ENvironmental Assessment

For the Proposed

35th Infantry Division Headquarters Readiness Center
Fort Leavenworth, Kansas

Prepared for:
Kansas Adjutant General’s Department
Kansas Army National Guard (KSARNG)
2800 Southwest Topeka Boulevard
Topeka, KS 66611

19 September 2013
# ENVIRONMENTAL ASSESSMENT FOR THE 35TH INFANTRY DIVISION HEADQUARTERS READINESS CENTER AT
FORT LEAVENWORTH, KANSAS

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<tr>
<td>AAFES</td>
<td>Army/Air Force Exchange Service</td>
</tr>
<tr>
<td>ACP</td>
<td>Access Control Point</td>
</tr>
<tr>
<td>ACSR</td>
<td>Aluminum Conductor Steel Reinforced</td>
</tr>
<tr>
<td>ADA</td>
<td>Americans with Disabilities Act</td>
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<tr>
<td>AIRFA</td>
<td>American Indian Religious Freedom Act</td>
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<td>AQCR</td>
<td>Air Quality Control Regions</td>
</tr>
<tr>
<td>ARNG</td>
<td>Army National Guard</td>
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<tr>
<td>ARPA</td>
<td>Archaeological Resources Protection Act</td>
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<tr>
<td>AT/FP</td>
<td>Antiterrorism/Force Protection</td>
</tr>
<tr>
<td>BCTC</td>
<td>Battle Command Training Center</td>
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<tr>
<td>BMP’s</td>
<td>Best Management Practices</td>
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<tr>
<td>CAA</td>
<td>Clean Air Act</td>
</tr>
<tr>
<td>CAC</td>
<td>Combined Arms Center</td>
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<tr>
<td>CEQ</td>
<td>Council on Environmental Quality</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>COA</td>
<td>Course of Action</td>
</tr>
<tr>
<td>CWA</td>
<td>Clean Water Act</td>
</tr>
<tr>
<td>DA</td>
<td>Department of the Army</td>
</tr>
<tr>
<td>DeCA</td>
<td>Defense Commissary Agency</td>
</tr>
<tr>
<td>DIS ENV DIV</td>
<td>Directorate of Installation Support Environmental Division</td>
</tr>
<tr>
<td>DoD</td>
<td>Department of Defense</td>
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<tr>
<td>DOT</td>
<td>Department of Transportation (Kansas – KDOT)</td>
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<tr>
<td>EA</td>
<td>Environmental Assessment</td>
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<tr>
<td>EIS</td>
<td>Environmental Impact Statement</td>
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<tr>
<td>ENMP</td>
<td>Environmental Noise Management Plan</td>
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<tr>
<td>EPA</td>
<td>United States Environmental Protection Agency</td>
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<tr>
<td>ESA</td>
<td>Endangered Species Act</td>
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<td>FEMA</td>
<td>Federal Emergency Management Authority</td>
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<tr>
<td>FIRM</td>
<td>Flood Insurance Rate Map</td>
</tr>
<tr>
<td>FLMR</td>
<td>Fort Leavenworth Military Reservation</td>
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<tr>
<td>FNSI</td>
<td>Finding of No Significant Impact</td>
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<tr>
<td>FPPA</td>
<td>Farmland Protection Policy Act</td>
</tr>
<tr>
<td>HWMP</td>
<td>Hazardous Waste Management Plan</td>
</tr>
<tr>
<td>ICRMP</td>
<td>Integrated Cultural Resources Management Plan</td>
</tr>
<tr>
<td>IES</td>
<td>Institute of Education Sciences</td>
</tr>
<tr>
<td>IIICEP</td>
<td>Intergovernmental and Interagency Coordination of Environmental Planning</td>
</tr>
<tr>
<td>INRMP</td>
<td>Integrated Natural Resources Management Plan</td>
</tr>
<tr>
<td>KBS</td>
<td>Kansas Biological Survey</td>
</tr>
<tr>
<td>KCCED</td>
<td>Kansas Center for Community Economic Development</td>
</tr>
<tr>
<td>KDHE</td>
<td>Kansas Department of Health and Environment</td>
</tr>
<tr>
<td>KDOT</td>
<td>Kansas Department of Transportation</td>
</tr>
<tr>
<td>KDWPT</td>
<td>Kansas Department of Wildlife, Parks, and Tourism</td>
</tr>
</tbody>
</table>
KPL  Kansas Power and Light
KSARNG  Kansas Army National Guard
MBTA  Migratory Bird Treaty Act
MOA  Memorandum of Agreement (per 36 CFR 800)
MTC  Mission Training Command
NAAQS  National Ambient Air Quality Standards
NAC  Native American Consultation
NAF  Non-appropriated Fund
NAGPRA  Native American Graves Protection and Repatriation Act
NAI  Natural Areas Inventory
NEPA  National Environmental Policy Act of 1969, as amended
NGB  National Guard Bureau
NHLD  National Historic Landmark District
NHPA  National Historic Preservation Act of 1966, as amended
NOI  Notice of Intent
NPDES  National Pollutant Discharge Elimination System
NRCS  National Resources Conservation Service
NRHP  National Register of Historic Places
POV  Privately-Owned Vehicles
PPA  Pollution Prevention Act
RCRA  Resource Conservation and Recovery Act
ROI  Region of Influence
SDP  Site Development Plan
SHPO  State Historic Preservation Officer
SINC  Species in Need of Conservation
SPCCP  Spill Prevention Control and Countermeasure Plan
SWP3  Storm Water Pollution Prevention Plan
TAC  Tactical Command Post
TAG  The Adjutant General
TCP  Traditional Cultural Properties
USACE  U.S. Army Corps of Engineers
USDA  U.S. Department of Agriculture
USEPA  U.S. Environmental Protection Agency
USFWS  U.S. Fish and Wildlife Service
1.0 PURPOSE OF AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

An Environmental Assessment (EA) has been prepared for the proposed development of a new Readiness Center to be operated by the 35th Infantry Division Headquarters (35ID HQ; Division Headquarters) of the Kansas Army National Guard (KSARNG) located at Fort Leavenworth, Kansas in Fiscal Year 2015. The KSARNG currently utilizes approximately 42-acres in the southeast portion of the Fort Leavenworth Military Installation. This 42-acre site of Fort Leavenworth is also utilized by the National Guard Bureau (NGB) Mission Training Complex (MTC), an existing complex which hosts National Guard Division Warfighter Exercises and Brigade Training Seminars.

Pursuant to Department of Defense (DoD) Directive 5105.77, NGB, dated 21 May 2008, the NGB serves as the principal advisor on matters involving the ARNG, and is responsible for implementing DoD guidance on the structure and strength authorizations of the ARNG. The NGB is responsible for ensuring that ARNG activities are performed in accordance with applicable policies and regulations. As such, the NGB is the lead federal agency responsible for preparation of NEPA-compliant documentation on projects for which the KSARNG is the proponent. In that capacity, the NGB is ultimately responsible for environmental analyses and documentation; however, the local responsibility for NEPA document preparation falls upon the KSARNG (DoD Directive 5015.77).

This EA analyzes and documents environmental effects associated with the KSARNG’s Proposed Action at the 35ID HQ.

This EA is intended to promote public participation and provide input into the decision-making process of the Proposed Action. The EA presents information on the Proposed Action, its alternatives, a description of the affected environment, and an analysis of potential environmental, cultural and socioeconomic impacts.

All persons and organizations having a potential interest in the proposed action, including Native American groups, and minority, low income or disadvantaged individuals are urged to participate in the decision making process. The US Army Fort Leavenworth Military Reservation (FLMR) has reviewed this EA and provided revisions directly in the text of earlier versions of this EA.

The preparation of this EA was coordinated with appropriate Federal, State and local agencies. Copies of agency correspondence are provided in Appendix A. In addition, agency and public input will be obtained during a public comment period. The public comment period will be held following completion of the EA. The FNSI would be co-signed by the US Army.

1.2 Purpose and Need

The KSARNG is planning a new Readiness Center for the 35ID HQ to be sited near the existing Readiness Center which it shares with the NGB MTC, formerly known as the Battle Command
Training Center (BCTC). The purpose of this project is to provide the 35ID HQ a new facility with the greatest efficiency and lowest overall costs at the same licensed area as the MTC. Currently, the site offers only enough area for one of the units to fulfill their mission requirements; the majority of the existing facilities are fitted to support the MTC mission.

The current facilities at the site were built in 1990, and the 35ID HQ occupies 13,000 square-feet or 11% of its authorized space at FLMR. Prior to 1990, the Headquarters were located in buildings around Fort Leavenworth with inadequate storage space, such as an auto-body shop or old horse stables. The mission of Division Headquarters is to provide tactical command and serve as the Homeland Security Command Post during natural disasters or emergencies. The current facility consists of an arrangement of small offices and numerous hallways, resulting in a workspace not conducive to a collaborative and cohesive Division Headquarters. According to the Space Authorization Specific to Headquarters Design Guide 2-4.10.1 of 415-1 DG 1 June 2011, these facilities are out-of-date, lack infrastructure, consume large quantities of energy, and would require major alterations to meet the needs of the Division Headquarters. According to the Commander-Based Status Report of 2009, the current Division Headquarter facilities are rated “amber” and “red” by a recent Installation Status Report Team, justifying the need to provide new facilities.

In summary, the Proposed Action of building a new Readiness Center for the 35ID Headquarters is needed to increase overall efficiency, maximize return on costs, and to meet the mission objectives of the 35ID Headquarters by providing a modernized facility. The Proposed Action is being proposed because the 35th is currently operating at a deficit for functional area. There is no office space for mobilization soldiers. Warfighting functions are currently crammed into open classrooms, there is no assembly hall, and soldiers sit on the floor in hallways and sometimes bring folding tables and chairs from home to have a work space.

1.3 Scope of the EA

The purpose of this EA is to inform decision-makers and the public of the likely environmental consequences of the Proposed Action and alternatives, and to solicit input from the public and regulators concerning implementation of the Proposed Action. This EA includes evaluation of potential environmental, cultural, and socioeconomic impacts to resources within the 35 ID HQ Readiness Center and its vicinity that could result from the construction and operation of the proposed 35 ID HQ Readiness Center.

The outline and content of this EA have been prepared in accordance with the guidelines provided in the National Guard Bureau publication Guidance on Preparing Environmental Documentation for Army National Guard Actions in Compliance with the National Environmental Policy Act (NEPA) of 1969 (NGB NEPA Handbook). This EA considers the direct, indirect, and cumulative environmental impacts from implementation of the proposed 35ID HQ Readiness Center at Fort Leavenworth, including parking facilities and other supporting facilities. The scope of this EA includes descriptions and evaluation of two alternatives, summarized as follows:
Alternative 1: Proposed Action – Implement the Proposed Action as defined in Section 2.2 to fulfill the assigned mission requirements of the KSARNG.

Alternative 2: No Action Alternative – Continue with operations as currently conducted; maintain the status-quo and do not implement the Proposed Action.

