4.12.2 CONSEQUENCES

Potential impacts to hazardous materials management are considered significant if the Proposed Action would:

- Result in noncompliance with applicable Federal and state regulations; or
- Increase the amounts generated or procured hazardous materials beyond current permitted capacities or management capabilities.

4.12.2.1 Alternative 1 – Preferred Alternative

Potential impacts to hazardous and toxic substances from the Preferred Alternative would not be significant. Construction activities would pose minimal adverse impacts due to the potential for spills and leaks from construction equipment. Potential adverse impacts associated with construction would be mitigated by contractor spill management plans and response equipment.

The proposed AFRC would consist primarily of administrative and office areas. Hazardous materials use would be minimal for routine facilities maintenance and would likely be limited to cleaning products, paints, and adhesives. General purpose detergents would be used on the wash platform. Handling and storage of any hazardous materials would follow applicable regulations and label precautions. Facility plans are yet to be finalized, but the vehicle wash platform would likely flow through an oil/water separator (OWS).

Small volumes of hazardous wastes would be generated by operation of the AFRC and could include used cleaning products, unused paints, unused adhesives, and used light bulbs. Additionally, periodic cleaning of OWS may result in limited amounts of waste oil, waste grease, and heavy sediments. Although no vehicle fluid changes would occur at the proposed AFRC the possibility of limited volumes of waste fluids resulting from vehicle use is a possibility. Waste vehicle fluids could include gasoline, diesel, hydraulic fluid, antifreeze, and motor oil.

Minor amounts of hazardous wastes generated from the Preferred Alternative would be temporarily stored on site and collected by a contracted commercial transport, storage, and disposal (TSD) operator for transportation to permitted disposal sites which may include special industrial landfills, hazardous waste facilities, and licensed recyclers.

An emergency standby generator and associated fuel source (diesel or liquid propane) supply would likely be used to ensure continued operation of the proposed AFRC while operating on emergency power.

The Preferred Alternative would likely result in negligible short- and long-term adverse impacts, based on the potential for small spills and the overall use of hazardous materials and disposal of hazardous waste from the proposed AFRC.

4.12.2.2 Alternative 2 – No Action Alternative

Under the No Action Alternative, no impacts would occur to hazardous and toxic substances.

4.13 Cumulative Effects

Cumulative effects are those environmental impacts that result from the incremental effects of other past, present, or reasonably foreseeable future actions when combined with the Proposed Action. CEQ regulations stipulate that the cumulative effects analysis within an EA consider the potential environmental impacts resulting from the “incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such actions” (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively substantial, actions undertaken over a period of time by various agencies (Federal, state, and local) or individuals.

The scope of the cumulative effect analysis involves evaluating impacts to environmental resources by geographic extent of the effects and the time frame in which the effects are expected to occur. Because of extensive influences both within the Proposed Action areas and outside the boundary, cumulative effects are the most difficult to analyze. NEPA requires the analysis of cumulative environmental effects of a Proposed Action, or set of actions, on resources that may often be manifested only at the cumulative level, such as traffic congestion, air quality, noise, biological resources, cultural resources, socioeconomic conditions, utility system capacities, and others. In order to fully capture the cumulative effects associated with the Proposed Action, the “checklist” analysis methodology set forth in *Considering Cumulative Effects under the NEPA* (CEQ 1997)

was used. This qualitative cumulative impacts analysis is based on the potential effects of the Proposed Action when added to similar impacts from other projects in the region. The ROI considered for the cumulative impacts analysis is Johnson County and the City of Franklin and Franklin and Needham Townships in particular.

Past, present, and reasonably foreseeable actions are identified first, followed by the cumulative effects that could result from these actions when combined with the Proposed Action. Irreversible and irretrievable commitments of resources are also discussed in this section.

4.13.1 PAST, PRESENT, AND REASONABLY FORESEEABLE ACTIONS

This section lists and describes the past, present, and reasonably foreseeable actions that when combined with the Proposed Action could cause cumulative impacts.

Johnson County was established in 1822 with the Ancient River Trail, Whetzel's Trace, and the Indianapolis and Madison State roads facilitating settlement of the county. Franklin became the county seat in 1832 due to its geographical central location and by the time of the Civil War, the town had grown to over 2,000 residents and was incorporated as a city (SAVI interactive 2008). The town of Greenwood in northern Johnson County grew rapidly with the completion of the electric railway from Indianapolis in 1900 (SAVI interactive 2008). Over the past 15 years, the population of Johnson County has steadily increased; far greater than the growth of the state. Growth in the county has been concentrated around the I-65 corridor and northern portions of the county, making it one of the fastest growing counties in the state (Woolpert 1997).

Agriculture defines and characterizes Johnson County. Not only is the majority of the land in the county used for agricultural purposes, but agriculture also plays a role in defining the functional and physical character of the county (Woolpert 1997). Johnson County still retains its rural character and reliance on farming for employment despite the influence of growth from the Indianapolis metropolitan area. The Johnson County Comprehensive Plan recognizes these rural characteristics within the county and encourages the continuation of such ways of life as well as the protection of farmland in rural areas as countywide objectives.

Past actions in the Johnson County area were mainly associated with the conversion of farmland into residential and industrial uses. In 1950, 1,547 farms existed in the county and approximately 88 percent of county land was used for agriculture (USDC 1950). By the 2002 agriculture census, farm numbers had decreased to 598, and the area in agriculture production to approximately 68 percent of the county's total acreage (USDA 2002). These changes have resulted in long-term adverse impacts to the land use, soils, and potentially the flora and fauna of the county. Substantive past and present actions in the Johnson County and City of Franklin area include but are not limited to: an expansion of the KYB manufacturing warehouse and additional jobs; Arbonne International distribution center in Greenwood (additional 300 jobs); new location for Klaiser Manufacturing with expected 22 new jobs by 2010; a tube processing warehouse and

distribution center in Greenwood with an expected additional 40 jobs by 2013; and Greenwood Machine company 80,000-square-foot facility (JCDC 2008a and 2008b). Other recent developments in the vicinity of the Proposed Action site include a Cooper Tire distribution Center (804,000 square feet) just east of I-65 and an apartment complex (Meyers 2008).

Future actions near the Proposed Action site are assumed to revolve around increased development and the conversion or reduction in farmland. The city of Franklin estimates a build out of 1,500 acres within the city limits and potentially further build out of 5,800 acres outside the current city limits (RATIO Architects 2002). While adverse impacts to land use are expected from these actions, the county plans to make efforts to direct future development to areas in the county that can naturally support growth and where public services exist (Woolpert 1997). The Hougham North Tract falls within the city’s primary target growth area, and the City of Franklin recently approved the annexation of the area around the Proposed Action site (The Daily Journal 2008). Additionally, 275 acres just west of the Proposed Action site were recently annexed by the City of Franklin for Franklin College.

4.13.2 CUMULATIVE EFFECTS SUMMARY

Environmental effects for all resources potentially affected by the Proposed Action when combined with the past, present, and reasonably foreseeable projects in the area are summarized in Table 4-8 and discussed below.

Table 4-8. Potential Cumulative Effects Associated with the Proposed Action.

Potential Impact Area	Proposed Action	Past Actions	Other Present Actions	Future Actions	Cumulative Impact
Land Use	L ⁻ , S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Air Quality	S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Noise	S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Soils	L ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Water Resources	S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Biological Resources	S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Cultural Resources	*	*	*	*	*
Socioeconomics	S ⁺	L ⁺	L ⁺	L ⁺	L ⁺
Environmental Justice	*	*	*	*	*
Infrastructure	S ⁻	L ⁻	L ⁻	L ⁻	L ⁻
Hazardous and Toxic Substances	S ⁻ , L ⁻	L ⁻	S ⁻ , L ⁻	S ⁻ , L ⁻	L ⁻

S⁻ short-term adverse effect
 S⁺ short-term beneficial effect
 L⁻ long-term adverse effect
 L⁺ long-term beneficial effect
 * no effect

Note: All identified impacts have been determined to be less than significant. Under the No Action Alternative, cumulative impacts would be limited, as construction at the Hougham North Tract would not occur.

The Preferred Alternative would not affect cultural resources. Although, one new archaeological site was identified on the Hougham North Tract, it did not meet criteria to be eligible for inclusion on the NRHP. No known NRHP-eligible archaeological or historical sites occur in the area and therefore, Proposed Action impacts and cumulative impacts are not considered significant.

Short-term impacts to the affected environments listed in Chapter 4 are mainly confined to the time frame during the construction of the site and the effects on land use and aesthetics, air, noise, hazardous waste, infrastructure, and biological resources. The noise impact created by facility and vehicle operations would not be significant compared to existing traffic noise and would be limited to short-term adverse effects on weekends during National Guard presence. However, future expansion and build-up of areas around I-65 would cause cumulative adverse impacts to noise.

Although development of the AFRC would be compatible with the future land use plans of the City of Franklin, cumulative long-term adverse impacts to the conversion of the land resources from rural/agriculture to urban and industrial would be an irreversible use of the land. Coupled with the change in land use are the effects on water, biological, and soil resources. The Proposed Action would cause short-term incremental adverse impacts to soils. Cumulative adverse impacts would occur from the combination of the Proposed Action with future actions through soil loss and erosion. Additionally, prime farmland would be lost, but the impacts would not be significant due to the size of the area relative to average size farms in Johnson County. As farmland or other rural areas become converted, wildlife will have to find other movement corridors, thus potentially altering home range and dispersal behaviors, as well as other areas to meet food and shelter requirements. The impacts to biological resources may be reduced if some natural areas are left undeveloped. As land becomes less permeable due to construction of structures, water resources can be impacted. With development of the Preferred Alternative, there would be no measurable reduction in surface water quality or availability and groundwater recharge would be slightly decreased but would not impact significantly the regional water supply.

Long-term adverse cumulative impacts on air quality and infrastructure are inevitable as the area becomes more urbanized and populations increase. Franklin, Indiana is located within Johnson County and is part of the Metropolitan Indianapolis Intrastate Air Quality Control Region. Although the Proposed Action would not significantly impact air quality, long-term impacts from other projects within Johnson County and the metropolitan area would occur. Increased demand on the infrastructure would also cause long-term adverse effects as the area develops.

The Preferred Alternative would provide *beneficial impacts* to the INARNG and the State of Indiana. Coupled with the present and future planned development and potential increase in jobs, the Preferred Alternative would cumulatively benefit the socioeconomics in Johnson County. In addition, given that minority populations are lower in Johnson County than state levels and incomes are higher than the state median, no adverse environmental justice impacts are anticipated from the cumulative effects of the Preferred Alternative and future plans.

One of the missions of the INARNG is to support the Governor by providing trained units and equipment capable of protecting life and property and preserving peace, order, and public safety. Training and support facilities are necessary to ensure long-term viability and sustainability, by providing assets necessary to meet the INARNG's readiness, recruiting, retention, and training objectives.