A detailed description of the Proposed Action is presented in Section 2.2. A description of the No Action Alternative, as well as a description of alternatives eliminated from detailed analysis is provided in Section 2.3. The No Action alternative provides a baseline by which to compare the potential impacts of the Proposed Action, as required by federal law.

An interdisciplinary team of environmental scientists, planners, engineers, archaeologists, historians, biologists and military technicians has reviewed the Proposed Action in consideration of existing conditions and has identified potential beneficial and adverse effects associated with the project. Potential environmental impacts to the following areas are addressed in the scope of this EA: land use, air quality, noise, geology, topography, soils, water resources, biological resources cultural resources, socioeconomics, environmental justice, infrastructure, and hazardous and toxic materials/wastes.

1.4 Decision-making

The KSARNG is deciding the location of a new armory, as well as the design, number of staff served, and parking. If this EA determines that the Proposed Action would result in significant impacts, the KSARNG and NGB could determine appropriate measures to reduce impacts to a level below significant, issue a Notice of Intent to prepare an EIS, or abandon the Proposed Action. The KSARNG and NGB may identify areas where mitigation measures would be applicable in supporting the NGB’s environmental stewardship responsibilities. The decision to proceed with development of the proposed 35ID HQ Readiness Center would be based on strategic, operational, environmental and other considerations, including the results of this EA.

1.5 Public and Agency Involvement

Examination of the views and recommendations of all interested persons enables better decision making. As such, the KSARNG encourages public participation in the NEPA process. In accordance with both the Intergovernmental and Interagency Coordination of Environmental Planning (IICEP) and Native American Consultation (NAC) processes, all agencies, organizations, federally recognized Native American Tribes and members of the public having an interest in the Proposed Action are invited to participate in the decision-making process. Environmental compliance documents 40 CFR §1506.6, 32 CFR §651.47 and section 2.3.1 of the 2011 NGB NEPA Handbook were reviewed to ensure that they identify and coordinate with, all agencies, organizations and individuals that may be interested in or affected by this proposal.

An information request letter was mailed to government agencies, organizations and Native American Tribes to obtain information concerning the project area and to identify potential issues. A summary of agencies and individuals consulted is presented in Section 9.0 of this document, while a copy of the information request letter is presented in Appendix A.
Public participation in the preparation of this EA is guided by 32 CFR Part 651, *Environmental Analysis of Army Actions*. The Final EA and Draft FNSI would be made available for a 30-day comment period. The KSARNG would consider any further comments submitted by agencies, organizations, or members of the public. Once the final review period is completed, the KSARNG would, if appropriate, execute the FNSI and implement the Proposed Action.

### 1.6 Related NEPA, Environmental, and Other Documents and Processes

Numerous environmental documents have been prepared that address activities related to the Proposed Action, as discussed in this EA. The following documents contain information used in the preparation of the EA:

- *Environmental Assessment, New Battle Command Training Center (BCTC) Facility*, Fort Leavenworth, Kansas, prepared for the Kansas Army National Guard by Jacobs, June 2010 [this document was not finalized and is included strictly for reference purposes].
- *Environmental Baseline Survey No. 38-EH-0AWC-09 for the Battle Command Training Center, Fort Leavenworth, Kansas*, prepared for the Kansas Army National Guard by the U.S. Army Center for Health Promotion and Preventative Medicine (USACHPPM), 29 July 2009.
- *35th Infantry Division Headquarters Readiness Center, Project Planning Document – Charrette*, prepared for the Kansas Army National Guard by Burns & McDonnell, 8 April 2012.
- Phase 1, 2 and 3 Archeological Investigations at Fort Leavenworth, Kansas, prepared for the U.S. Army Corps of Engineers by American Resources Group, Ltd., 1988.

### 1.7 Regulatory Framework

This EA has been prepared in compliance with the National Environmental Policy Act of 1969, as implemented by the President's Council on Environmental Quality (CEQ) regulations (40 Code of Federal Regulations (CFR) 1500 *et. seq.*), and 32 CFR Part 651, *Environmental Analysis of Army Actions*. The EA has been prepared following the guidelines set forth by the National Guard Bureau (NGB) NEPA Handbook (Army National Guard 2011). If the analysis presented in the EA indicates that implementation of the Proposed Action would not result in significant environmental impacts, a Finding of No Significant Impact (FNSI) would be prepared. A FNSI briefly presents why a Proposed Action would not have a significant effect on the environment and why an Environmental Impact Statement (EIS) is unnecessary. If significant environmental issues result that cannot be mitigated to insignificance, either an EIS would be required or the Proposed Action would be abandoned and no action would be taken.

In addressing environmental considerations, the NGB is guided by relevant statutes (and their implementing regulations) and Executive Orders that establish standards and provide guidance
on environmental and natural resources management and planning. This EA addresses all applicable laws including, but not limited to, the following:

- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Endangered Species Act (ESA)
- National Historic Preservation Act (NHPA)
- Archaeological Resources Protection Act (ARPA)
- Resource Conservation and Recovery Act (RCRA)
- Pollution Prevention Act (PPA)
- Migratory Bird Treaty Act (MBTA)
2.0 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

This section describes the KSARNG’s Proposed Action (Preferred Action Alternative) for supplying the 35ID HQ with a new Readiness Center capable of supporting mission requirements. As described in Section 1.2, the new Readiness Center facility is needed by the 35ID HQ to increase overall efficiency, maximize return on costs, and to meet the mission objectives of the Division Headquarters.

The KSARNG conducted a Project Planning Charrette in March 2012 (Burns & McDonnell 2012) with the following primary objectives for planning the 35ID Readiness Center:

1. Identify the operating functions and space requirements needed by the 35ID HQ.
2. Develop concept level parametric cost estimates.
3. Select the best location for the new Readiness Center.
4. Provide schematic plans and visioning images of the new facility.

Descriptions of the Proposed Action and alternatives resulting from the project planning phase are provided in the following sections of this chapter.

2.2 Proposed Action

The Proposed Action is to construct a new Readiness Center in Fiscal Year 2015 to support routine operations, and mobilization of some or all of the 35ID HQ and its subordinate units which are currently stationed across the four-state area of Illinois, Missouri, Nebraska, and Kansas. The new Readiness Center shall provide adequate space to support in excess of 270 soldiers for regularly scheduled weekend drills, in addition to year-round Annual Training (AT) and planning seminars with the ability to support the entire Division Headquarters strength of 731 soldiers that would meet at the proposed facility multiple times per year. Elements of the Proposed Action are shown in Figure 2, Site Concept Map, and are described as follows:

- Construct, occupy, and operate an approximately 120,450 square-foot Readiness Center facility at the current privately owned vehicle (POV) parking lot located south of Tice Hall. The facility would be designed and constructed to achieve a U.S. Green Building Council “Leadership in Energy and Environmental Design (LEED) Silver Certification Level”. LEED provides the standard for environmentally sustainable construction. The new Readiness Center would be a high performance building, promote low maintenance through the use of durable materials for construction, and would meet Americans with Disabilities Act (ADA) requirements. Antiterrorism/force protection (AT/FP) would be incorporated in the design of the proposed Readiness Center. Building design standards from NRG 415-10 Army National Guard Facilities Construction, NGB PAM 415-12, Army National Guard Facilities Allowances, and the 5 Jan 2006 Assistant Secretary of the Army Installations and Environment Memorandum entitled “Sustainable Design and Development Policy Update – SPiRiT to LEED Transition” were also incorporated in the design.
• Construct a 62 space POV parking lot immediately west of the proposed Readiness Center facility, along Sherman Avenue.

• Construct a 500 space POV parking area, in an approximate five acre area north of Greenlief Hall. Currently, the 35th ID uses MTC parking on weekend drills due to a lack of adequate parking. The proposed parking area would give the allotted spaces to MTC and the 35th ID.

• Construct access roads and entry points to the new Readiness Center facility and POV parking areas.

• Implement stormwater and soil erosion management controls in accordance with applicable Federal and State laws to control erosion and sedimentation during construction activities.

• Implement Best Management Practices (BMPs) as described throughout Section 4.0 and summarized in Section 4.13.

2.3 Alternatives Considered

NEPA, CEQ regulations and 32 CFR Part 651 requires Federal agencies to consider reasonable alternatives to a Proposed Action. The development and consideration of alternatives helps identify and avoid impacts while also identifying reasonable ways to achieve the stated purpose and need. An alternative must be considered reasonable to warrant detailed evaluation. This section discusses the development and screening of considered alternatives, addresses alternatives to the Proposed Action and describes the No Action.

2.3.1 Alternatives Development (Screening Criteria)

Alternatives to implement the Proposed Action were screened using the following criteria:

1. The alternative must provide the 35ID HQ with a modernized facility capable of supporting the Division’s mission objectives.

2. The alternative must satisfy the Unified Facilities Criteria for Minimum Antiterrorism Standards for Buildings (UFC 4-010-01), including the ability to achieve antiterrorism/force protection requirements. The proposed project has been coordinated with the installation antiterrorism plan. Risk and threat analysis have been performed in accordance with DA Pam 190-51 and TM 5-853-1, respectively. Only protective measures in UFC 4-010-01 are required and are included in the description of construction and cost estimates.

3. The site must be suitable for construction without significant impacts to natural environment, cultural resources, aesthetic value, or other construction constraints that would unreasonably restrict development or result in exorbitant construction costs.

4. Implementation of the Proposed Action must not result in adverse impacts to the existing Fort Leavenworth operations.
### Table 2-1: Screening Criteria Comparison Matrix

<table>
<thead>
<tr>
<th>Screening Criteria</th>
<th>No Action Alternative</th>
<th>Preferred Action Alternative</th>
<th>Eliminated Alternative - Northern Site</th>
<th>Eliminated Alternative - Off-Site</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Must provide 35ID HQ with modernized facility capable of supporting Division’s mission objectives</strong></td>
<td>Does not provide modernized facility capable of supporting mission objectives.</td>
<td>Provides modernized facility capable of supporting mission objectives.</td>
<td>Provides modernized facility capable of supporting mission objectives.</td>
<td>Provides modernized facility capable of supporting mission objectives.</td>
</tr>
<tr>
<td><strong>Must satisfy UFC 4-010-01, including ability to achieve antiterrorism/force protection requirements</strong></td>
<td>Does not satisfy UFC 4-010-01</td>
<td>Satisfies UFC 4-010-01</td>
<td>Satisfies UFC 4-010-01</td>
<td>Satisfies UFC 4-010-01</td>
</tr>
<tr>
<td>Suitable for construction without significant impacts to natural environment, cultural resources, aesthetic value, or other construction constraints; does not result in exorbitant construction costs</td>
<td>No impact to natural environment; no construction costs.</td>
<td>Short- and long-term, less-than-significant adverse impacts.</td>
<td>Potentially significant impacts to natural environment, particularly to biological resources.</td>
<td>Short- and long-term, less-than-significant adverse impacts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Potential for inadvertent discoveries of cultural resources during construction.</td>
<td>Potential for inadvertent discoveries of cultural resources during construction.</td>
<td>Undesirable location within view-shed of a National Historic Landmark.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Long-term positive impact through development of the site in consonance with FLMR plans and zoning, as well as improved use of the site by the 35ID HQ.</td>
<td>Unfavorable due to forested characteristics of site.</td>
<td>Short-term, less-than-significant adverse impact to soils during construction through grading the majority of the site.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alternative does not result in significant construction costs.</td>
<td>Alternative results in significant construction costs.</td>
<td>Alternative results in significant construction costs.</td>
</tr>
<tr>
<td><strong>Must not result in adverse impacts to the existing Fort Leavenworth operations</strong></td>
<td>No impact to existing Fort Leavenworth operations.</td>
<td>No impact to existing Fort Leavenworth operations.</td>
<td>No impact to existing Fort Leavenworth operations.</td>
<td>Minor impact to existing Fort Leavenworth operations.</td>
</tr>
</tbody>
</table>

**2.3.2 Evaluated Alternatives**

**Preferred Action Alternative (Proposed Action)**

Under this alternative, the 35ID Readiness Center facility would be constructed as discussed in Section 2.2. The KSARNG identified this to be the Preferred Action Alternative because it best meets the screening criteria set forth in Section 2.3.1 and meets the project purpose and need discussed in Section 1.2.
No Action Alternative
The No Action Alternative would maintain the status-quo at the site and the KSARNG would not develop a new Readiness Center for the 35ID HQ. This alternative would fail to meet the screening criteria set forth in Section 2.3.1. Implementation of the No Action Alternative would result in the personnel of the 35ID HQ to continue operations without reducing operating costs or improving efficiency.