The construction of the AFRC at the Hougham North Tract is considered to have less than significant impacts to the resources identified in Chapter 4 and outlined above. The AFRC is compatible with the current land use plan and development of the City of Franklin as well as Johnson County.

4.14 Mitigation Summary

Mitigation measures are actions required for the specific purpose of reducing the significant environmental impacts of implementing a proposed or alternative action. An EA may specify mitigation measures that, if implemented, would prevent significant impacts that would otherwise require an environmental impact statement. No mitigation measures are required for the Proposed Action discussed in this EA because resulting impacts would not meet the significance criteria described in Section 4.1; that is, the impacts would not be significant. Additionally, BMPs, where applicable for each resource, would be implemented to minimize impacts.

5.0 FINDINGS AND CONCLUSIONS

Direct, indirect, and cumulative impacts of the Preferred Alternative and the No Action Alternative have been considered. The evaluation performed within this EA concludes that there would be *no significant adverse impact*, either individually or cumulatively, to the local environment or quality of life as a result of the implementation of the Preferred Alternative, provided that BMPs specified in this EA are implemented. Positive impacts to the local socioeconomic environment would be anticipated.

Therefore, the issuance of a FNSI is warranted, and preparation of an environmental impact statement is not required. Implementation of the No Action Alternative is not feasible because the BRAC actions are required by law to be implemented, if the Army is able to acquire land suitable for the construction of the facilities.

6.0 REFERENCES

- Catt, B. (USDA/NRCS). 2008, November 25. Personal Communication with W. Arjo (AGEISS, Inc.)
- City of Franklin. 2006. City of Franklin website. Available at www.franklin-in.gov/egov/docs/1193331799_766815.pdf. Accessed November 26, 2008.
- City of Franklin. 2008a. Fire Department website. Available at www.franklin-in.gov. Accessed December 5, 2008.
- City of Franklin. 2008b. Parks and Recreation website. Available at www.franklin-in.gov. Accessed December 5, 2008.
- DOE (U.S. Department of Energy). 2002. Final Environmental Impact Statement for a Geologic Repository for the Disposal of Spent Nuclear Fuel and High-Level Radioactive Waste at Yucca Mountain, Nye County, Nevada, DOE/EIS-0250, Washington, D.C., U.S. Department of Energy, Office of Civilian Radioactive Waste Management, p. G-7.
- eCommunity. 2008. Community Hospital South news. Available at <http://www.ecommunity.com/newsroom/view.aspx?Page=466>. Accessed December 8, 2008.
- EPA (U.S. Environmental Protection Agency). 2005. New Source Review: Implementation of New Source Review Requirements in PM-2.5 Nonattainment Areas: Interim Guidance. Available at <http://www.epa.gov/ttn/oarpg/t1/memoranda/m16633memo.pdf>. Accessed November 21, 2008.
- EPA (U.S. Environmental Protection Agency). 2008a. Emissions by Category Report - Criteria Air Pollutants, for Johnson County, Indiana, calendar year 2002. Available at <http://www.epa.gov/air/data/reports.html>. Accessed November 20, 2008.
- EPA (U.S. Environmental Protection Agency). 2008b. General Conformity *De Minimis* Levels. Available at <http://www.epa.gov/air/genconform/deminimis.htm>. Accessed on December 2, 2008.
- FEMA (Federal Emergency Management Agency). 2008. FEMA Map Service Center. Available at <https://hazards.fema.gov/wps/portal/mapviewer>. Accessed December 11, 2008.
- Gravity College. 2008. Topographic Maps. Available at <http://www.gravitycollege.com/gcmap>. Accessed December 4, 2008.
- Hanson et al. (Hanson, C.E.; Towers, D.A.; Meister, L.D.). 2006. Transit Noise and Vibration Impact Assessment. U.S. Department of Transportation, Federal

- Transit Administration, Office of Planning and Environment. Washington, D.C. FTA-VA-90-1003-06
- Hospital-Data. 2008. Hospital and nursing home profiles. Available at <http://www.hospital-data.com>. Accessed December 8, 2008.
- IDEM (Indiana Department of Environmental Management). 2008. Air Quality Permit Status Search. Available at <http://www.in.gov/apps/idem/caats/activityTypes.aspx>. Accessed December 11, 2008.
- IDNR (Indiana Department of Natural Resources). 2001. Strategy for Indiana Bat on Indiana State Forests. Division of Forestry Resource Management. Available at www.in.gov/dnr_old/forestry/stateforests/pdf/I-H-1_Strategy_for_Indiana_Bat.pdf. Accessed November 19, 2008
- IDNR (Indiana Department of Natural Resources). 2005. Indiana County Endangered, Threatened, and Rare Species List: Johnson County. Available at www.in.gov/dnr/files/np_johnson.pdf. Accessed November 25, 2008.
- Indiana Sub. 2008. Seismic Regulations of the Indiana Building Code. Available at http://www.indianasubcontractors.org/pdf/Seismic_Regulations.pdf. Accessed December 4, 2008.
- Johnson County. 1997. Comprehensive Plan, Johnson County, Indiana. Available at www.co.johnson.in.us/planning/compplan/index.html. Accessed December 1, 2008.
- Johnson Memorial Hospital. 2008. News story dated April 28, 2008. Available at <http://www.johnsonmemorial.org>. Accessed December 8, 2008.
- Johnson County Development Center (JCDC). 2008a. Johnson County Development Center website. Available at <http://www.jcdc.org>. Accessed December 15, 2008.
- Johnson County Development Center (JCDC). 2008b. Recent Economic development news of interest in Johnson County, Indiana. Available at <http://www.jcdc.org/printable/news.html>. Accessed December 15, 2008.
- Keller et al. (Keller, C.E., S.A. Keller, and T.C. Keller). 1986. Indiana Birds and the Haunts: a Checklist and Finding Guide. Indiana University Press, Bloomington, IN.
- Meyers, J. (City of Franklin Planner). 2008, December 15. Personal Communication with W. Arjo (AGEISS, Inc.).
- NIDCD (National Institute on Deafness and Other Communicative Disorders). 2007. NIDCD Fact Sheet: Noise Induced Hearing Loss. U.S. Department of Health and Human Services, National Institutes of Health. NIH Publication No. 97-4233, April 2007.

- QEPI (Quality Environmental Professional, Inc). 2008. Phase I Environmental Site Assessment.
- RATIO Architects, Inc. 2002. City of Franklin Comprehensive Plan. Available at http://www.franklin-in.gov/comp_plan/comprehensive_plan.pdf. Accessed December 15, 2008
- SAVI interactive. 2008. Community profiles, Johnson County, Indiana. Available at http://www.savi.org/savii/comm_info/Community_Profiles/CNTY/18081/history.aspx. Accessed December 10, 2008.
- Sewell, A. 2008a. Phase Ia Cultural Resource Survey for a Proposed Armed Forces Reserve Center. Hardlines Design Company, Columbus, OH.
- Sewell, A. (Hardlines Design Company Principal Investigator). 2008b. November 11. Personal Communication with W. Arjo (AGEISS, Inc.).
- STATS Indiana. 2007. Demographics. Available at <http://www.stats.indiana.edu/>. Accessed December 8, 2008.
- The Daily Journal, Johnson County, Indiana. 2008, November 19. "Franklin to Annex 40 acres for \$35 million National Guard Armory. Available at <http://www.indianaeconomicdigest.net/main.asp?SectionID=31&SubSectionID=70&ArticleID=44419>. Accessed December 15, 2008.
- U.S. Census Bureau. 2000. U.S. Census Bureau website. Available at <http://factfinder.census.gov>. Accessed December 5, 2008.
- U.S. Census Bureau. 2007. U.S. Census Bureau website. Available at <http://factfinder.census.gov>. Accessed December 5, 2008.
- USDA NRCS (U.S. Department of Agriculture, Natural Resources Conservation Service). 2002. Indiana State and County data: 22002 Census of Agriculture. Available at http://www.agcensus.usda.gov/Publications/2002/Volume_1,_Chapter_2_County_Level/Indiana/st18_2_001_001.pdf. Accessed December 8, 2008.
- USDA (U.S. Department of Agriculture). 2008. Natural Resources Conservation Service, web soil survey. Available at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>. Accessed November 26, 2008.
- USDC (U.S. Department of Commerce). 1950. US Census of Agriculture: Counties and State Economic Area-Indiana. Available at http://www.agcensus.usda.gov/Publications/Historical_Publications/1950/Vol1%20Indiana/12063324v1p4.pdf. Accessed December 8, 2008.

USACE (U.S. Army Corp of Engineers). 1987. Wetland Delineation Manual. Available at <http://www.wetlands.com/regs/tlpge02e.htm>. Accessed November 25, 2008.

USDA NRCS (United States Department of Agriculture Natural Resource Conservation Service). 2008. Soil Survey of Marion County, Indiana. Available at <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed December 5, 2008.

USGS (United States Geological Survey). 2008a. Mineral Resources On-Line Spatial data. Available at <http://earthquake.usgs.gov/regional/states/indiana/history.php>. Accessed December 6, 2008.

USGS (United States Geological Survey). 2008b. Earthquake Hazard Program, Indiana. Available at <http://earthquake.usgs.gov/regional/states/indiana/history.php>. Accessed December 6, 2008.

Woolpert LLC. 1997. Comprehensive Plan Johnson County, Indiana Adopted: April 1997. Available at <http://www.co.johnson.in.us/planning/compplan/chap01.html>. Accessed December 8, 2008.

7.0 GLOSSARY

100-year floodplain – A flood event of such magnitude that it occurs, on average, every 100 years; this equates to a one percent chance of its occurring in a given year.

Aesthetics – Pertaining to the quality of human perception of natural beauty.

Ambient - The environment as it exists around people, plants, and structures.

Ambient Air Quality Standards - Those standards established according to the CAA to protect health and welfare (AR 200-1).

Aquifer - An underground geological formation containing usable amounts of ground water which can supply wells and springs.

Attainment Area - Region that meets the National Ambient Air Quality Standard (NAAQS) for a criteria pollutant under the CAA.

Battalion - A military unit consisting of a headquarters company and three to five functional (combat arms, combat support, or combat service support) companies consisting of approximately 250 to 1,000 persons, depending on the type of unit.

Bedrock - the solid rock that underlies all soil, sand, clay, gravel and loose material on the earth's surface.

Best Management Practices (BMPs) – Voluntary, methods measures, or practices for reducing environmental impacts, such as pollutants to U.S. waters. Best management practices may be imposed in addition to, or in the absence of, effluent limitations, standards, or prohibitions (AR 200-1).

Biological Resources – **The naturally occurring plant and animal species is the defined area. Also includes the habitat a species occurs in as well as very specific habitats such as wetlands.**

Company - A military unit that is the next smaller unit of a battalion; the most basic administrative and tactical unit (approximately 50 to 200 persons, depending on the type of unit).