Under the No Action Alternative, the purpose and need for the Proposed Action would not be met. However, the analysis of a No Action Alternative is required by CEQ Regulations and serves as the benchmark against which the environmental, cultural, and socioeconomic effects of the Proposed Action and reasonable alternatives can be evaluated.

2.3.3 Alternatives Eliminated from Further Consideration

Northern Site
The northern portion of the KSARNG site at Fort Leavenworth was also considered for the location of the main 35ID HQ Readiness Center Facility. Referred to as the “North Site”, this alternative evaluated building the Readiness Center north of the Greenlief Hall Parking lot in an existing forested site. Benefits of the North Site include its location on undeveloped land, resulting in no need to remove of relocate existing infrastructure and allowing for unimpeded expandability, should the need arise for future growth of the Readiness Center. However, the existing grade change of the North Site relative to Sherman Avenue and Greenlief Hall is significant and the project area would be in close proximity to Corral Creek. The forested characteristics of the North Site, coupled with the significant change in grade from existing roadways and facilities made this alternative economically prohibitive due to the potential construction costs associated with site clearing and grading. Additionally, potential significant impacts to Corral Creek associated with this alternative were considered undesirable.

Off-Site
Prior to evaluating the Fort Leavenworth site, four sites were evaluated in the Lansing and Leavenworth, Kansas areas to be used for the 35ID HQ and possible joint agency facilities. Potential Lansing sites were considered undesirable due to access restraints causing large military vehicles to pass through a city park to reach the proposed Readiness Center facility. Property evaluated in Leavenworth was also determined undesirable to its location within a viewshed of a National Historic Landmark. Two additional locations in Kansas City and Wyandotte County, Kansas were discussed early in the planning process. Each of them was found to be not feasible and not supportable because of their locations and cost of purchase.

The above represents the analysis the KSARNG undertook to apply the screening criteria and define the reasonable alternatives to be considered in this EA. The KSARNG does not consider the alternatives listed above to be reasonable alternatives at this time, unless otherwise noted for the reasons listed. Accordingly, these alternatives have been eliminated from further consideration and are not carried forward for detailed analysis in this EA.

2.3.4 Alternatives’ Impacts Comparison Matrix
A summary matrix of the potential impacts of the Preferred Action Alternative (Proposed Action), No Action Alternative, and eliminated alternatives is provided below in Table 2-2.
<table>
<thead>
<tr>
<th>Technical Resource Area</th>
<th>No Action Alternative</th>
<th>Preferred Action Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic Setting and Location</td>
<td>No impact attributable to KSARNG action.</td>
<td>Less-than-significant, long-term, adverse impact through removal of vegetative cover on the site and alteration of the site's topography to support proposed 500 space POV parking lot area.</td>
</tr>
<tr>
<td>Land Use</td>
<td>No impact attributable to KSARNG action.</td>
<td>Long-term positive impact through development of the site in consonance with FLMR plans and zoning, as well as improved use of the site by the 35ID HQ.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short-term, less-than-significant adverse impact due to the potential for dust generation and emissions from construction activities. Would be reduced with implementation of BMPs.</td>
</tr>
<tr>
<td>Noise</td>
<td>No impact attributable to KSARNG action.</td>
<td>Potential short-term, less-than-significant adverse impact due to the potential for noise generation from construction activities.</td>
</tr>
<tr>
<td>Geology, Topography, and Soils</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short-term, less-than-significant adverse impact to soils during construction through grading the majority of the site. Impacts would be further reduced with implementation of BMPs.</td>
</tr>
<tr>
<td>Water Resources</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short-term, less-than-significant adverse impacts to offsite surface waters due to soil erosion and consequent sedimentation during construction. Would be reduced with implementation of BMPs.</td>
</tr>
<tr>
<td>Biological Resources</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short- and long-term, less-than-significant adverse impacts to biological resources through habitat conversion. Would be reduced with implementation of BMPs.</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>No impact attributable to KSARNG action.</td>
<td>Potential for inadvertent discoveries of cultural resources during construction. Would be reduced with implementation of BMPs.</td>
</tr>
<tr>
<td>Socioeconomics (including Environmental Justice and Protection of Children)</td>
<td>No impact attributable to KSARNG action</td>
<td>Short-term positive socioeconomic impacts due to creation of construction jobs and additional local spending and revenue during construction.</td>
</tr>
<tr>
<td>Utilities</td>
<td>No impact attributable to KSARNG action.</td>
<td>Less-than-significant adverse impacts during increased onsite training due to increase in demand for utility capacity and services. Would be reduced with implementation of BMPs. Anticipated operational utility demand decrease due to LEED-Certified Readiness Center facility.</td>
</tr>
<tr>
<td>Transportation and Traffic</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short- and long-term, less-than-significant adverse traffic impacts due to construction traffic and increased operational traffic during weekend training events. Would be reduced with implementation of BMPs.</td>
</tr>
</tbody>
</table>
Table 2-2: Alternative Comparison Matrix

<table>
<thead>
<tr>
<th>Technical Resource Area</th>
<th>No Action Alternative</th>
<th>Preferred Action Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous and Toxic Materials/ Wastes</td>
<td>No impact attributable to KSARNG action.</td>
<td>Short-term, less-than-significant adverse impacts due to construction activities. Would be controlled through ongoing regulatory compliance and BMPs.</td>
</tr>
</tbody>
</table>
3.0 AFFECTED ENVIRONMENT

This section presents a discussion of the current environmental conditions that would be affected if the Proposed Action was implemented. Only those environmental resources that would potentially be affected by the Proposed Action, or are of public concern, are included in this section; affected environmental resources are analyzed further in Section 4.0, Environmental Consequences. As set forth in Section 1.3, per 40 CFR 1501.7(a)(3), this EA addresses a scope of potentially impacted environmental resources including land use, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics, environmental justice, infrastructure and hazardous and toxic materials/waste. The following environmental resources were deemed to be unaffected by the Proposed Action and were not examined in detail: aesthetics and visual resources, and prime farmland. These resources are described in Section 3.13.

3.1 Location Description

Fort Leavenworth is located immediately north of downtown Leavenworth, Kansas at the intersection of Metropolitan and Sherman Avenues. The oldest continuously operating military installation west of the Mississippi River, Fort Leavenworth is noted for its campus setting, open green spaces and home of the U.S. Army’s Combined Arms Center (CAC). The CAC serves as a major subordinate headquarters of the U.S. Army Training and Doctrine Command and is often referred to as the “Intellectual Center of the Army”. Since 1827, CAC and its predecessor organizations have been engaged in the primary mission of preparing the Army and its leaders for war. The CAC’s mission involves leader development, collective training, Army doctrine, and battle command (current and future). In addition, the U.S. Disciplinary Barracks are also located at Fort Leavenworth and serve as the only maximum security prison operated by the DoD. Lastly, the Fort Leavenworth Garrison supports numerous tenant organizations that directly and indirectly relate to the functions of the CAC, including the Battle Command Training Center (BCTC). The KSARNG recently ended a 25-year lease that was initiated in 1985 and, as of 2010, signed a new 5-year agreement to work on a 12-acre land expansion that will be included in the 2015 lease that is expected to be drawn for 20 years.

Fort Leavenworth is located within the transition of the humid subtropical climate and humid continental climate zones and experiences hot, humid summers and cold, drier winters. Temperatures range from an average low of 19 degrees Fahrenheit (°F) to an average high of 90°F, resulting in an overall average of 55°F. In a normal year, the Fort Leavenworth vicinity receives approximately 43 inches of precipitation, with annual snowfall averaging 16 inches.

According to estimates in 2000, Fort Leavenworth is comprised of approximately 5,634 acres. Located in the southeast portion of Fort Leavenworth on approximately 54 acres, the KSARNG operates the MTC complex, which is bordered on the south by the City of Leavenworth. The Fort Leavenworth Army Base borders the project area to the north and west, while right-of-way owned by the Union Pacific Railroad and property of the City of Leavenworth Wastewater...
Treatment Facility form the eastern property boundary. The Missouri River is located east of the Union Pacific Railroad right-of-way.

The following discussion contains a description of the existing environmental conditions of the Proposed Action project area that would be affected by implementation of the Proposed Action. Environmental resources that could be affected by the Proposed Action or are of public concern are analyzed in detail under Section 4.0 Environmental Consequences of this EA.

### 3.2 Land Use

The 35ID HQ is located in Leavenworth County, immediately west of the Missouri River and approximately 0.7 miles north of downtown Leavenworth, Kansas. Although the project area is located within Leavenworth City Limits, the City of Leavenworth has not zoned areas north of Metropolitan Avenue, which include Fort Leavenworth properties and the 35ID HQ. There is no City of Leavenworth code enforcement for Fort Leavenworth properties, including the 35ID HQ.

Initial review of the Proposed Action with respect to the Land Use revealed that the site of the proposed 35ID HQ Readiness Center is located within a compatible land use area. The site proposed for the Readiness Center is currently used for parking by MTC operations while the proposed 500 POV parking lot area is comprised of approximately five acres of undeveloped upland woodlands. The proposed development is consistent with the types of development and activities conducted within proximate areas.

Potential land use impacts are not expected to occur as a result of the Proposed Action and further analysis is not included in this EA.