Contaminants - Any physical, chemical, biological or radiological substances that have an adverse effect on air, water or soil.

Council on Environmental Quality (CEQ) - An Executive Office of the President composed of three members appointed by the President, subject to approval by the Senate. Each member shall be exceptionally qualified to analyze and interpret environmental trends; to appraise programs and activities of the Federal Government. Members are to be conscious of and responsive to the scientific, economic, social, aesthetic, and cultural needs of the Nation; and to formulate and recommend national policies to promote the improvement of the quality of the environment.

Criteria Pollutants - The CAA of 1970 required the USEPA to set air quality standards for common and widespread pollutants in order to protect human health and welfare. There are six "criteria pollutants": ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), lead (Pb), nitrogen dioxide (NO₂), and particulate matter.

Cultural Resources - The physical evidence of our Nation's heritage. Included are: archaeological sites; historic buildings, structures, and districts; and localities with social significance to the human community.

Cumulative Impact - The impact on the environment that results from the incremental impact of the action when added to other past, present, and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7).

dBA – “A-weighted” non-impulse noise measurement in decibels, weighted to match human hearing frequency response.

Decibel (dB) - A unit of measurement of sound pressure level.

Direct Impact - A direct impact is caused by a Proposed Action, and occurs at the same time and place.

Emission - A release of a pollutant.

Endangered Species - Any species which is in danger of extinction throughout all or a significant portion of its range.

Environmental Assessment (EA) - An EA is a publication that provides sufficient evidence and analysis to show whether a proposed system will adversely affect the environment or be environmentally controversial.

Environmental Impact Statement - A document prepared in conjunction with an EA, when the EA determines that a Proposed Action will adversely affect the environment or be controversial. The EIS discloses the impacts of the action.

Erosion - The wearing away of the land surface by detachment and movement of soil and rock fragments through the action of moving water and other geological agents.

Farmland - Cropland, pastures, meadows, and planted woodland.

Fauna - Animal life, especially the animal characteristics of a region, period, or special environment.

Flora - Vegetation; plant life characteristic of a region, period, or special environment.

Floodplain - The relatively flat area or lowlands adjoining a river, stream, ocean, lake, or other body of water that is susceptible to being inundated by floodwaters.

FNSI - Finding of No Significant Impact, a NEPA document.

Fugitive Dust - Particles light enough to be suspended in air which are not caught in a capture or filtering system. For this document, this refers to particles put in the air by moving vehicles and air movement over disturbed soils at construction sites.

Geology - Science which deals with the physical history of the earth, the rocks of which it is composed, and physical changes in the earth.

Groundwater - Water found below the ground surface. Groundwater may be geologic in origin and as pristine as it was when it was entrapped by the surrounding rock or it may be subject to daily or seasonal effects depending on the local hydrologic cycle. Groundwater may be pumped from wells and used for drinking water, irrigation and other purposes. It is recharged by precipitation or irrigation water soaking into the ground. Thus, any contaminant in precipitation or irrigation water may be carried into groundwater.

Habitat - Set of environmental conditions in which a wildlife population lives.

Hazardous Substance - Hazardous materials are defined within several laws and regulations to have certain meanings. For this document, a hazardous material is any one of the following:

- 1) Any substance designated pursuant to section 311 (b)(2) (A) of the Clean Water Act.
- 2) Any element, compound, mixture, solution or substance designated pursuant to Section 102 of Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)
- 3) Any hazardous as defined under the Resource Conservation and Recovery Act (RCRA)
- 4) Any toxic pollutant listed under TSCA.
- 5) Any hazardous air pollutant listed under Section 112 of CAA.
- 6) Any imminently hazardous chemical substance or mixture with respect to which the EPA Administrator has taken action pursuant to Subsection 7 of TSCA.

The term does not include: 1) Petroleum, including crude oil or any thereof, which is not otherwise specifically listed or designated as a hazardous substance in a above. 2) Natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). c. A list of hazardous substances is found in 40 CFR 302.4.

Hazardous Waste - A solid waste, which when improperly treated, stored, transported or disposed of poses a substantial hazard to human health or the environment. Hazardous wastes are identified in 40 CFR 261.3 or applicable foreign law, rule, or regulation (see also solid waste).

Indirect Impact - An indirect impact is caused by a Proposed Action, but occurs later in time or farther removed in distance, but is still reasonably foreseeable. Indirect impacts may include induced changes in the pattern of land use, population density or growth rate, and related effects on air, water, and other natural and social systems. For example, referring to the possible direct impacts described above, the clearing of trees for new development may have an indirect impact on area wildlife by decreasing available habitat.

Installation - A grouping of facilities, located in the same general vicinity, over which the installation commander has authority (AR 200-1).

Jurisdictional wetland – Areas that meet the wetland hydrology, vegetation, and hydric soil characteristics, and have a direct connection to the Waters of the US. These wetlands are regulated by the USACE.

Listed Species - Any plant or animal designated as a State or Federal threatened, endangered, special concern, or candidate species.

Long Term Impacts – Direct or indirect impacts resulting from an action in an extended term. In this context, long-term does not refer to any rigid time period and is determined on a case-by-case basis in terms of the environmental consequences of the Proposed Action.

Mitigation – Measures taken to avoid, minimize, rectify, reduce, eliminate or compensate for an adverse environmental impact.

Mobile Sources - Vehicles, aircraft, watercraft, construction equipment, and other equipment that use internal combustion engines for energy sources.

Monitoring – A process of inspecting and recording the progress of mitigation measures implemented.

National Ambient Air Quality Standards (NAAQS) - Nationwide standards set up by the USEPA for widespread air pollutants, as required by Section 109 of the Clean Air Act (CAA). Currently, six pollutants are regulated by primary and secondary NAAQS: carbon monoxide (CO), lead, (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter, and sulfur dioxide (SO₂).

National Environmental Policy Act (NEPA) - U.S. statute that requires all Federal agencies to consider the potential effects of Proposed Actions on the human and natural environment.

Nonattainment Area - An area that has been designated by the EPA or the appropriate State air quality agency as exceeding one or more national or State ambient air quality standards.

Particulates or Particulate Matter - Fine liquid or solid particles such as dust, smoke, mist, fumes or smog found in air.

Pollutant - A substance introduced into the environment that adversely affects the usefulness of a resource.

Potable Water - Water which is suitable for drinking.

Prime Farmland - A special category of highly productive cropland that is recognized and described by the US Department of Agriculture's Soil Conservation Service and receives special protection under the Surface Mining Law.

Readiness Centers – A military structure where arms and ammunition and other military equipment are stored and military training is given. Also known as an Armory.

Sensitive Receptors - Include, but are not limited to, asthmatics, children, and the elderly, as well as specific facilities, such as long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, and childcare centers.

Short Term Impacts – Direct or indirect impacts resulting from an action in the near term. In this context, short-term does not refer to any rigid time period and is determined on a case-by-case basis in terms of the environmental consequences of the Proposed Action.

Significant Impact - According to 40 CFR 1508.27, "significance" as used in NEPA requires consideration of both context and intensity.

- a. Context. The significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the Proposed Action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant.
- b. Intensity. This refers to the severity of impact. Responsible officials must bear in mind that more than one agency may make decisions about partial aspects of a major action.

Soil - The mixture of altered mineral and organic material at the earth's surface that supports plant life.

Solid Waste - Any discarded material that is not excluded by section 261.4(a) or that is not excluded by variance granted under sections 260.30 and 260.31.

Threatened species - Any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.

Topography - The relief features or surface configuration of an area.

Toxic Material/Waste - A harmful substance which includes elements, compounds, mixtures, and materials of complex composition.

Waters of the United States include the following: (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide. (2) All interstate waters including interstate wetlands. (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce.

Wetlands - Areas that are regularly saturated by surface or ground water and, thus, are characterized by a prevalence of vegetation that is adapted for life in saturated soil conditions. Examples include swamps, bogs, fens, marshes and estuaries.

8.0 LIST OF PREPARERS

Wendy Arjo, Project Manager

Melissa Russ, Geologist

C. Lee Major, Jr., Environmental Engineer

Cyndi Bell, Environmental Scientist

Norai Ibrahim, Environmental Scientist

Andrea Linder, Environmental Scientist

Cynthia Madden, Environmental Scientist

Leroy Shaser, Environmental Scientist

Tonya Bartels, Technical Editor

9.0 AGENCIES AND INDIVIDUALS CONSULTED

Persons and agencies that were contacted for information for this EA are listed in this section regardless of whether a response was received.

General Environmental Agencies

Ms. Mary A. Gade, Regional Administrator
U.S. Environmental Protection Agency,
Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604

Mr. Thomas W. Easterly, Commissioner
Indiana Department of Environmental
Management
100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015

Natural Resources Agencies

Mr. Robert E. Carter, Jr., Director
Indiana Department of Natural Resources
402 West Washington Street, Room 256
Indianapolis, Indiana 46204

Mr. John Seifert, State Forester
Indiana Department of Natural Resources
Division of Forestry
402 West Washington Street Room W296
Indianapolis, Indiana 46204-2739

Mr. Michael W. Neyer, P.E.
Indiana Department of Natural Resources
Division of Water
402 West Washington Street, Room W264
Indianapolis, Indiana 46204

Mr. Glen Salmon, Director
Indiana Department of Natural Resources
Division of Fish and Wildlife
402 W. Washington St., Room W273
Indianapolis, Indiana 46204

Mr. John Bacone, Director
Indiana Department of Natural Resources
Division of Nature Preserves
402 W. Washington St., Room W267
Indianapolis, Indiana 46204

Ms. Robyn Thorson, Regional Director
U.S. Fish and Wildlife Service, Region 3
BHW Federal Building, 1 Federal Drive
Fort Snelling, Minnesota 55111

Mr. Scott Pruitt, Field Supervisor
U.S. Fish and Wildlife Service, Region 3
Bloomington Ecological Services Field Office
620 South Walker Street
Bloomington, Indiana 47403-2121

Mr. Tim Smith
U.S. Army Corps of Engineers
Indianapolis Field Office
9799 Billings Road
Indianapolis, Indiana 46216

Soils/Geology Resource Agencies

Ms. Suzette Kimball, Regional Director
U.S. Geological Survey, Eastern Region
Office of Regional Director
11649 Leetown Road
Kearneysville, West Virginia 25430

Mr. James A. Stewart, Director
U.S. Geological Survey, Indiana Office
5957 Lakeside Boulevard
Indianapolis, Indiana 46278-1996

Mr. Travis Neely, State Soil Scientist/ Office
Leader
U.S. Department of Agriculture
Natural Resources Conservation Service
Indiana State Office
6013 Lakeside Boulevard
Indianapolis, Indiana 46278-2933

Jane Hardisty, State Conservationist
U.S. Department of Agriculture
Natural Resources Conservation Service
6013 Lakeside Boulevard.
Indianapolis, Indiana 46278-2933

Mr. Ron Lauster, Director/Resource
Conservationist
Soil and Water Conservation District
6960 S. Gray Road, Suite C
Indianapolis, Indiana 46237-3237

Mr. Tony Branam
District Conservationist
USDA/NRCS
USDA Franklin Service Center
3059 N. Morton St
Franklin, IN 46131-9662

Cultural Resources Agency

Dr. James Glass, Division Director
Deputy State Historic Preservation Officer
Division of Historic Preservation and
Archaeology
Indiana Department of Natural Resources
402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739

Native American Tribes

Honorable Governor Larry Nuckools
Absentee Shawnee Tribe of Oklahoma
2025 S. Gordon Cooper Dr.
Shawnee, Oklahoma 74801

Honorable Chairman John Barrett
Citizen Potawatomi Nation
1601 S. Gordon Cooper Dr.
Shawnee, Oklahoma 74801

Honorable President Kerry Holton
Delaware Nation
P.O. Box 825
Anadarko, Oklahoma 73005

Honorable Chief Glenna Wallace
Eastern Shawnee Tribe of Oklahoma
P.O. Box 350
Seneca, Missouri 64865

Honorable Chairperson Harold Frank
Forest County Potawatomi Community
P.O. Box 340
Crandon, Wisconsin 54520

Honorable Chairperson Kenneth Meshigwad
Hannahville Indian Community
N14911 Hannahville B-1 Road
Wilson, Michigan 49896

Honorable Chairperson Steve Cadue
Kickapoo Tribe of Kansas
P.O. Box 271
Horton, Kansas 66439

Honorable Chairperson Tom Gambles
Miami Tribe of Oklahoma
P.O. Box 1326
Miami, Oklahoma 74355

Honorable Principal Chief Charles Todd
Ottawa Tribe of Oklahoma
P.O. Box 110
Miami, Oklahoma 74355

Honorable Principal Chief John Froman
Peoria Indian Tribe of Oklahoma
P.O. Box 1527
Miami, Oklahoma 74355

Honorable Chairperson John Miller
Pokagon Band of Potawatomi Indians
58620 Sink Road
Dowagiac, Michigan 49047

Honorable Chairperson Steve Ortiz
Prairie Band Potawatomi Nation
16281 Q Road
Mayetta, Kansas 66509

Honorable Principal Chief Leaford Bearskin
Wyandotte Tribe of Oklahoma
P.O. Box 250
Wyandotte, Oklahoma 74370
Honorable Chairperson Marlan Frye

Honorable Chairperson Marlan Frye
Kickapoo Tribe of Oklahoma
PO Box 70
McLoud, Oklahoma 74851

Honorable Chief George Wickliffe
United Keetoowah Band of Cherokee Indians
PO Box 746
Tahlequah, Oklahoma 74457

Honorable Chairperson Ron Sparkman
Shawnee Tribe
PO Box 189
Miami, Oklahoma 74355

Honorable Chairperson Laura Spurr
Nottawaseppi Huron Band of Potawatomi
2221 1 1/5 Mile Rd
Fulton, Michigan 49052

Other Individuals or Organizations

Mr. Jim Kurtz
Sr. Project Manager
Jacobs Engineering Group, Inc.
One Financial Plaza
501 N. Broadway
St. Louis, Missouri 63102-2121

*Environmental Assessment for Construction of an
Armed Forces Reserve Center and
Implementation of BRAC 05 Recommendations in the
Vicinity of Greenwood and Franklin, Indiana*

APPENDIX A

CONSULTATION AND COORDINATION

This page intentionally left blank.

APPENDIX A. CONSULTATION AND COORDINATION

This appendix contains Interagency and Intergovernmental Coordination for Environmental Planning correspondence. Section 9.0 of the EA lists contact information for all persons and agencies contacted. The following letters sent by the Indiana Army National Guard are included in this appendix:

- Letter to the State Historic Preservation Office, Division of Historic Preservation and Archaeology, dated December 16, 2008
- Letter to the U.S. Fish and Wildlife Service, dated December 3, 2008
- Letter to the U.S. Department of Agriculture, Natural Resources Conservation Service, dated December 3, 2008
- Letter to the Absentee Shawnee Tribe of Oklahoma, dated December 1, 2008

Letters identical to the U.S. Fish and Wildlife Service letter were also sent to the U.S. Environmental Protection Agency, the Indiana Department of Natural Resources (various divisions), the Indiana Department of Environmental Management, the Soil and Water Conservation District, the U.S. Geological Survey, and the U.S. Army Corps of Engineers.

Letters identical to the Absentee Shawnee Tribe of Oklahoma letter were also sent to 16 other federally recognized tribes: Citizen Potawatomi Nation, Delaware Nation, Eastern Shawnee Tribe of Oklahoma, Forest County Potawatomi Community, Hannahville Indian Community, Kickapoo Tribe of Kansas, Miami Tribe of Oklahoma, Ottawa Tribe of Oklahoma, Peoria Indian Tribe of Oklahoma, Pokagon Band of Potawatomi Indians, Prairie Band Potawatomi Indians, Wyandotte Tribe of Oklahoma, Kickapoo Tribe of Oklahoma, United Keetoowah Band of Cherokee Indians, Shawnee Tribe, and Nottawaseppi Huron Band of Potawatomi.

All responses received are also included in this appendix.

- Letters received from the State Historic Preservation Office, Division of Historic Preservation and Archaeology, dated January 12 and January 16, 2009
- Letter received from the U.S. Fish and Wildlife Service, dated December 19, 2008
- Letter received from the Indiana Department of Natural Resources, dated December 11, 2008
- Letter received from the U.S. Geological Survey, Indiana Water Science Center, dated December 28, 2008
- Postcards received from the following tribes: United Keetoowah Band of Cherokee Indians, Ottawa Tribe of Oklahoma, Hannahville Indian Community, Peoria Indian Tribe of Oklahoma, and Eastern Shawnee Tribe of Oklahoma

- Letter received from the Miami Tribe of Oklahoma, dated December 22, 2008
- Letter received from the Peoria Indian Tribe of Oklahoma dated December 16, 2008
- Letter received from the Eastern Shawnee Tribe of Oklahoma dated December 30, 2008
- Letter received from the Indiana Department of Natural Resources, Division of Water dated June 23, 2009

This appendix also contains a Memorandum for the Record regarding tribal consultation dated April 16, 2009.



REPLY TO
ATTENTION OF

INDIANA
JOINT FORCES HEADQUARTERS
NATIONAL GUARD
2002 SOUTH HOLT ROAD
INDIANAPOLIS, INDIANA 46241-4839



December 16, 2008

Environmental Office

Dr. James Glass, Division Director
Deputy State Historic Preservation Officer
Division of Historic Preservation and Archaeology
Indiana Department of Natural Resources
402 West Washington Street, Room W274
Indianapolis, Indiana 46204-2739

SUBJECT: Intergovernmental and Interagency Environmental Planning Consultation for Proposed Armed Forces Reserve Center (AFRC) in Franklin, Johnson County, Indiana

Dear Dr. Glass:

The National Guard Bureau (NGB) and the Indiana Army National Guard (INARNG) are preparing environmental documentation for the proposed Armed Forces Reserve Center (AFRC) near Franklin, Johnson County, Indiana (Attachment 1) as part of the restructuring of military bases recommended by the Defense Base Realignment and Closure Act (BRAC). The AFRC would be located on approximately 40 acres of undeveloped, privately owned farmland located 0.3 miles south of the intersection of Interstate 65 and State Road 44, approximately 2 miles east of Franklin, Indiana. The proposed site, known as the Hougham North Tract Site, lies between County Road 450 East and Interstate 65 (Attachment 2). Attachment 3 shows an aerial photograph of the proposed site.

The proposed AFRC building (approximately 162,616 square feet) would house eight INARNG and two United States Army Reserve (USAR) units. It would include administration, education, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for approximately 651 INARNG personnel and approximately 331 USAR personnel. Outside supporting facilities would include military and personally-owned vehicle parking, a 363-square-foot flammable materials facility, a 299-square-foot controlled waste facility, a 4,013-square-foot unheated storage building, fencing, sidewalks, outside lighting, access roads, facility sign, helipad, and a flagpole. Attachment 4 shows the proposed Franklin AFRC site layout.

An Environmental Assessment (EA) document will evaluate the environmental, cultural, and social impacts associated with the proposed construction and operation of the Franklin AFRC, pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); and 32 CFR Part 651; as well as the NGB NEPA

Manual – *Guidance on Preparing Environmental Documentation for Army National Guard Actions in Compliance with NEPA* (NGB, June 2006).

Information Request: Information you may be able to provide on any of the following environmental issue areas (at or in the vicinity of the project area) would be appreciated:

- Potential environmental concerns or issues;
- Surface and groundwater resources, including streams, wetlands, floodplains, open water features, wells, and local aquifers;
- State or Federally listed threatened or endangered species, or any species proposed for such listing, or critical habitat for such species that may occur within a one-mile radius around the project area;
- Parks, nature preserves, conservation areas, designated wild or scenic rivers, migratory bird habitats or special wildlife issues;
- Natural resource issues;
- Soils and geologic data, including lists of hydric soils
- Prime and unique farmland (Natural Resources Conservation Services [NRCS] only); and
- Additional environmental, cultural, land use or socioeconomic information or concerns your agency may have with regard to the referenced project area.

Data that you make available will provide input to the NEPA evaluation. As part of the NEPA process, local citizens, groups, and agencies, among others, will have ample future opportunity to review and comment on the information and alternatives addressed in the document.

In addition to this request for information in accordance with NEPA, the INARNG is requesting review by the Indiana State Historic Preservation Officer of the attached report (Attachment 5). The report documents the cultural resource investigation, including a Phase Ia archaeological reconnaissance survey and an assessment of buildings within the area of potential effect for the project that was conducted by Hardlines Design Company.

The archaeological survey recorded site 12Jo594, a multi-component Euro-american historic scatter and unidentified Pre-Contact lithic scatter. Due to the lack of evidence of intact, buried archaeological features (i.e. burned earth, charcoal, fire-cracked rock, concrete block, etc.), the site is not likely to yield much information pertaining to either the Pre-Contact Native American era or the Euroamerican era of the region. The INARNG has determined that the site is not eligible for listing on the National Register of Historic Places. The report also documents the lack of structures over 50 years within the visual area of potential effect of the project as well as the lack of exceptional structures less than 50 years that meet the criteria for consideration on the National Register.