### 3.3 Air Quality

Air quality is determined within regional boundaries and by pollutant concentration guidelines as defined and enforced by the United States Environmental Protection Agency (EPA) and state agencies. The Clean Air Act (CAA), as amended in 1990, provides a comprehensive national program with the goal of reducing the levels of pollutants in the ambient air. Pursuant to the CAA, the EPA has established National Ambient Air Quality Standards (NAAQS) for ambient air concentrations of the criteria air pollutants (sulfur dioxide, carbon monoxide, ozone, nitrogen oxides, lead, and particulate matter) intended to protect the public health and welfare.

Sensitive receptors in the vicinity of the propose project include Patton Junior High School, located approximately 0.25-mile west; Eisenhower Elementary School, located approximately 0.32 mile northwest; Earl M. Lawson Elementary School, located approximately 0.40 mile southwest; and Cornerstone Church, located approximately 0.50 mile southwest. The impact of the proposed project to sensitive receptors in the vicinity of the project area would consist of short-term, less-than-significant adverse impacts due to the potential for dust generation and emissions from construction activities. These impacts would be reduced with implementation of BMPs.

Air quality at Fort Leavenworth is regulated by the Kansas Department of Health and Environment (KDHE), as well as Army Regulation 200-1 (AR200-1). At present time, the 35ID
HQ, Fort Leavenworth and Leavenworth County are in NAAQS attainment for all criteria ambient air pollutants (USEPA 2012a). Examples of activities that could potentially cause changes in air quality at Fort Leavenworth include construction of new facilities, modification of existing facilities, increases in military operations, or changes in military equipment.

3.4 Noise

Although minimal, the main sources of noise at Fort Leavenworth and the surrounding area is vehicular traffic, normal operation for the heating, ventilation, and air conditioning systems, lawn maintenance equipment, and general maintenance of streets and sidewalks. The U.S. Army has established environmental noise management plans (ENMP) to protect the general public from noise impacts by monitoring noise levels. The two primary contributors of noise at military installations are aircraft operations, and weapons training and qualification. Fort Leavenworth does not currently have any assigned military aircraft and has only one small-arms weapons firing range. The installation does not cause adverse noise impacts on either on-post or surrounding community land uses, and therefore, according to Chapter 14 of the AR 200-1, an ENMP is not required.

Sensitive receptors in the vicinity of the propose project include Patton Junior High School, located approximately 0.25-mile west; Eisenhower Elementary School, located approximately 0.32 mile northwest; Earl M. Lawson Elementary School, located approximately 0.40 mile southwest; and Cornerstone Church, located approximately 0.50 mile southwest. However, the sensitive receptors are buffered by densely wooded vegetation.

3.5 Geology, Topography, and Soils

3.5.1 Geologic and Topographic Conditions

Fort Leavenworth is located in the Glaciated Region physiographic province (Kansas Geological Survey 2005). Upland, bottomland and transitional areas all occur on Fort Leavenworth property, which is typical of the vicinity. The topography of the proposed Readiness Center site is moderately hilly, with slopes steeper than eight percent existing at the extreme north end of the site and in the immediate area of Corral Creek. Elevations of the site range from approximately 770 to 830 feet (USGS 1984).

3.5.2 Soils

According to the U.S. Department of Agriculture’s (USDA) National Resource Conservation Service (NRCS) Web Soil Survey for Leavenworth County (USDA NRCS 2007), three soil types occur within the proposed Readiness Center site: Ladoga silt loam (3 to 8 percent slopes), Knox silt loam (7 to 12 percent slopes) and the Knox complex (18-30 percent slopes). More specifically, the Ladoga silt loam underlies the southern portion of the site, while the Knox silt loam and Knox complex comprise the central and northern portions of the site, respectively. The three abovementioned soil units are generally described as moderately well to well-drained, deep, and moderately sloping to steep, with silty clay to loamy textures. The Ladoga silt loam is considered highly erodible (USDA NRCS 2007). See Figure 5, Soils Map, for location of soils in the vicinity of the project.
3.6 Water Resources

3.6.1 Surface Water

Numerous intermittent streams and three small lakes are located on Fort Leavenworth property. Surface water runoff originating from the proposed Readiness Center site would follow surface topography and drain generally to the north towards Corral Creek. Corral Creek is located approximately 0.40 mile north of the proposed Readiness Center facility and 0.10 mile north of the proposed 500 space POV overflow parking lot. There are no ponds, streams or wetlands within the boundary of the proposed Readiness Center site with the exception of an unmapped and unnamed ephemeral tributary located along the eastern border of the proposed 500 space POV parking lot which drains north to Corral Creek. Corral Creek discharges to the Missouri River approximately 500 feet east of Fort Leavenworth property. See Figure 3 for a map of jurisdictional waters in the area.

3.6.2 Hydrology/Groundwater

Groundwater on Fort Leavenworth is provided in the alluvial deposits along the Missouri River and depth to saturated water-bearing materials averages 40 feet. However, the availability of groundwater in the tributaries of the Missouri River in the vicinity is very limited and restricted by the prominence of clay sediments. Several wells approximately 75 feet deep supply the installation with water, and are located within the levee area of the Missouri River and on Fort Leavenworth property. None of the water supply wells are located within the boundaries of the proposed Readiness Center site (Jacobs 2010).

3.6.3 Floodplains

A search of the Federal Emergency Management Agency (FEMA) maps indicated that the project area is located on Map Panel 20103C0133F for Leavenworth County, Kansas. A review of the Flood Insurance Rate Maps (FIRM) indicates that no portion of the Proposed Action project area is located within Zone A: Areas of 100-year flood. The flat, wide terrain of the Missouri River bottomland is located east of the project area and is prone to periodic flooding. It should be noted that the 100-year floodplain of the Missouri River extends west along Corral Creek and across Sherman Avenue. However, a four-mile-long levee protects Fort Leavenworth along its shared boundary with the Missouri River. See Figure 4 for the Flood Rate Insurance Map.

3.7 Biological Resources

3.7.1 Vegetation

The vegetation of Fort Leavenworth and the surrounding area is typical to what is seen throughout the Central Irregular Plains Ecoregion and consists of a mixture of upland forest, bottomland forest, grassland and urban land. The potential natural vegetation of the Central Irregular Plains Ecoregion is a grassland/forest mosaic with wider forested strips occurring along streams (USEPA 2012b). More specifically, the vegetation of the undeveloped areas within the proposed Readiness Center site is comprised of mixed deciduous forest. Eastern red cedar (Juniperus virginiana), cottonwood (Populus deltoids), honey locust (Gleditsia
trianthos), boxelder (Acer negundo), hackberry (Celtis occidentalis), green ash (Fraxinus pennsylvanica), oaks (Quercus spp.), hickories (Carya spp.), sycamore (Platanus occidentalis), eastern redbud (Cercis canadensis), and pawpaw (Asimina triloba) are among the dominant canopy tree species documented in the area of the proposed Readiness Center (TWI 2007). Numerous species of shrubs and vines are common throughout the project area, while the occurrence of forbs is sparse (TWI 2007).

3.7.2 Wildlife

A variety of mammals, birds, amphibians, reptiles, and fish are found at Fort Leavenworth. Quail, wild turkey, white-tailed deer and many non-game species can be found throughout the less-developed portions of the installation. It is anticipated that most of these species would likely occur within the forested portions of the proposed Readiness Center site.

3.7.3 Threatened and Endangered Species

Federally-listed Species

According to the Natural Areas Inventory (NAI) of the Fort Leavenworth Military Reservation (NAI 2003, KBS 2003), the bald eagle (Haliaeetus leucocephalus), was a regular winter resident of the installation (Jacobs 2010). The bald eagle is no longer listed as a threatened species, although it is still protected by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (Eagle Act). According to the United States Fish and Wildlife Service (USFWS), four species of federally protected birds are known to migrate through the area, but nesting or foraging habitat is considered limited or absent at Fort Leavenworth (Jacobs 2010). The four migrants are the Eskimo curlew (Numenius borealis), least tern (Sterna anillarum), piping plover (Charadrius melodus), and whooping crane (Grus Americana). Conservation measures would be implemented, as feasible, to ensure management of military lands is done in a manner that benefits migratory birds and by planning non-readiness activities so impacts to migratory birds are minimal.

On August 17, 2012, the United States Fish and Wildlife Service (USFWS) responded with a letter indicating that the federally-listed pallid sturgeon (Scaphirhynchus albus), and the western prairie fringed orchid (Platanthera praecilera) may occur in the project area. Neither of these species was observed at the time of the site visit. A copy of the USFWS correspondence letter is provided in Appendix A.

State-listed Species

According to the Kansas Biological Survey (KBS) all suitable habitat in Leavenworth County is designated as critical habitat for the Smooth Earth Snake (Virginia valeriae) and Red-bellied Snake (Storeria occipitomaculata), and the Missouri River at Leavenworth County is designated as critical habitat for several species of fish.

The KBS also indicated that the Southern Flying Squirrel (Glaucomys volans) is known to use upland and floodplain forest along the Missouri River and could occur at Fort Leavenworth, while the Southern Bog Lemming (Synaptomys cooperi) has been documented to occur at Fort Leavenworth. Both are Species in Need of Conservation (SINC) in Kansas. SINC are any
nongame species deemed to require conservation measures in an attempt to keep the species from becoming imperiled in the State of Kansas.

The Kansas Department of Wildlife, Parks and Tourism (KDWPT) reviewed the project area and habitat survey and did not identify any listed threatened or endangered species or species in need of conservation within the project area. Correspondence from the KBS and KDWPT is provided in Appendix A.

3.8 Cultural Resources

Cultural Resources are defined as historic properties as defined by the National Historic Preservation Act (NHPA), cultural items as defined by the Native American Graves Protection and Repatriation Act (NAGPRA), archaeological resources as defined by Archaeological Resources Protection Act (ARPA), sacred sites as defined by EO 13007 to which access is afforded under the American Indian Religious Freedom Act (AIRFA), and collections and associated records as defined in 36 CFR 79. Additionally, Department of Defense Instruction 4710.02, DoD Interactions with Federally Recognized Tribes was utilized when determining the appropriate agencies with whom to coordinate. Specifically, compliance with Section 5.3.4 indicates that federally-recognized tribes should be consulted on a government-to-government basis on matters that may have the potential to significantly affect protected tribal resources, tribal rights, or Native American lands.

Cultural and archeological sites are present in numerous locations at Fort Leavenworth. The November 2010 Integrated Cultural Resources Management Plan for Fort Leavenworth (ICRMP) (Fort Leavenworth 2010) outlines the policies, procedures and responsibilities for meeting cultural resources compliance and management at the base. In addition, the Kansas Army National Guard Cultural Resources Survey (Thies 2001) provided additional information regarding cultural resources on Fort Leavenworth property. This 2001 survey was informed by a 1989 archeological investigation and report by McNerney et. al., completed for the Leader Development Center area. The State Historic Preservation Officer (SHPO), Kansas State Historical Society was also contacted for information and guidance on whether the proposed project would have an impact on properties listed in the National Register of Historic Places or other historically-significant properties.

3.8.1 Background

According to the 2010 ICRMP, Fort Leavenworth is located on 5,634 acres that includes a 213-acre National Historic Landmark District (NHLD), which was established in 1974. Since 1979, all of the Fort’s historical buildings and structures have been inventoried for cultural resources. One prehistoric site known as Quarry Creek, and two National Register of Historic Places (NRHP) listed sites known as the Main Parade Ground and the Santa Fe Trail Ruts, have been identified on the Fort Leavenworth installation. These sites are not located in proximity to the project area of the Proposed Action.

In addition, an archeological survey was completed in 2001 (referencing the McNerney 1989 survey), which evaluated the entire installation. Five archeological sites identified by the 1989 survey were determined to be ineligible for NRHP listing. One site known as “14LV107,” is
located on the eastern boundary of the study area and is currently pending review for NRHP. The 14LV107 is described as a “dump/discard location” consisting of historic debris dumped or discarded from military and/or civilian sources associated with the 19th and early 20th century period. None of the sites identified in the 2001 archeological survey exist within the project area of the Proposed Action. The SHPO concurred with this finding in a letter dated 15 May 2007. The SHPO concurred with the findings of ineligibility for all archeological sites on KSARNG property in a letter dated 18 January 2000. Tribes were given the opportunity to review and comment on the archeological survey beginning in 1999; a Memorandum of Record dated 25 March 2002 is available that documents review phase of the tribes.

The 2010 ICRMP also states that there are no known Traditional Cultural Properties (TCPs) located within the study area. The ICRMP lists the following Federally-Recognized Tribes with a geographical interest in the proposed project:

- Iowa Tribe of Kansas and Nebraska
- Kickapoo Tribe in Kansas

3.9 Socioeconomics

3.9.1 Region of Influence

The proposed Readiness Center site and the Fort Leavenworth installation region of influence (ROI) includes Leavenworth County, Kansas. Although Platte County, Missouri neighbors Fort Leavenworth to the east across the Missouri River, the main communities affected by activities at Fort Leavenworth reside in the cities of Leavenworth and Lansing, which are both located in Leavenworth County. However, according to the Fort Leavenworth Public Affairs Office, 802 active duty military personnel were residing off-post as of September 2009; 120 and 57 off-post active duty personnel were residing in Platte and Jackson Counties, Missouri, respectively.

3.9.2 Population

Leavenworth County Population and Demographics

As of 2010, the population of Leavenworth County was 76,227; the age and ethnic breakdown of the population is provided in Table 3-1. According to U.S. Census Bureau data, the racial composition of the county as of 2011 is 84.9% white (79.9% of which are not Hispanic), 9.7% black, 0.9% Native American, 1.4% Asian, 0.1% Pacific Islander, and 2.9% from two or more races. Persons of Hispanic or Latino of any race comprise 6.0% of the population. Approximately 3.1% of the Leavenworth Country population are foreign-born residents.

<table>
<thead>
<tr>
<th>Table 3-1. Leavenworth County Demographic Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, 2011 estimate</td>
</tr>
<tr>
<td>Population, percent change, April 1, 2010 to July 1, 2011</td>
</tr>
<tr>
<td>Population, 2010</td>
</tr>
</tbody>
</table>
Environmental Assessment

35th Infantry Division Headquarters Readiness Center

Kansas Army National Guard

<table>
<thead>
<tr>
<th>Population Characteristics</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons under 5 years old</td>
<td>6.6%</td>
</tr>
<tr>
<td>Persons under 18 years old</td>
<td>24.5%</td>
</tr>
<tr>
<td>Persons 65 years old and over</td>
<td>11.4%</td>
</tr>
<tr>
<td>Female persons</td>
<td>46.9%</td>
</tr>
<tr>
<td>White persons</td>
<td>84.9%</td>
</tr>
<tr>
<td>Black persons</td>
<td>9.7%</td>
</tr>
<tr>
<td>American Indian and Alaska Native persons</td>
<td>0.9%</td>
</tr>
<tr>
<td>Asian persons</td>
<td>1.4%</td>
</tr>
<tr>
<td>Native Hawaiian and Other Pacific Islander</td>
<td>0.1%</td>
</tr>
<tr>
<td>Persons reporting two or more races</td>
<td>2.9%</td>
</tr>
<tr>
<td>Persons of Hispanic or Latino origin</td>
<td>6.0%</td>
</tr>
<tr>
<td>White persons not Hispanic</td>
<td>79.9%</td>
</tr>
</tbody>
</table>

(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.

Source: U.S. Census Bureau: State and County QuickFacts, 2011.

Fort Leavenworth Population

According to the Fort Leavenworth Public Affairs Office, the population reporting to Fort Leavenworth on a full-time basis as of 30 September 2009 was 13,503, and is comprised of 8,908 military personnel and 4,595 civilians. Of the military population on-post on a full-time basis, 3,448 are permanent party personnel, 4,044 are military family members, and are 1,416 students who are at the fort for military training courses. The on-post civilian population is comprised of 4,595 employees of the following entities, including contract laborers: Department of the Army (DA), Department of Defense (DoD), Army/Air Force Exchange Service (AAFES), Non-appropriated Fund (NAF), and the Defense Commissary Agency (DeCA). Table 3-2 summarizes the on-post population of Fort Leavenworth.
### Table 3-2. Fort Leavenworth On-Post Population (September, 2009)

<table>
<thead>
<tr>
<th>Personnel</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Military</strong></td>
<td></td>
</tr>
<tr>
<td>Permanent Military</td>
<td>3,448</td>
</tr>
<tr>
<td>Students</td>
<td>1,416</td>
</tr>
<tr>
<td>Family Members On-Post</td>
<td>4,044</td>
</tr>
<tr>
<td><strong>Total Military Personnel</strong></td>
<td>8,908</td>
</tr>
<tr>
<td>United States Disciplinary Barracks Inmates</td>
<td>441</td>
</tr>
<tr>
<td><strong>Civilian</strong></td>
<td></td>
</tr>
<tr>
<td>Department of the Army (DA) &amp; Department of Defense (DoD) Employees</td>
<td>2,353</td>
</tr>
<tr>
<td>Army/Air Force Exchange Service (AAFES), Non-appropriated Fund (NAF) Employees, and Defense Commissary Agency (DeCA) Employees</td>
<td>540</td>
</tr>
<tr>
<td>Contractors</td>
<td>1,702</td>
</tr>
<tr>
<td><strong>Total Civilian Personnel</strong></td>
<td>4,595</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>13,503</td>
</tr>
</tbody>
</table>

Source: Fort Leavenworth, Public Affairs Office, Fort Leavenworth Statistics, September 30, 2009

**Regional Population**

The Kansas Center for Community Economic Development’s (KCCED) county profile for Leavenworth County indicates an 18% increase in population between 1980 and 1990, followed by an approximate 7% increase from 1990 to 2000. From 2000 to 2010, the population of Leavenworth County grew approximately 10% to 76,227 residents and is projected to grow another 24% by the year 2030 to an estimated population of 100,274 people (KCCED 2011).

**3.9.3 Regional Employment and Economic Activity**

According to KCCED’s county profile report, Leavenworth County supported a civilian labor force of 32,353 in 2010 and the median household income from the period of 2006-2010 was $61,107 (U.S. Census Bureau 2012). The Leavenworth County unemployment rate for 2010 was reported to be 8.4%, which was higher than the State of Kansas’ average unemployment rate of 6.6% for the same year.
An estimated 35.1% of the Leavenworth County workforce is represented by the management, business, science, and arts occupations, followed by the sales and office (24.8%), service (17.8%), production, transportation, and material moving (11.6%), and natural resources, construction and maintenance (10.7%) occupation categories (U.S. Census Bureau 2010). An estimated 4.4% of the Leavenworth County workforce is in the armed forces, due to the presence of Fort Leavenworth.

Fort Leavenworth’s contribution to the region’s economic activity is significant and can be measured by the County’s relative percentage of the workforce in the armed forces and the military and civilian payrolls supported by the installation. According to the Fort Leavenworth Public Affairs Office, the 2009 combined military and civilian payrolls exceed $300 million. An additional $363 million was expended for services, supplies, utilities and housing. In addition, $2.4 million was expended on construction projects on the installation in 2009.

### 3.9.4 Housing

**Fort Leavenworth**

In 2009, the Public Affairs Office indicated that 1,583 family housing units for permanent military personnel are provided by Fort Leavenworth. An additional 523 unaccompanied personnel housing spaces for single soldiers, distinguished visitors, and visiting officers are provided on the installation. In addition to the on-post residency, 716 military personnel and approximately 1,440 family members occupy off-post housing (Jacobs 2010). Approximately half of the off-post military personnel are estimated to own their own homes, most of them residing in the cities of Leavenworth and Lansing (Jacobs 2010).

**Regional Housing**

According to U.S. Census data and the KCCED county profile, the number of housing units in Leavenworth County totaled 28,697 for 2010. Approximately 69.4% of the housing units were owner-occupied, and 30.6% were occupied by renters (U.S. Census Bureau 2010). According to KCCED, the median value of owner-occupied houses in Leavenworth County was estimated to be $96,900 in 2000; the median value for an owner-occupied home for the State of Kansas was $83,500. The estimated median rent in Leavenworth County was $786 per month in 2010 (U.S. Census Bureau 2010). It is expected that Leavenworth County will experience an increase of housing units in the future to accommodate the estimated population growth of the region.

### 3.9.5 Education, Health and Emergency Services

**Education**

The Leavenworth County Development Corporation (LCDC) and the Leavenworth County Port Authority (LCPA) indicate that there are 11 unified school districts within Leavenworth County, four of which are recognized as being among the top 30 school districts in the Kansas City Metropolitan Area (LCDC 2011). Several colleges and universities are also located in Leavenworth County. In regard to education attainment, 86.50% of Leavenworth County residents have achieved at least a high school degree, while 23.10% have obtained a bachelor’s degree (LCDC 2011). Fort Leavenworth is home to three elementary schools and one junior high school. Total enrollment for the 2006-07 school year was 1,712.
Medical Services
Health care at Fort Leavenworth is provided by three facilities: the Munson Army Health Center (MAHC), the Thomas L. Smith Dental Clinic, and the Family Practice Clinic. None of these facilities are located within the proposed Readiness Center project area.

Emergency Services
The Directorate of Installation Support provides emergency and fire protection services at Fort Leavenworth. Two fire stations serve Fort Leavenworth: Station 1 at 750 McClellan Avenue and Station 2 at 295 Biddle Avenue. Neither fire station is located within the proposed Readiness Center project area.

3.9.6 Environmental Health Risks and Safety Risks to Children
An analysis was made of the potential for children to access the proposed project area of the Readiness Center in accordance with Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks (April 21, 1997). Family military housing is present approximately 2,500 feet west of the proposed Readiness Center project area. Precautions to prevent children from entering the project area have been taken by the KSARNG and Fort Leavenworth. Access to certain areas is restricted to visitors with children and children must be under adult supervision at all times. Perimeter fencing during the construction phase of the project would be installed to further limit access.