Federal and State cultural resource regulations concerning the identification of historic properties were followed for this project, and it is concluded that there will be no historic properties affected. It is recommended that the project proceed as planned. However, if concentrations of artifacts, archaeological features, or human remains are found during

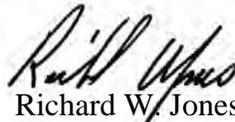
construction, all construction activities must stop and the Standard Operating Procedures outlined in the 2007-2011 Indiana National Guard Integrated Cultural Resource Management Plan must be followed, including contacting the Division of Historic Preservation and Archaeology at the Indiana Department of Natural Resources and all other appropriate consulting parties.

Please review the attached documentation and respond in accordance with 36 CFR 800.5(c)1. The project is planned to begin in 180 days. A copy of this letter has been furnished to Mrs. Karstin Carmany-George, INARNG Cultural Resource Manager. If you have any questions, please contact her at 317-416-9223 or at:

Camp Atterbury Joint Maneuver Training Center: CA-ENV
 PO Box 5000, Bldg 609
 ATTN: Ms. Karstin Carmany-George
 Edinburgh, Indiana 46124

We look forward to and welcome your participation in this study. Please reply on or before January 20, 2008 to enable us to complete this phase of the project within the scheduled timeframe. Thank you for taking the time to review this letter. The INARNG looks forward to working with you on this and future projects.

Sincerely,



Richard W. Jones
 Lieutenant Colonel, Indiana Army
 National Guard
 Supervisory Environmental Specialist

Enclosures:

- 1 – Franklin, Indiana Location Map
- 2 – Location of Proposed Site, Hougham North Tract
- 3 – Aerial Photograph of the Proposed Site
- 4 – Preliminary Franklin, Indiana AFRC Site Layout
- 5 – “Phase Ia Cultural Resources Survey for a Proposed Armed Forces Reserve Center”

Electronic Copy Furnished:

Mrs. Karstin Carmany-George, INARNG
 Ms. Wendy Arjo, AGEISS Environmental, Inc.
 Mr. Andrew Sewell, Hardlines Design Company
 Mr. David Pugh, US Army Corp of Engineers, Mobile District



REPLY TO
ATTENTION OF

INDIANA
JOINT FORCES HEADQUARTERS
NATIONAL GUARD
2002 SOUTH HOLT ROAD
INDIANAPOLIS, INDIANA 46241-4839



December 3, 2008

Environmental Office

Mr. Scott Pruitt, Field Supervisor
U.S. Fish and Wildlife Service, Region 3
Bloomington Ecological Services Field Office
620 South Walker Street
Bloomington, Indiana 47403-2121

SUBJECT: Intergovernmental and Interagency Environmental Planning Consultation for Proposed Armed Forces Reserve Center (AFRC) near Franklin, Indiana

Dear Mr. Scott Pruitt:

The National Guard Bureau (NGB) and the Indiana Army National Guard (INARNG) are preparing environmental documentation for the proposed AFRC near Franklin, Indiana (Attachment 1) as part of the restructuring of military bases recommended by the Defense Base Realignment and Closure Act (BRAC). The AFRC would be located on approximately 40 acres of undeveloped farmland located 0.3 mile south of the intersection of Interstate 65 and State Road 44, approximately 2 miles east of Franklin, Indiana in Johnson County. The proposed site lies between County Road 450 East and Interstate 65. Attachment 2 shows an aerial photograph of the location of the proposed site. The proposed AFRC building (approximately 162,616 square feet) would house eight INARNG and two United States Army Reserve (USAR) units. It would include administration, education, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for approximately 651 INARNG personnel and approximately 331 USAR personnel. Supporting facilities would include military and personally-owned vehicle parking, a 363-square-foot flammable materials facility, a 299-square-foot controlled waste facility, a 4,013-square-foot unheated storage building, fencing, sidewalks, outside lighting, access roads, facility sign, helipad, and a flagpole. Attachment 3 shows the aerial photo of the proposed Franklin AFRC site layout.

An Environmental Assessment (EA) will evaluate the environmental, cultural, and socioeconomic impacts associated with the proposed construction and operation of the Franklin AFRC, pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); and 32 CFR Part 651; as well as the NGB NEPA Manual – *Guidance on Preparing Environmental Documentation for Army National Guard Actions in Compliance with NEPA* (NGB, 2006).

Information Requested: Any information you can provide on the following environmental issue areas (at or in the vicinity of the project area) is appreciated:

- Potential environmental concerns or issues;
- Surface and groundwater resources, including streams, wetlands, floodplains, open water features, wells, and local aquifers;

- State and Federally listed threatened or endangered species, or any species proposed for such listing, or critical habitat for such species that may occur within a 1-mile radius around the project area;
- Parks, nature preserves, conservation areas, designated wild or scenic rivers, migratory bird habitats, or special wildlife issues;
- Natural resources issues;
- Soils and geological data, including lists of hydric soils;
- Prime and unique farmland [National Resources Conservation Services (NRCS) only]; and
- Additional environmental, cultural, land use or socioeconomic information or concerns your agency may have with regard to the project area.

Data that you make available will provide input to the NEPA evaluation. As part of the NEPA process, local citizens, groups, and agencies, among others, will have ample future opportunity to review and comment on the information and alternatives addressed in the document.

We look forward to and welcome your participation in this study. Please respond on or before **31 December 2008** to enable us to complete this phase of the project within the scheduled timeframe. AGEISS Inc. has been contracted by the INARNG to assist with the environmental documentation. Please send your responses to:

AGEISS Inc.
ATTN: Dr. Wendy Arjo
5225 Deerfield Park CT, NE
Olympia, WA 98516

If you have any questions or concerns with regard to this request, please direct them to Dr. Arjo at (360)628-8748. Thank you for taking the time to review this letter. The INARNG looks forward to working with you on this and future projects.

Sincerely,



Richard W. Jones
Lieutenant Colonel, Indiana Army
National Guard
Supervisory Environmental Specialist

Enclosure(s)

1. Franklin, Indiana Location Map
2. Location of Proposed Site
3. Aerial Photograph of the Proposed Site



REPLY TO
ATTENTION OF

INDIANA
JOINT FORCES HEADQUARTERS
NATIONAL GUARD
2002 SOUTH HOLT ROAD
INDIANAPOLIS, INDIANA 46241-4839



December 3, 2008

Environmental Office

Ms. Jane Hardisty, State Conservationist
USDA/NRCS
6013 Lakeside Blvd.
Indianapolis, IN 46278-2933

Dear Ms. Hardisty:

On September 8, 2005, the Defense Base Realignment and Closure Commission (BRAC) recommended that certain realignment actions occur in the vicinity of Greenwood and Franklin, Indiana. These recommendations were approved by the President on September 23, 2005, and forwarded to Congress. The BRAC Commission made the following recommendations concerning Greenwood-Franklin, Indiana:

“Realign Charles H. Seston United States Army Reserve Center by relocating the 402nd Engineer Company and Detachment 1 of the 417th Petroleum Company into a new Armed Forces Reserve Center in the vicinity of Greenwood and Franklin, IN, if the Army is able to acquire land suitable for the construction of the facility. The new AFRC shall have the capability to accommodate the Indiana National Guard units from the Camp Atterbury Army National Guard Readiness Center (Building #500), and the 219th Area Support Group Readiness Center (Building #4), Camp Atterbury, IN, if the state decides to relocate those National Guard units.”

To implement these recommendations, the Army National Guard (ARNG) proposes to construct a new Armed Forces Reserve Center (AFRC) and related facilities at a site in the vicinity of Greenwood and Franklin, Indiana to support the changes in force structure. The project area is located in Franklin, Johnson County, Indiana, approximately 20 miles south of the City of Indianapolis, Indiana. The facility would employ approximately 36 permanent full-time personnel, and would serve about 982 personnel on a rotating basis, mostly on weekends. The maximum expected use of the new facility would be about 640 members per weekend, and there would be parking for 577 privately-owned vehicles (taking into account those that would use public transportation or carpool).

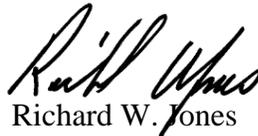
The Army's Preferred Alternative is to construct the AFRC and associated facilities at the Hougham North Tract (Attachment 1). The Hougham North Tract consists of approximately 37 acres of irregularly-shaped farmland located 0.3 mile south of the intersection of Interstate 65 and State Road 44, approximately 2 miles east of Franklin, Indiana. The site is currently zoned Industrial-Light and Residential Traditional. Based on the environmental site assessment (2008), the predominate soil type of the site is Crosby silt loam associated soils. Further preliminary

analyses using the Natural Resources Conservation Service (NRCS) web soil survey identified the site to be composed of approximately 42% Brookston silt-clay loam, 53% Crosby silt loam (0-2 % slope), 3% Crosby-Miami silt loam (2-4% slope), and 3% Miami silt loam (2-6% slope). The Miami silt loam soil type represents 1 acre of prime farmland. The other acreage is considered to be prime farmland if drained according to the web soil survey.

Although the Farmland Protection Policy Act (7 CFR Parts 657 and 658) exempts urban lands and lands that are used for national defense purposes [7 CFR 658.3(b)] from the provisions of the Farmland Protection Policy Act, we are including a Farmland Conversion Impact Rating Form (Attachment 2), for your consideration. The purpose of this letter and attached evaluation form is to request input and/or concurrence from the NRCS on the proposed federal action. A location map is enclosed that indicates the area of the proposed project (Attachment 3).

We feel the conversion of the 37 acres at the Hougham North Tract is consistent with the Farmland Protection Policy Act and look forward to your assessment. AGEISS Inc. has been contracted by the Indiana Army National Guard to assist with the environmental documentation. If you have questions or require further information, please contact Dr. Wendy Arjo at (360) 628-8748 or wendya@ageiss.com.

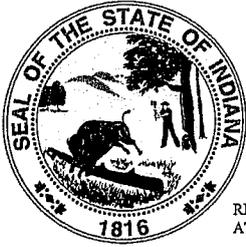
Sincerely,



Richard W. Jones
Lieutenant Colonel, Indiana Army
National Guard
Supervisory Environmental Specialist

Enclosure(s)

1. Franklin, Indiana Location Map
2. Farmland Conversion Impact Rating
3. Aerial Photograph of the Proposed Site



REPLY TO
ATTENTION OF

Environmental Office

INDIANA
JOINT FORCES HEADQUARTERS
NATIONAL GUARD
2002 SOUTH HOLT ROAD
INDIANAPOLIS, INDIANA 46241-4839



December 1, 2008

Honorable Governor Larry Nuckools
Absentee Shawnee Tribe of Oklahoma
2025 S. Gordon Cooper Dr.
Shawnee, Oklahoma 74801

SUBJECT: Environmental Planning and Section 106 Consultation for Franklin, Indiana Readiness Center

Dear Mr. Nuckools:

The National Guard Bureau (NGB) and the Indiana Army National Guard (INARNG) are preparing environmental documentation for the proposed Armed Forces Reserve Center (AFRC) near Franklin, Johnson County, Indiana (Attachment 1) as part of the restructuring of military bases recommended by the Defense Base Realignment and Closure Act (BRAC). The AFRC would be located on approximately 40 acres of undeveloped, privately owned farmland located 0.3 miles south of the intersection of Interstate 65 and State Road 44, approximately 2 miles east of Franklin, Indiana. The proposed site, known as the Hougham North Tract Site, lies between County Road 450 East and Interstate 65 (Attachment 2). Attachment 3 shows an aerial photograph of the proposed site.