3.10 Environmental Justice
Executive Order 12898: Federal Actions to Address Environmental Justice in Minority and Low-Income Populations (February 11, 1994) requires that an analysis be made to assess whether the Proposed Action or its alternatives would have disproportionately high and adverse human health or environmental effects on minority and low-income populations. According to 2010 Census Bureau data, the percentage of minority residents in Leavenworth County is higher than the State of Kansas, but lower than the National percentage. The median household income in 2010 for Leavenworth County was approximately $61,107, which is 27.43% higher than in 2000, and approximately 37% higher than the $48,257 median income for the State of Kansas. Lastly, 8.7% of the Leavenworth County population was living below the poverty rate in 2010, which is lower than the State or National rates of 13.60% and 15.33%, respectively.

3.11 Infrastructure
3.11.1 Roadways
Multiple roadways provide access to Fort Leavenworth including Interstate Highways 29, 70 and 435; U.S. Highways 73 and 24-40; and Kansas Highways 92, 7, 45, 192, and 5. The main gate to Fort Leavenworth is located at the intersection of U.S. Highway 73 and Grant Avenue. A second entrance to Fort Leavenworth is located at the intersection of Hancock Avenue and U.S. Highway 73, while a daylight-only entrance is located off 155th Street.

The proposed 35ID HQ Readiness Center site can be accessed by two driveway accesses from Sherman Road. The southern driveway is located approximately 250 feet south of the
temporary Access Control Point (ACP) for Fort Leavenworth, while the north driveway is located approximately 100 feet north of the ACP. Both driveway access points are capable of conducting identification verification when needed. However, neither drive can support the required queuing distance, security setback, or equipment to function as the primary gate for the 35ID HQ Readiness Center site. A new ACP on Sherman Road is currently being planned by Fort Leavenworth and would function as the main gate for the installation, with full inspection and over-watch capabilities. Construction of the new ACP is not included in any of the proposed 35ID HQ Readiness Center alternatives.

3.11.2 Utilities

Water Supply, Sanitary Sewer and Stormwater
The water treatment and distribution system at Fort Leavenworth is operated by American Water Works Company, Inc. Water from the Missouri River alluvial deposits is drawn from five wells located to the south of Sherman Army Airfield and is then pumped through a 16-inch cast iron main-line to the installation’s treatment plant. The water treatment plant is expected to have sufficient design capacity to support the needs of the proposed 35ID Readiness Center (Parsons 2006, Jacobs 2010).

Sewage generated at Fort Leavenworth is collected by a gravity-flow sanitary sewer system that is discharged through one 30-inch sewer main at the southeast corner of the proposed 35ID Readiness Center site and to a wastewater treatment plant operated by the City of Leavenworth (Parsons 2006, Jacobs 2010). A network of vitrified clay, polyvinyl chloride, and cast iron collection piping with diameters ranging from 3 to 30 inches comprises the stormwater collection system at Fort Leavenworth. The stormwater system also operates under gravity flow and discharges to a surface connection with the Missouri River.

Electric Service
Electrical power at Fort Leavenworth is supplied by Westar Energy. A double-transmission system at a Westar metering point west of the installation delivers power to the post. The Leavenworth/Jefferson Cooperative currently owns and operates the electrical facilities at Fort Leavenworth. The majority of the current electrical system at the proposed 35ID Readiness Center site was completed in the 1980’s and 1990’s with completion of Tice and Greenlief Halls (Jacobs 2010). Five metered transformer locations are available near the proposed site as well as three switches on the Aluminum Conductor Steel Reinforced (ACSR) main overhead line, which runs parallel to Metropolitan Avenue (Jacobs 2010).

Gas Service
All buildings on Main Post of Fort Leavenworth are heated with natural gas provided by Seminole Energy. A 4-inch line delivers gas to the proposed 35ID Readiness Center site from beneath Metropolitan Avenue. Many of the gas lines in the project area were installed during the construction of Tice and Greenlief Halls in the 1980’s and 1990’s (Jacobs 2010).

Telephone Service
Official telephone service at Fort Leavenworth is provided by the U.S. Army, with commercial and unofficial telephone services provided by AT&T and Southwestern Bell (Jacobs 2010). One
main 9,000-line digital Central Office and eight branch switches are located on the installation. The KSARNG site is served by a private, third party telecommunications service, as well as by Fort Leavenworth (Jacobs 2010). Data services of the 35th Division are provided by Guardnet over the third party service lines.

3.12 Hazardous and Toxic Materials/Wastes (HTMW)

Activities at Fort Leavenworth that use or generate hazardous materials are required to ensure that handling and storage activities are completed in accordance with all applicable regulations and Fort Leavenworth Environmental Division Office procedures. Several programs to minimize and prevent damage to the environment from the use of hazardous materials are implemented at Fort Leavenworth (Jacobs 2010). These programs include the Fort Leavenworth Spill Prevention and Countermeasure Plan, the Hazardous Waste Management Plan (HWMP) and the Pollution Prevention Plan, as well as the KSARNG HWMP.

The HWMP requires that hazardous waste be managed and handled by personnel who are properly trained in waste handling. This program establishes procedures and policies, and assigns responsibilities associated with the generation, handling, management, and disposition of hazardous waste at Fort Leavenworth (Jacobs 2010). The HWMP complies with the Resource Conservation and Recovery Act (RCRA) of 1976, the Kansas Hazardous Waste Generators Program, AR 200-1, and other applicable Federal, State and local regulations (Jacobs 2010).

An Environmental Baseline Survey (EBS) was prepared in October 2008 by the U.S. Army Center for Health Promotion and Preventive Medicine on behalf of KSARNG. The EBS was performed following ASTM International D6008-96 (2005), Standard Practice for Conducting Environmental Baseline Surveys. The EBS concluded that there was no evidence that hazardous substances used at the Property during KSARNG occupation were improperly stored, released, or disposed of at the Property. Additionally, there was no evidence of PCB-containing equipment or transformers, radiological materials, asbestos-containing materials, lead-based paint, or munitions or explosives of concern. However, the site is located in an area with elevated background radon levels, and best management practices will be implemented post-construction if radon gas is discovered in the readiness center. The EBS indicated that two 500-gallon Aboveground Storage Tanks (ASTs) with secondary containment are used for storing fuel at the Property. The two 500-gallon ASTs are located approximately 780 feet north of the proposed Readiness Center and approximately 250 feet south-southeast of the proposed 500 POV parking area.

3.13 Resources Not Examined in Detail

The description of the affected environment focuses on environmental conditions that would be potentially affected by implementation of the Proposed Action. The following resource areas were omitted from this analysis: aesthetics and visual resources, and prime farmland. The following sections detail omitted resources and the basis for exclusion.
3.13.1 Aesthetics and Visual Resources

The following criteria were considered during the initial screening and planning process of the proposed Readiness Center:

- The identified development alternative would include the construction of facilities in accordance with the Fort Leavenworth Installation Design Guide.
- Use of Fort Leavenworth Installation Design Guide standards within the potential development sites is consistent between the potential development alternative thereby resulting in no difference in potential development standards or costs.
- Potential development would be consistent with other similar development in the area, thereby no detracting from proximate activities.

Therefore, detailed consideration of potential aesthetic and visual resource impacts is not included in this EA.

3.14.2 Prime Farmland

There are no parcels within the proposed Readiness Center site with agricultural land-use or zoning designations. Correspondence with the NRCS indicated the entire site of the proposed Readiness Center is considered to be in urban land use and no prime or unique farmland is adjacent to the property. Therefore, impacts to farmland would not occur as a result of the Proposed Action, and a detailed analysis is not required for this EA.
4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

The potential direct, indirect, and cumulative effects of the Preferred Action Alternative (Proposed Action) and the No Action Alternative are presented in this section. This section also compares the effects of implementing the Proposed Action with the potential effects of the No Action Alternative, and identifies Best Management Practices (BMPs) and/or mitigation measures that would reduce the level of identified impacts, as appropriate.

4.2 Land Use

4.2.1 Effects of the Proposed Action

The Proposed Action would not have a significant adverse impact on land use.

The proposed development of the 35ID Readiness Center is located within compatible land use areas. The site of the Readiness Center facility is currently used for parking; while the proposed 500 POV overflow parking areas is comprised of undeveloped forested land. Development of the Proposed Action is consistent with the types of development and activities conducted within the surrounding areas.

4.2.2 Effects of the No Action Alternative

Under the No Action Alternative, conditions would remain unchanged and no land use impacts would occur.

4.2.3 Mitigation Measures

No mitigation measures would be required.

4.3 Air Quality

4.3.1 Effects of the Proposed Action

The Proposed Action would have no significant impacts to local or regional air quality. The primary sources of air emissions are expected to be: (1) construction vehicle fuel combustion; (2) land-disturbance activities (fugitive dust); and (3) commuter vehicle fuel combustion. Emissions from construction activities are generally short-term and result in localized impacts on air quality. Various types of construction equipment are expected to be used for the development of the Proposed Action.

While the Proposed Action includes the development of overflow parking areas, there is no anticipated net increase in the typical number of commuter vehicles traveling to the site of the Readiness Center facility on weekdays and during weekends. Therefore, no significant impacts to local or regional air quality are expected.
4.3.2 Effects of the No Action Alternative

Under the No Action Alternative, conditions would remain unchanged and no air quality impacts would occur.

4.3.3 Mitigation Measures

No mitigation measures would be required.

4.4 Noise

4.4.1 Effects of the Proposed Action

Direct noise impacts resulting from the Proposed Action are expected to be minor, temporary and localized to the construction site. During the construction phase, an increase in localized noise would result from the use of construction machinery, including bulldozers, backhoes, dump trucks, graders and track-hoes. Construction noise emanating from the site is expected to attenuate before reaching residential areas. The presence of dense riparian vegetation and the Missouri River bordering the construction site to the east, and the road noise of Metropolitan Avenue to the south, provide a noise reduction buffer from the construction activities occurring at the site. Military family housing located approximately 2,500 feet west of the construction site would have no buffer from construction noise originating from the site. However, the 2,500 foot separation between the residences and the construction site is expected to provide enough distance to attenuate construction noise to an acceptable level.

4.4.2 Effects of the No Action Alternative

Under the No Action Alternative, conditions would remain unchanged and no noise impacts would occur.

4.4.3 Mitigation Measures

No mitigation measures would be required.

4.5 Geology, Topography, and Soils

4.5.1 Effects of the Proposed Action

The Proposed Action is not anticipated to significantly adversely impact geology or soils. Although the Proposed Action would result in an approximate five acre increase in impermeable cover resulting from the 500 space POV parking area and additional access roads, additional permeable surfaces would be created by perimeter landscaping of the proposed Readiness Center facility. All construction activities would be completed in accordance with state and local regulations to minimize impacts to geology and soils. The existing topography of the project area has been considered in the site design to minimize changes to the extent possible.

The total area of the Proposed Action construction site is approximately 11 acres. New land disturbances would occur in an approximate five acre area of the total 11 acre construction site. Onsite soil characteristics would be taken into account during design and construction of the project. Soil erosion would be minimized or eliminated through implementation of BMPs and
compliance with the KDHE General Permit for Stormwater Runoff from Construction Activities pursuant to the Provisions of the Kansas Statutes Annotated 65-164 and 65-165; the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq., the “Clean Water Act”); and the Kansas Surface Water Quality Standards (K.A.R. 28-16-28 et seq). Permit standards would be adhered to during all construction activities. The KDHE permit requires a Stormwater Pollution Prevention Plan (SWP3), which would be developed and implemented for the construction phase of the project.

The project area is not located on soils considered prime or unique prime farmland.

4.5.2 Effects of the No Action Alternative

Under the No Action Alternative, conditions would remain unchanged and construction-related geology, topography, or soil impacts would occur.

4.5.3 Mitigation Measures

No mitigation measures would be required.

4.6 Water Resources

4.6.1 Effects of the Proposed Action

No significant adverse impacts to water resources are expected to occur as a result of the Proposed Action.

No federal wild or scenic rivers or natural surface-water features are present on, or in the vicinity of the project area. There would be no impacts to these resources as a result of the Proposed Action.

Potential stormwater impacts would be mitigated through the implementation of BMPs, including sediment control during construction in accordance with State and local permit requirements (See Section 4.5.1). BMPs may include the use of silt fencing, ditch checks, inlet protection and seeding and mulching.

The potential effects on surface water quality resulting from the Proposed Action would be associated with construction activities and runoff from the new facility building and parking areas. Stormwater drainage from the future 500 space POV parking area would flow generally north towards Corral Creek, while drainage from the Readiness Center building site flows to drainage inlets of the City of Leavenworth stormwater system. Specific inlet protection BMPs to prevent potential impacts to the City of Leavenworth stormwater system would be implemented during the construction phase of the Proposed Action.

4.6.2 Effects of the No Action Alternative

Conditions would remain unchanged under the No Action Alternative and no water resource impacts would occur.
4.6.3 Mitigation Measures
No mitigation measures would be required.

4.7 Biological Resources

4.7.1 Effects of the Proposed Action
No significant adverse impacts to biological resources are anticipated to occur as a result of the Proposed Action. The removal of approximately five acres of forested area for the 500 space POV parking area in the northern portion of the project area would be a permanent minor adverse impact. The Proposed Action alternative was chosen due it having the least impact on wooded areas and thus impacting less preferred habitat of critical species than other alternatives.

The August 17, 2012 letter from the USFWS indicated that the federally-listed pallid sturgeon (*Scaphirhynchus albus*), and the western prairie fringed orchid (*Platanthera praeclara*) may occur in the project area. The KSARNG provided a response on August 21, 2012 to request concurrence from the USFWS that neither species would be adversely impacted by the Proposed Action based on the following information:

**Pallid Sturgeon**
The pallid sturgeon is found in the Missouri River, which is located approximately 1,200 feet east of the project area. No portion of the Proposed Action would impact pallid sturgeon habitat, habitat enhancement efforts, or stocking programs. BMPs on construction sites near tributary streams would be implemented throughout the construction phase of the project to prevent soil erosion and to assure discharge and stormwater runoff are not released to areas likely to attract pallid sturgeon. The pallid sturgeon or its state-listed critical habitat is not expected to be adversely affected by the Proposed Action.

**Western Prairie Fringed Orchid**
The western prairie fringed orchid is a perennial orchid most often found on unplowed, calcareous moist prairies and sedge meadows. State-listed critical habitat also includes disturbed sites such as borrow pits, old fields, and roadside ditches, as well as fire and grazing adapted communities. The project area of the Proposed Action is mostly comprised of mixed deciduous woodland habitat; grasses and forbs generally occur in few, isolated patches. Prairie and sedge meadow habitat is not located within the project area and no part of the project area is known to have been subject to fire or grazing activities in the past. For these reasons, the western prairie fringed orchid is not expected to be adversely affected by the Proposed Action.

The KSARNG is making a "not likely to adversely affect" determination based on consultation with the US Fish and Wildlife Service for the western prairie fringed orchid, and the pallid sturgeon. Habitat for the Pallid Sturgeon and the Western Prairie Fringed Orchid does not exist within the boundaries of the construction zone for this project.
On 5 October 2012, the USFWS responded in a letter stating their concurrence that the Proposed Action is not likely to adversely affect the pallid sturgeon or western prairie fringed orchid. All correspondence from the USFWS is provided in Appendix A.

The MBTA prohibits the taking, killing, possession, and transportation of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. While the MBTA has no provision for allowing unauthorized take, the USFWS realizes some birds may be killed during the construction of the project, even if all known reasonable effective measures to protect birds are used. The bald eagle is common during the winter months in the vicinity of the Proposed Action project area, and may be present in the breeding season. If bald eagles or their nests are observed within or adjacent to the project area, the KSARNG would follow the USFWS National Bald Eagle Management guidelines prior and during construction of the Proposed Action to minimize adverse impacts to bald eagles. Any unintentional take of birds associated with the Proposed Action will not have any appreciable impact on any species or population of migratory bird. Loss of habitat will also be minor consideration the vast amount of similar habitat throughout the area where these birds can continue to feed, roost, and breed.

The DoD has authorization to take migratory birds, with limitations, that result from DoD military readiness activities. A “military readiness activity” is defined in the Authorization Act to include all training, and operations of the Armed Forces that relate to combat and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation, and suitability for combat use. It does not include the routine operation of installation operation of installation support functions, such as: administrative offices; military exchanges; commissaries; water treatment facilities; storage facilities, schools; housing; motor pools; laundries; morale, welfare and recreation activities; shops; and mess halls, the operation of industrial activities or the construction or demolition of facilities listed above.

According to KBS all suitable habitat in Leavenworth County is designated as critical habitat for the Smooth Earth Snake (*Virginia valeriae*) and Red-bellied Snake (*Storeria occipitomaculata*). In 2007, a Habitat Assessment completed by TWI concluded that critical habitat for these two species does occur near the Proposed Action project area (TWI 2007). However, no critical habitat for either species was found anywhere within, or adjacent to the boundaries of the Proposed Action site.

The KBS also indicated that the Southern Flying Squirrel (*Glaucomys volans*) is known to use upland and floodplain forest along the Missouri River and could occur at Fort Leavenworth, while the Southern Bog Lemming (*Synaptomys cooperi*) has been documented to occur at Fort Leavenworth. Both are Species in Need of Conservation (SINC) in Kansas. SINC are any nongame species deemed to require conservation measures in an attempt to keep the species from becoming imperiled in the State of Kansas. The KDWPT did not comment on any of the aforementioned species.

The loss of the forested area for construction of the 500 space POV parking area would have a minor adverse impact on wildlife present within the project area, resulting in their displacement to other areas in the vicinity.
In conclusion, there are no unique or rare habitats, federally listed threatened or endangered species, or designated critical habitat for such species within the project area of the Proposed Action. Therefore, no impact is anticipated.

4.7.2 Effects of the No Action Alternative

Conditions would remain unchanged if the No Action Alternative were implemented. No biological resource impacts would occur.

4.7.3 Mitigation Measures

No mitigation measures would be required.

4.8 Cultural Resources

4.8.1 Effects of the Proposed Action

No adverse impacts to cultural resources are anticipated to occur as a result of the Proposed Action.

On July 23, 2012, the Kansas State Historic Preservation Office (SHPO) reviewed its cultural resources files for Fort Leavenworth in accordance with 36 CFR 800 and determined that the Proposed Action would have no effect on properties listed in the National Register of Historic Places. The SHPO stated no objection to implementation of the project. Correspondence from the SHPO is provided in Appendix A.

Any changes to the project area that include additional ground disturbing activities would need to be reviewed by the SHPO prior to beginning construction. If any buried archaeological materials are uncovered during construction, the work would be halted and the SHPO would be contacted for guidance. Standard Operating Procedure No. 5 for Inadvertent Discovery of Cultural Materials from the 2010 ICRMP outlines the specific actions to be taken for inadvertent discovery, and would be distributed to construction contractors prior to beginning work on the proposed action.

Department of Defense Instruction 4710.02, DoD Interactions with Federally Recognized Tribes, within which the Department of Defense Annotated American Indian and Alaskan Native Policy is a component, was utilized when determining the appropriate agencies with whom to coordinate. Specifically, compliance with Section 5.3.4 indicates that federally-recognized tribes should be consulted on a government-to-government basis on matters that may have the potential to significantly affect protected tribal resources, tribal rights, or Native American lands. Based on KSARNG correspondence in 2001 with the Kickapoo Tribe and the Iowa Tribe of Kansas and Nebraska, the two tribes were deemed as interested parties in the KSARNG’s property at Fort Leavenworth. The 2010 ICRMP also lists these tribes as the appropriate tribal contacts for projects at Fort Leavenworth. Electronic and phone correspondence have been initiated with the two tribes. Coordination was specifically continued with the two tribes for the present EA based on special interests described in correspondence with the tribes. Additionally, written correspondence was initiated with the two tribes on July 10, 2012; correspondence can be viewed in Appendix A. The Iowa Tribe of Kansas and Nebraska
responded on August 9, 2012 with no objections to the proposed action. In addition to the initial correspondence, the Kickapoo Tribe was contacted on August 22, 2012 and September 10, 2012 via email and telephone. On September 10, 2012 the tribal representative indicated that the scoping letter had been received by the Tribal Council. No response has been received to date.

4.8.2 Effects of the No Action Alternative

Conditions would remain unchanged if the No Action Alternative were implemented. No cultural resource impacts would occur.

4.8.3 Mitigation Measures

No mitigation measures would be required.

4.9 Socioeconomics

4.9.1 Effects of the Proposed Action

No adverse impacts to socioeconomics are anticipated to occur as a result of the Proposed Action.

There would be no increase in stationing of either personnel or equipment associated with the planned development of the Proposed Action. The intent of the Proposed Action is to meet existing requirements and alleviate gross space shortages now experienced at current facilities. The number of fulltime employees at the location of the Readiness Center is not expected to increase significantly.

It is expected for the Proposed Action to have a short-term benefit on the local and regional economy during the construction of the Proposed Action. The majority of construction workers are expected to come from the Leavenworth, Lansing and/or the Greater Kansas City Metropolitan areas. Employment generated by construction activities is expected to result in additional wages paid including an increase in business volume and expenditures for local and regional services, materials and supplies.

Safety impacts to children are not expected to occur as a result of the Proposed Action. Although children are located in the community of Fort Leavenworth, they are seldom present at the 35ID Headquarters other than as occasional visitors accompanied by adults. No children reside within the project area and no local schools would be adversely impacted by the Proposed Action.

4.9.2 Effects of the No Action Alternative

Conditions would remain unchanged if the No Action Alternative were implemented. The Local economy in the vicinity of Fort Leavenworth would not be affected.

4.9.3 Mitigation Measures

No mitigation measures would be required.
4.10 Environmental Justice

4.10.1 Effects of the Proposed Action

Adverse impacts to minority and/or low income populations are not expected to result from the Proposed Action.