The proposed AFRC building (approximately 162,616 square feet) would house eight INARNG and two United States Army Reserve (USAR) units. It would include administration, education, assembly, kitchen, library, learning center, vault, weapons simulator, physical examination, storage, maintenance training bays, and physical fitness areas for approximately 651 INARNG personnel and approximately 331 USAR personnel. Outside supporting facilities would include, but are not limited to, military and personally-owned vehicle parking, a flammable materials facility, a controlled waste facility, an unheated storage building, fencing, sidewalks, outside lighting, access roads, facility sign, helipad, and a flagpole. Attachment 4 shows the proposed Franklin AFRC site layout.

An Environmental Assessment (EA) document will evaluate the environmental, cultural, and social impacts associated with the proposed construction and operation of the Franklin AFRC, pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); and 32 CFR Part 651; as well as the NGB NEPA Manual – *Guidance on Preparing Environmental Documentation for Army National Guard Actions in Compliance with NEPA* (NGB, June 2006).

The INARNG has conducted archaeological investigations at the proposed location for the Franklin AFRC to identify historic properties. The investigations were conducted pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended (Section 106) and the (16 USC 470 et seq.), Protection of Historic Properties (36 CFR Part 800), and Army Regulation 200-4 (Cultural Resources Management). A copy of the management summary from the survey is attached (Attachment 5). Once the full archaeological report is completed, it will be available upon request.

The INARNG is requesting that you review the attached information and determine if you would like to be considered a consulting party for the EA and Section 106 processes. If so, please notify the INARNG of your interest as soon as possible by returning the enclosed pre-paid post card. In addition, if you identify any properties of traditional, sacred or religious importance in your review, please notify the INARNG as soon as possible so we can arrange further discussions with you regarding such properties.

If you respond that you would like to be a consulting party or if you have not responded to this letter by the time the archaeological reports are completed, the INARNG will forward you a copy of the archaeological report and may request to initiate Section 106 consultation based on the results of the report and/or your response to this letter.

As per Army Regulation 200-4 and other state and federal guidelines, the INARNG will protect information you provide regarding the existence of sacred or religious historic properties and the locations of Native American archaeological sites and will not make that information available to the public during the NEPA or Section 106 consultation process.

We look forward to and welcome your participation in this study. If possible, please return the enclosed post card on or before January 15, 2009 to enable us to complete this phase of the project within the scheduled timeframe. Mrs. Karstin Carmany-George is the Native American Liaison for the INARNG. Please direct any issues, questions, or concerns to her at 317-416-9223, kari.carmany@us.army.mil or at:

Camp Atterbury Joint Maneuver Training Center: CA-ENV
PO Box 5000, Bldg 609
ATTN: Mrs. Karstin Carmany-George
Edinburgh, Indiana 46124

Thank you for taking the time to review this letter. The INARNG looks forward to working with you on this and future projects.

Sincerely,



R. Martin Umberger
Major General, Indiana Army
National Guard
The Adjutant General

Enclosures

1. Franklin Map
2. Hougham North Tract
3. Aerial Photo of Proposed Site
4. Preliminary Franklin, IN AFRC Site Layout
5. Phase Ia Archaeological Survey Management Summary

Copy Furnished:

Mrs. Karstin Carmany-George, INARNG
Karen Kaniatobe, Absentee Shawnee Tribe of Oklahoma

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



January 12, 2009

Dr. Wendy Arjo
AGEISS, Inc.
5225 Deerfield Park CT, NE
Olympia, Washington 98516

Federal Agency: National Guard Bureau

Re: Request information for a proposed Armed Forces Reserve Center (AFRC) (DHPA #5466)

Dear Dr. Arjo:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated December 3, 2008 and received on December 18, 2008, for the above indicated project in Franklin, Johnson County, Indiana.

Based upon the information available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, districts, or objects listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects.

In terms of potential impact on archaeological resources, a review of our records indicates that the proposed project area is in an environmental setting that is suitable to contain archaeological resources, but has never been evaluated by a qualified archaeologist. Moreover, archaeological sites have already been recorded within one mile of the proposed project location.

Given the above, a reconnaissance level archaeological survey will be required to determine the presence or absence of archaeological resources. The survey must be done in accordance with the "Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation" (48 F.R. 44716). A description of the survey methods and results must be submitted to the Division of Historic Preservation and Archaeology for review before we can comment further (see list of qualified professional archaeologists at the DHPA website link <http://www.in.gov/dnr/historic/>).

Once the indicated information is received, the Indiana SHPO will resume identification and evaluation procedures for this project. Please keep in mind that additional information may be requested in the future.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Laura Black at (317) 232-1650 or lblack@dnr.IN.gov. If you have questions about buildings or structures please contact Chad Slider at (317) 234-5366 or cslider@dnr.IN.gov. Additionally, in all future correspondence regarding the above indicated project, please refer to DHPA #5466.

Very truly yours,

James A. Glass, Ph.D.
Deputy State Historic Preservation Officer

JAG:LRB:CWS:cws

emc: Karstin Carmany-George, Indiana Army National Guard

DNR Indiana Department of Natural Resources

Mitchell E. Daniels, Jr., Governor
Robert E. Carter, Jr., Director

Division of Historic Preservation & Archaeology • 402 W. Washington Street, W274 • Indianapolis, IN 46204-2739
Phone 317-232-1646 • Fax 317-232-0693 • dhpa@dnr.IN.gov



January 16, 2009

Richard W. Jones
Lieutenant Colonel, Indiana Army National Guard
Supervisory Environmental Specialist
2002 South Holt Road
Indianapolis, Indiana 46241-4839

Federal Agency: National Guard Bureau

Re: Phase Ia cultural resource investigation (Sewell, 12/5/08) and notification of the National Guard Bureau's finding of "no historic properties affected" for a proposed Armed Forces Reserve Center (DHPA #5466)

Dear Lt. Col. Jones:

Pursuant to Section 106 of the National Historic Preservation Act (16 U.S.C. § 470f) and 36 C.F.R. Part 800, the staff of the Indiana State Historic Preservation Officer ("Indiana SHPO") has conducted an analysis of the materials dated December 16, 2008 and received on December 23, 2008, for the above indicated project in Needham Township, Johnson County, Indiana.

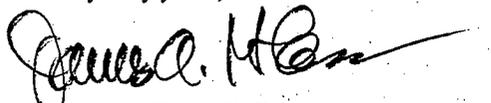
Based upon the documentation available to the staff of the Indiana SHPO, we have not identified any historic buildings, structures, districts, objects, or archaeological resources listed in or eligible for inclusion in the National Register of Historic Places within the probable area of potential effects. Site 12-Jo-594 does not appear eligible for inclusion in the National Register of Historic Places. Therefore, we concur with the archaeological report that no further archaeological investigations are necessary. Please enter the archaeological site forms into the SHAARD database so we will have it for our files.

We concur with the National Guard Bureau's December 16, 2008 finding that there are no historic buildings, structures, districts, objects, or archaeological resources within the area of potential effects that will be affected by the above indicated project.

If any concentrations of archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317) 232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.

A copy of the revised 36 C.F.R. Part 800 that went into effect on August 5, 2004, may be found on the Internet at www.achp.gov for your reference. If you have questions about archaeological issues please contact Laura Black at (317) 232-1650 or lblack@dnr.IN.gov. If you have questions about buildings or structures please contact Chad Slider at (317) 234-5366 or cslider@dnr.IN.gov.

Very truly yours,



James A. Glass, Ph.D.
Deputy State Historic Preservation Officer

JAG:LRB:CWS:cws

emc: Karstin Carmany-George, Indiana Army National Guard



United States Department of the Interior
Fish and Wildlife Service



Bloomington Field Office (ES)
620 South Walker Street
Bloomington, IN 47403-2121
Phone: (812) 334-4261 Fax: (812) 334-4273

December 19, 2008

Dr. Wendy Arjo
AGEISS, Inc.
5225 Deerfield Park Court NE
Olympia, Washington 98516

Dear Dr. Arjo:

This responds to Colonel Richard Jones' (Indiana ARNG) letter of December 3, 2008 requesting U.S. Fish and Wildlife Service (FWS) review of a proposed Armed Forces Reserve Center near Franklin in Johnson County, Indiana.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et. seq.) and are consistent with the intent of the National Environmental Policy Act of 1969, the Endangered Species Act of 1973, and the U. S. Fish and Wildlife Service's Mitigation Policy.

Based on the description, site map and aerial photograph provided in the ARNG letter, the project site consists of 40 acres of farmland adjacent to and west of I-65. The site is bordered on the west by farmland and a woodlot, on the north by suburban development, and on the south by a woodlot and borrow pit impoundment. According to the National Wetland Inventory map a large portion of the south woodlot and a small portion of the west woodlot consist of forested wetland.

The woodlots and impoundment provide habitat for migratory birds, amphibians and other forest wildlife. We recommend complete avoidance of these areas during site development, along with use of best management practices to prevent soil erosion and surface runoff of pollutants during and after construction. A minimum undisturbed buffer of 25 feet should be maintained between construction and the impoundment.

Endangered Species

The proposed project is within the range of the federally endangered Indiana bat (*Myotis sodalis*). Indiana bats hibernate in caves, then disperse to reproduce and forage in relatively undisturbed forested areas associated with water resources during spring and summer. Recent research has shown that they will inhabit fragmented landscapes with adequate forest for roosting and

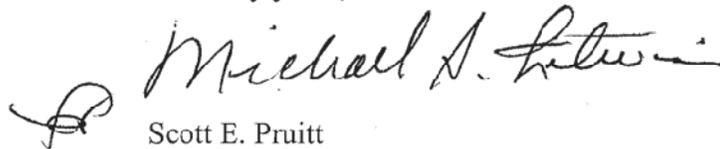
foraging. Young are raised in nursery colony roosts in trees, typically near drainageways in undeveloped areas. Like all other bat species in Indiana, the Indiana bat diet consists exclusively of insects.

There is limited summer habitat for Indiana bats present in woodlots and riparian areas near the project site. There are no current records of Indiana bats near the site but to our knowledge the area has not been surveyed. The project will not eliminate enough habitat to affect this species, but to avoid incidental take from removal of an occupied roost tree we recommend that tree-clearing be avoided during the period April 1 - September 30. If this measure is implemented, or if no tree clearing is required, we concur that the proposed project is not likely to adversely affect this listed species.

This precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If, however, new information on endangered species at the site becomes available or if project plans are changed significantly, please contact our office for further consultation.

For further discussion, please contact Mike Litwin at (812) 334-4261 ext. 205.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Michael A. Litwin", is written over the typed name "Scott E. Pruitt". To the left of the signature is a large, stylized initial "P".

Scott E. Pruitt
Field Supervisor

December 11, 2008

AGEISS, Inc.
ATTN: Dr. Wendy Arjo
5225 Deerfield Park CT, NE
Olympia, WA 98516

Dear Dr. Arjo:

I am responding to your request for information sent to John Bacone, Director, Indiana Department of Natural Resources Division of Nature Preserves, on potential environmental concerns or issues including endangered, threatened or rare (ETR) species and significant natural areas documented from the proposed Armed Forces Reserve Center near Franklin, Indiana. The Indiana Natural Heritage Data Center has been checked and there are no ETR species and significant areas documented within one mile of the project area.

The information I am providing does not preclude the requirement for further consultation with the U.S. Fish and Wildlife Service as required under Section 7 of the Endangered Species Act of 1973. You should contact the Service at their Bloomington, Indiana office.

U.S. Fish and Wildlife Service
620 South Walker St.
Bloomington, Indiana 47403-2121
(812)334-4261

At some point, you may need to contact the Department of Natural Resources' Environmental Review Coordinator so that other divisions within the department have the opportunity to review your proposal. For more information, please contact:

Department of Natural Resources
attn: Christie Stanifer
Environmental Coordinator
Division of Water
402 W. Washington Street, Room W264
Indianapolis, IN 46204
(317)232-8163

Please note that the Indiana Natural Heritage Data Center relies on the observations of many individuals for our data. In most cases, the information is not the result of comprehensive field surveys conducted at particular sites. Therefore, our statement that there are no documented significant natural features at a site should not be interpreted to mean that the site does not support special plants or animals.

Dr. Wendy Arjo

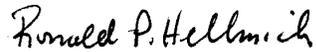
2

December 11, 2008

Due to the dynamic nature and sensitivity of the data, this information should not be used for any project other than that for which it was originally intended. It may be necessary for you to request updated material from us in order to base your planning decisions on the most current information.

Thank you for contacting the Indiana Natural Heritage Data Center. You may reach me at (317)232-8059 you have any questions or need additional information.

Sincerely,



Ronald P. Hellmich
Indiana Natural Heritage Data Center



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Indiana Water Science Center
5957 Lakeside Boulevard
Indianapolis, Indiana 46278-1996
(317) 290-3333

December 28, 2008

AGEISS Inc.
ATTN: Dr. Wendy Arjo
5225 Deerfield Park CT, NE
Olympia, WA 98516

Dr. Arjo,

This letter is in response to the intergovernmental and interagency environmental planning consultation for the proposed Armed Forces Reserve Center (AFRC) near Franklin, Indiana in the December 2008 letter from Lieutenant Colonel Richard W. Jones to James A. Stewart, Director of the U.S. Geological Survey Indiana Office. Please note that the current director of the USGS Indiana Office is William Guertal.

The following USGS information sources were consulted for details about surface-water and ground-water resources in the vicinity of the proposed AFRC near Franklin:

- the USGS National Water Information System data base records of streamflow, ground-water levels, and water-quality determinations;
- the “Hydrogeologic Atlas of Aquifers in Indiana” (USGS Water-Resources Investigations Report 92-4142); and
- the list of USGS publications about water resources in Indiana.

Specifically, a search was made for data about streamflow and water-quality in Hurricane Creek and Youngs Creek, and about unconsolidated and bedrock aquifers, ground-water levels, and ground-water quality in the vicinity of Franklin, Indiana.

Regarding surface water, the drainage area of Hurricane Creek above the confluence with Youngs Creek in Franklin, approximately 2 miles west of the proposed AFRC, is 16.4 square miles; the drainage area of Youngs Creek including Hurricane Creek, at the confluence in Franklin, is 75 square miles (“Drainage Areas of Indiana Streams”, Hoggatt, 1975). The USGS maintained a streamflow-gaging station on Youngs Creek near Edinburgh, approximately 3.5 miles south of the proposed AFRC, since 1942 (station identification 0336200). A summary of all the available streamflow data for site 0336200 is at the URL

http://waterdata.usgs.gov/nwis/nwisman/?site_no=03362000&agency_cd=USGS

A statistical summary of streamflow data for site 0336200 is at the URL

<http://in.water.usgs.gov/dvstats/htdocs/03362000.txt>

A streamflow-gaging station has not been operated by USGS for Hurricane Creek.

The USGS report, “Flood of June 7–9, 2008 in Central and Southern Indiana” (Morlock and others, 2008, at URL <http://pubs.usgs.gov/of/2008/1322/>) indicates flooding occurred in Franklin. The estimated recurrence interval for an ungaged location on Hurricane Creek in Franklin was 50–100 years. The proposed AFRC location was not part of the flood investigation.

Regarding aquifers, the unconsolidated deposits near the proposed AFRC are approximately 150 feet in thickness, consisting of glacial till with some outwash. According to the Hydrogeologic Atlas, discontinuous sand and gravel aquifers approximately 10 feet in thickness may be present within the upper 100 feet of the glacial till. There may be a potential hydrologic connection between some of the discontinuous sand and gravel and the outwash sand and gravel near Youngs Creek. Other discontinuous aquifers composed of sand may be present on the surface of the bedrock. Immediately beneath the unconsolidated deposits is Devonian and Mississippian-Age shale and the weathered upper bedrock may be an aquifer with unknown potential. Approximately 300 feet below land surface is the Silurian-Devonian carbonate bedrock aquifer which has use as a water supply. Recharge to the sand and gravel aquifers and bedrock aquifers are generally by vertical infiltration of precipitation. No USGS observation wells for recording ground-water levels have been maintained in Johnson County near Franklin.

Regarding water quality, no water-quality records in the USGS data base were found for Hurricane Creek, Youngs Creek, or ground-water wells in Johnson County near Franklin.

If you have questions about the information provided, please contact me by phone at the above number, extension 163 or by email at mrrisch@usgs.gov. Thank you for the opportunity to participate in this intergovernmental consultation.

Sincerely,



Martin R. Risch
Water Program Manager
USGS Department of Defense Earth Science Program

cc: LTC Richard W. Jones
Indiana Joint Forces Headquarters National Guard
2002 South Holt Road
Indianapolis, IN 46241-4839



United States Department of the Interior

U. S. GEOLOGICAL SURVEY

Reston, VA 20192

In Reply Refer To:
Mail Stop 423

DEC 31 2008

AGEISS Inc.
ATTN: Dr. Wendy Arjo
5225 Deerfield Park CT, NE
Olympia, WA 98516

Subject: Intergovernmental and Interagency Environmental Planning Consultation for Proposed
Armed Forces Reserve Center (AFRC) near Franklin, Indiana

Dear Dr. Arjo:

This is in response to your letter dated December 3, 2008 to Suzette Kimball, Regional Director of the Office of the U.S. Geological Survey Eastern Region, requesting environmental information to assist with the development of NEPA documents. I understand that you have already been in contact with Martin Risch, Hydrologist, at our Indiana Water Science Center (317-290-3333 x 163; mrrisch@usgs.gov). He would be the best source of relevant USGS scientific data and expertise concerning the natural resources of the project area.

Sincerely,

James F. Devine

Senior Advisor for Science Applications

Copies to:
DOI Office of Environmental Policy and Compliance
USGS Indiana Water Science Center

With regards to the construction of the Franklin Readiness Center in Johnson County, Indiana, the **United Keetoowah Band of Cherokee Indians**

Are interested in becoming a NEPA and Section 106 consulting party

Are NOT interested in becoming a NEPA and Section 106 consulting party

Are unsure of interest in becoming a NEPA and Section 106 consulting party, please send archaeological investigative report

Are interested ONLY if NAGPRA related items are located either during the archaeological investigation or inadvertently during construction

Lisa C Stopp
Print and Sign Your Name

12-12-08
Date

With regards to the construction of the Franklin Readiness Center in Johnson County, Indiana, the **Ottawa Tribe of Oklahoma**

Are interested in becoming a NEPA and Section 106 consulting party

Are NOT interested in becoming a NEPA and Section 106 consulting party

Are unsure of interest in becoming a NEPA and Section 106 consulting party, please send archaeological investigative report

Are interested ONLY if NAGPRA related items are located either during the archaeological investigation or inadvertently during construction

Rhonda Dixon Rhonda Dixon
Print and Sign Your Name

12/19/08
Date

With regards to the construction of the Franklin Readiness Center in Johnson County, Indiana, the **Hannahville Indian Community**

Are interested in becoming a NEPA and Section 106 consulting party

Are NOT interested in becoming a NEPA and Section 106 consulting party

Are unsure of interest in becoming a NEPA and Section 106 consulting party, please send archaeological investigative report

Are interested ONLY if NAGPRA related items are located either during the archaeological investigation or inadvertently during construction

Anthony Marcella
Print and Sign Your Name

12-17-08
Date

With regards to the construction of the Franklin Readiness Center in Johnson County, Indiana, the **Peoria Indian Tribe of Oklahoma**

Are interested in becoming a NEPA and Section 106 consulting party

Are NOT interested in becoming a NEPA and Section 106 consulting party

Are unsure of interest in becoming a NEPA and Section 106 consulting party, please send archaeological investigative report

Are interested ONLY if NAGPRA related items are located either during the archaeological investigation or inadvertently during construction

John P. Froman
Print and Sign Your Name

12 19 08
Date

With regards to the construction of the Franklin Readiness Center in Johnson County, Indiana, the **Eastern Shawnee Tribe of Oklahoma**

Are interested in becoming a NEPA and Section 106 consulting party

Are NOT interested in becoming a NEPA and Section 106 consulting party

Are unsure of interest in becoming a NEPA and Section 106 consulting party, please send archaeological investigative report

Are interested ONLY if NAGPRA related items are located either during the archaeological investigation or inadvertently during construction

Glenna J. Wallace 12-10-08

Print and Sign Your Name

Date

Glenna J. Wallace



Miami Tribe of Oklahoma

P.O. Box 1326 Miami, Oklahoma 74355

Ph: (918) 542-1445 Fax (918) 542-7260



December 22, 2008

Camp Atterbury Joint Maneuver Training Center: CA-ENV

P.O. Box 5000, Bldg 609

ATTN: Mrs. Karstin Carmany-George

Edinburgh, Indiana 46124

**RE: Environmental Planning and Section 106 Consultation for Franklin, Indiana
Readiness Center**

To Whom It May Concern:

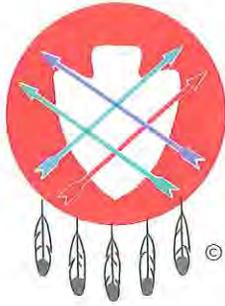
Aya, kikwesitoole. My name is Joshua Sutterfield and I am the Tribal Historic Preservation Officer for the Federally Recognized Miami Tribe of Oklahoma. In this capacity I am the Miami Nation's point of contact for all NAGPRA and Section 106 issues.

In reference to the above mentioned construction/project's, the Miami Nation is not currently aware of existing documentation directly linking specific Miami religious, cultural, or historic sites to the above referenced construction/project site(s). However, as this site(s) is/are within the aboriginal homelands of the Miami Nation, should any Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) be discovered during this or any construction project the Miami Nation requests immediate consultation with the appropriate State Historical Society or related entity.

The Miami Nation offers no objection to the proposed construction/project at this time. Again, should human remains and/or objects be uncovered please contact me at 918-542-1445, or by mail at the address listed above, to initiate consultation.

Sincerely

Joshua Sutterfield
Tribal Historic Preservation Officer
Miami Nation



PEORIA TRIBE OF INDIANS OF OKLAHOMA

118 S. Eight Tribes Trail (918) 540-2535 FAX (918) 540-2538

P.O. Box 1527

MIAMI, OKLAHOMA 74355

CHIEF
John P. Froman

SECOND CHIEF
Jason Dollarhide

December 16, 2008

Camp Atterbury Joint Maneuver Training Center: CA-ENV
Attn: Karstin Carmany-George
PO Box 5000, Bldg 609
Edinburgh, IN 46124

RE: Construction of the Franklin Readiness Center in Johnson County Indiana

Thank you for notice of the referenced project. The Peoria Tribe of Indians of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Peoria Tribe request notification and further consultation.

The Peoria Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

John P. Froman
Chief

xc: Bud Ellis, Repatriation/NAGPRA Committee Chairman

TREASURER
John Sharp

SECRETARY
Hank Downum

FIRST COUNCILMAN
Carolyn Garren

SECOND COUNCILMAN
Jenny Rampey

THIRD COUNCILMAN
Alan Goforth

Eastern Shawnee Tribe of Oklahoma

Cultural Preservation Department

P.O. Box 350, Seneca, MO 64865

918 666 2435 ext 247, rdushane@estoo.net

December 30, 2008

RE: INARNG Consultation – Franklin Readiness Center, Johnson County, IN

Karstin (Kari) Carmany-George, M.A.
Camp Atterbury, CA-ENV 609
PO Box 5000
Edinburgh, IN 46124

Dear Ms. Carmany-George,

Thank you for the communication initiating our tribe's comments on the project referenced above. After reviewing the contents of the Archaeological Report for this project we are in agreement with the findings of 'low probability of archaeological deposits at this site'. The Eastern Shawnee Tribe has no objection to the proposed construction. At this time we are unaware of any sacred sites or historical cultural resources within the proposed project area.

As with all ground disturbing activities of the INARNG, we ask that if any inadvertent discoveries are made that our tribe be contacted.

Thank you for consulting with the Eastern Shawnee Tribe.

Best regards,

Robin Dushane
Cultural Preservation Director/NAGPRA Contact

THIS IS NOT A PERMIT

**State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Water**

Early Coordination/Environmental Assessment

DNR #: ER-13683 **Request Received:** December 10, 2008

Requestor: AGEISS, Inc
Dr. Wendy Arjo
5225 Deerfield Park CT, NE
Olympia, WA 98516

Project: Proposed Armed Forces Reserve Center (AFRC) near Franklin

County/Site info: Johnson

The Indiana Department of Natural Resources has reviewed the above referenced project per your request. Our agency offers the following comments for your information and in accordance with the National Environmental Policy Act of 1969.

Regulatory Assessment: Formal approval by the Department of Natural Resources under the regulatory programs administered by the Division of Water is not required for this project.

Natural Heritage Database: The Natural Heritage Program's data have been checked. To date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project vicinity.

Fish & Wildlife Comments: The project proposes to develop infrastructure (buildings, roads, helipad, etc.) on undeveloped farm land. No site specific plans were included with the submittal, so site specific comments cannot be made at this time. Impacts to local and migratory fish, wildlife, and botanical resources should be negligible if the infrastructure is situated properly in the landscape. High density, high traffic, and high noise impacts should be avoided near the southern boundary of the property as disturbance to wildlife resources to the south and southwest of the site are much more likely.

In a highly developed and urbanized area, small patches of undeveloped land (the woodlots and excavated wetland to the south and southwest of the site) become the last remaining areas of useable habitat for local and migratory fish, wildlife, or botanical resources. Focusing development on previously disturbed areas (such as agricultural areas, vacant properties, etc.) can help preserve undisturbed areas as habitat for wildlife resources. For more information on wildlife habitat conservation, visit the Wildlife Habitat Council's (WHC) website at www.wildlifehc.org. The WHC works to increase the amount of quality wildlife habitat on corporate, private and public lands.

Fish, wildlife, and botanical resource losses as a result of this project can be minimized through implementation of the following measures.

Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.

Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.

Seed and protect all disturbed streambanks and slopes that are 3:1 or steeper with erosion control blankets (follow manufacturer's recommendations for selection and installation) or use an appropriate structural armament; seed and apply mulch on all other disturbed areas.

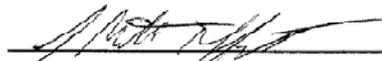
THIS IS NOT A PERMIT

**State of Indiana
DEPARTMENT OF NATURAL RESOURCES
Division of Water**

Early Coordination/Environmental Assessment

Contact Staff:

Christie L. Stanifer, Environ. Coordinator, Fish & Wildlife
Our agency appreciates this opportunity to be of service. Please do not hesitate to contact the above staff member at (317) 232-4160 or 1-877-928-3755 (toll free) if we can be of further assistance.



J. Matthew Buffington
Environmental Supervisor
Division of Fish and Wildlife

Date: June 23, 2009

Tribal Consultation Actions Regarding the Franklin RC
 Information Compiled by INARNG CRM, Karstin Carmany-George
 Date: April 16, 2009

Group Name	Date	Correspondance
17 Tribes*	Dec-08	Scoping letter with archaeo survey executive summary sent to tribes. Post card included for ease of comment
United Keetoowah Band, Hannahville Indian Tribe	Dec-08	Return post card indicating they are not ineterested in becoming consulting parties
Peoria Tribe, Ottawa Tribe	Dec-08	Return post card indicating they are only interested if NAGPRA related items are discovered on site.
Eastern Shawnee	Dec-08	Return post card indicating would like to become a consulting party
Miami Nation of Indians	Dec-08	Reply via letter with no objections to the project but want to be contacted if NAGPRA related items are discovered.
11 Tribes~	Mar-09	Letter to 11 tribes that did not respond to the EA Scoping. Letter contained CD with full archaeoloigcal report for their review and provided a postcard for easy response.
Kickapoo of Kansas	Mar-09	Letters mailed to Joe Williams and Steve Cadue were returned. INARNG CRM contacted tribe and received updated Chairperson and Culturual contacts. Original letter that was mailed in Mar 09 was email to these individuals.
Delaware Nation	Mar-09	Not interested in becoming a NEPA or 106 Consulting Party per response post card
<p>INARNG made no additional attempts were made to contact the 11 Tribes who had not responded to the Mar 09 letter. Of those 11 Tribes, 4 (Absentee Shawnee, Citizen Potawatomi, Delaware Nation, and Wyandotte) are regular participants in consultations with the INARNG. They have repeatedly, verbally, indicated that if they do not respond to a project it is because they are not interested but do not have the time to respond to our letters. The remaining 7 Tribes regularly do not respond to INARNG attempts to consult with them on various projects. There is only a small, ineligble Native American lithic scatter in the project area, which is located a consderable distance from surface water putting it in a moderately to low probability area for significant archaeological sites or sites of traditional, cultural or sacred importance. In addition, INARNG has several other projects with on-going Tribal</p> <p>Apr-09 consultation. The INARNG feels that in light of its active consultation, lack of significant archaeological desoposits; the low probability for sites of traditional, cultural, or sacred importance; and the lack of significant archaeological resources, additional attempts to contact the Tribes regarding the Franklin project are unwarrented and may distract from the INARNG's other, more significant projects.</p>		

*Absentee Shawnee, Citizen Potawatomi, Delaware Nation, Eastern Shawnee, Forest County Potawatomi, Hannahville Indian Community, Kickapoo of Kansas, Miami Tribe of Oklahoma, Peoria Indian Tribe of Okahoma, Pokagon Band of Potawatomi Indians, Prairie Band of Potawatomi, Wyandotte Tribe of Oklahoma, Kickapoo Tribe of Oklahoma, United Keetoowah Band of Cherokee, Shawnee Tribe, Nottawaseppi Huran Band, Ottawa Tribe of Oklahoma

~Absentee Shawnee, Citizen Potawatomi, Delaware Nation, Forest County Potawatomi, Kickapoo of Kansas, Pokagon Band of Potawatomi Indians, Prairie Band of Potawatomi, Wyandotte Tribe of Oklahoma, Kickapoo Tribe of Oklahoma, Shawnee Tribe, Nottawaseppi Huran Band

*Environmental Assessment for Construction of an
Armed Forces Reserve Center and
Implementation of BRAC 05 Recommendations in the
Vicinity of Greenwood and Franklin, Indiana*

APPENDIX B

ECONOMIC IMPACT FORECAST SYSTEM REPORT

This page intentionally left blank.

APPENDIX B. ECONOMIC IMPACT FORECAST SYSTEM REPORT

This appendix provides the Economic Impact Forecast System Report for the Greenwood-Franklin Proposed Action.

EIFS REPORT

PROJECT NAME

Franklin EA

STUDY AREA

18081 Johnson, IN

FORECAST INPUT

Change In Local Expenditures	\$39,000,000
Change In Civilian Employment	36
Average Income of Affected Civilian	\$0
Percent Expected to Relocate	100
Change In Military Employment	0
Average Income of Affected Military	\$0
Percent of Military Living On-post	0

FORECAST OUTPUT

Employment Multiplier	2.57
Income Multiplier	2.57
Sales Volume - Direct	\$39,000,000
Sales Volume - Induced	\$61,230,000
Sales Volume - Total	\$100,230,000 3.12%
Income - Direct	\$6,515,382
Income - Induced)	\$10,229,150
Income - Total(place of work)	\$16,744,530 0.62%
Employment - Direct	242
Employment - Induced	323
Employment - Total	565 1.11%
Local Population	90
Local Off-base Population	90 0.08%

RTV SUMMARY

	Sales Volume	Income	Employment	Population
Positive RTV	9.57 %	9.45 %	3.59 %	1.89 %
Negative RTV	-9.06 %	-7.99 %	-4.27 %	-0.96 %

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