No concentrations of minority or low-income residents are located near the project area of the Proposed Action. Therefore construction and operation activities associated with the Proposed Action would not result in disproportionate, adverse environmental or human health impacts on minority or low-income populations.

4.10.2 Effects of the No Action Alternative

Conditions relating to environmental justice would remain the same under the No Action Alternative. Minority and/or low income populations would not be affected.

4.10.3 Mitigation Measures

No mitigation measures would be required.

4.11 Infrastructure

4.11.1 Effects of the Proposed Action

Roadways

No significant adverse impacts to the roadway infrastructure are expected to occur as a result of the Proposed Action.

Short-term minor impacts to Sherman Avenue and Metropolitan Avenue may occur during the construction phase of the Proposed Action due to the increased traffic of construction equipment coming to and from the project area. However, following construction, a significant increase in vehicular traffic in the vicinity of the 35ID Readiness Center is not anticipated because there would be no increase in stationing of either personnel or equipment associated with the proposed facility. Congestion related to the insufficient number of parking spaces which is currently experienced during large exercises conducted by either the 35ID or the MTC is expected to be improved by the Proposed Action.

Utilities (Water, Sewer, Gas, Electricity)

Significant adverse impacts to utilities (water, sewer, gas, electricity) are not anticipated as a result of the Proposed Action. Correspondence with the City of Leavenworth (see Appendix A-1) indicates the City has concerns over the location of the sewer connection and volume of the sewer. This issue would be evaluated with the City during the design phase of the proposed project.

Current supply infrastructure is considered capable of meeting the operational demand of the Proposed Action. Minor impacts on utilities resulting from the Proposed Action would be temporary and limited to construction activities within the project area. Additionally, Silver-rated
Leadership in Energy and Environmental Design (LEED) energy conservation measures would be included in the design of exterior lighting of the proposed Readiness Center facility.

4.11.2 Effects of the No Action Alternative

No significant adverse impacts to the roadway or utility infrastructure would occur under the No Action Alternative; conditions would remain unchanged.

4.11.3 Mitigation Measures

No mitigation measures would be required.

4.12 Hazardous and Toxic Materials/Wastes (HTMW)

4.12.1 Effects of the Proposed Action

The Proposed Action would not have a significant adverse impact on HTMW. A substantial change in either the quantity or type of hazardous materials currently in use at Fort Leavenworth would not result from operation of the proposed Readiness Center facility.

4.12.2 Effects of the No Action Alternative

There would be no effect upon the handling, storage, or disposal of hazardous materials and other wastes under the No Action Alternative.

4.12.3 Mitigation Measures

No mitigation measures would be required.

4.13 BMP and Mitigation Measures

As discussed in the previous sections of this EA, no significant adverse impacts have been identified or are anticipated as a result of implementing either the Proposed Action Alternative or the No Action Alternative. No mitigation measures will be necessary to reduce any adverse environmental impacts to below significant levels. As a result, no mitigation measures are required for reducing impacts. However, several BMPs developed based on recommendations from agency coordination, public comments, and other sources have been included for the KSARNG’s Proposed Action and are discussed in this section. It is important to note that BMPs and mitigation measures are not the same; as stated in Volume II, Section 8.14.3 of the ARNG NEPA Handbook, BMPs are standard environmental protection measures that the ARNG routinely implements, while mitigation measures are project-specific, unique requirements designed and implemented to lower potentially significant adverse impacts. The following BMPs would be implemented for the proposed project:

- **Air Quality** – During construction, the KSARNG would use dust control where feasible. Fugitive dust would be kept to a minimum through control methods including, application of water to disturbed areas, covering of open equipment during transportation of materials, prompt removal of spilled or tracked soil on paved streets, and the removal of dried sediments resulting from soil erosion.
Geology and Soils – The KSARNG would implement appropriate BMPs and adhere to the conditions of the KDHE General Permit requirements to avoid impacts from soil erosion. The KDHE permit also requires a SWP3; the KSARNG would ensure the development and implementation of a SWP3 for the construction phase of the project. Construction BMPs may include, but are not limited to the following: mulching, silt fences, sediment traps, straw bales, ditch checks and inlet protection. Clearing and grubbing would be sequenced with construction to minimize the exposure of cleared surfaces.

Water Resources – The KSARNG would employ measures to control erosion and sediment originating from the construction site and adhere to current State regulations to minimize impacts during construction. Standards and specifications provided by the KDHE Stormwater Program and/or the USEPA manual for Stormwater Management for Construction Activities would be followed for all land disturbance activities. Erosion and sediment controls would be properly maintained during the construction phase of the project.

Biological Resources – BMPs on construction sites near tributary streams would be implemented throughout the construction phase of the project to prevent soil erosion and to assure discharge and stormwater runoff are not released to areas likely to attract pallid sturgeon. The USFWS National Bald Eagle Management guidelines would be followed during construction if bald eagles or their nests are observed in the vicinity of the project area prior to commencement of construction.

Cultural Resources – If archaeological resources are uncovered during construction, the KSARNG would stop work and initiate consultation with the SHPO.

Transportation – The KSARNG would establish contractor haul routes for construction traffic to access the project area. To the extent practicable, the KSARNG would limit construction traffic to times outside morning and evening peak traffic periods. No local roadways would be temporarily closed to public traffic during construction of the Proposed Action.

4.14 Cumulative Effects

This section addresses the cumulative effects of the Proposed Action and other past, current, and proposed future activities within the vicinity of the proposed 35ID Readiness Center facility. Cumulative effects are defined by the CEQ in 40 CFR 1508.7 as: "Impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions." CEQ regulations also state that the addressed cumulative impacts should not only include (or be limited to) those from actual proposals, but must also contain impacts from contemplated or reasonably foreseeable actions.
4.14.1 Effects of the Proposed Action Alternative

The Region of Influence (ROI) for this project was defined by determining the area in which potential indirect effects on land use could occur along the Proposed Action. The ROI for this project was defined to include both an area in which potential indirect effects on land use could occur, and the potential for effects on water and biological resources. In order to establish the appropriate ROI, various methods were considered and some were dismissed. Using a municipal or county boundary would be too large of an area for this project. Using a watershed approach for the ROI was considered, but using a watershed boundary would be too large of an area and was deemed not practical. The ROI was determined by assessing the areas that would be impacted by added footprint of impervious surface in an otherwise undeveloped area. This area includes the subdivisions and businesses adjacent to the Proposed Action, the agricultural land in the vicinity of the Proposed Action, and the Missouri River.

To determine the ROI, a variety of quantitative and qualitative methods such as City of Leavenworth zoning maps, in addition to reviews of local and regional planning websites and documents, were used to obtain information and any development-inducing activities by the proposed project. In addition to mapping and quantitative computations, qualitative information was also reviewed from the City of Leavenworth Comprehensive Plan, CEQ, NEPA, and FHWA guidance papers and regulations, and the project’s CE document.

The ROI for this project has been identified as the area delineated by Pope Avenue to the north, the Missouri River to the east, Metropolitan Avenue/State Highway 7 to the south, and Grant Avenue to the west. This area encompasses approximately 630 acres of land, all of which are contained within the City of Leavenworth, and all of which are classified on the City of Leavenworth zoning map as “Fort Leavenworth.” Pope Avenue was selected as a northern boundary for the ROI due to its designation as a major arterial that services Fort Leavenworth. The Missouri River was selected as an eastern boundary because it is the point to which the ROI drains. Metropolitan Avenue was selected as a southern boundary because it is the major arterial to the south that would be the route from which traffic traveling to the Proposed Action would utilize. Grant Avenue was chosen as a western boundary because traffic traveling to the Proposed Action would likely use Grant Avenue as a north-south route for accessing the site.

The temporal component of the ROI is the timeframe in which impacts to resources are expected to occur, which for the past, present, and reasonably foreseeable future.

The vicinity of the property on which the Proposed Action is located was initially developed in the 1950s and 1960s. The Proposed Action is bounded by forested land (Riverfront Park) to the north, with commercial buildings and residential dwellings located beyond the forested land; by the Missouri River to the east; by the Mission Training Complex and associated buildings and commercial/residential dwellings to the south; and by forested land and Patton Junior High School to the west. The land in the vicinity of the Proposed Action is within the current city limits of the City of Leavenworth; however, the area is identified as ‘Fort Leavenworth’ and is not currently provided a zoning designation.
To evaluate the cumulative impacts, the short- and long-term direct and indirect impacts of the Proposed Action on notable features were evaluated. Notable features in the vicinity of the Proposed Action include public health and safety, sensitive species and habitats, air quality, valued environmental components, vulnerable populations, land transformation, cultural resources, waters of the US, hazardous materials, and changes in traffic.

**Public Health and Safety:** Presently, the Readiness Center is comprised of offices and hallways that are not sufficient in size for the number of occupants in the building. Those utilizing the building must bring in their own office equipment such as tables and chairs, and set up makeshift offices in hallways and other areas of the building not constructed for collaborative purposes. The Proposed Action is to construct a Readiness Center that provides adequate space to support the 270 soldiers for regularly scheduled weekend drills, in addition to year-round Annual Training (AT) and planning seminars with the ability to support the entire Division Headquarters strength of 731 soldiers that would meet at the proposed facility multiple times per year. The Proposed Action would directly impact the safety of those utilizing the facility, making it safer and easier to evacuate the facility in an emergency situation. Indirectly, over a long period of time, the Proposed Action would positively indirectly impact the health of those utilizing the facility, creating a less stressful atmosphere for those who would utilize the facility on a regular basis.

Past impacts in the area to public health and safety have included the direct impact of construction of the current facility on travel patterns, air quality, and water quality. Presently, the current facility has a negligible impact on the health and safety of the public; the public may be indirectly impacted by the increased traffic traveling to the current facility as opposed to when the present facility was undeveloped. The Proposed Action would have minimal direct impact on the health and safety public living or traveling within the ROI in the reasonably foreseeable future. Direct impacts of the Proposed Action in the reasonably foreseeable future include construction impacts on the air and water quality within the ROI. The construction contractor would take the necessary steps to minimize construction impacts to air and water quality. Furthermore, the construction impacts as a result of the Proposed Action would be short-term in nature.

**Sensitive Species and Habitats:** Past direct impacts to sensitive species and habitats have included the direct impact of conversion of wooded area to developed land. Present indirect impacts to sensitive species and habitats in the past have included the daily operations conducted at the site, including the impacts of the noise and wastes generated at the facility.

Direct impacts to sensitive species and habitats in the reasonably foreseeable future include impacts to the wooded area as a result of construction and permanent operation of the facility and parking lot included in the Proposed Action. Coordination with the USFWS was initiated to determine the extent of the direct impact of the Proposed Action on the habitat of sensitive Species. The August 17, 2012 letter from the USFWS indicated that the federally-listed pallid sturgeon (*Scaphirhynchus albus*), and the western prairie fringed orchid (*Platanthera praeclara*) may occur in the project area. However, a survey of the site at which the Proposed Action
would be located indicated no existing habitat suitable for the pallid sturgeon or western prairie fringed orchid. Neither construction activities associated with the Proposed Action nor long-term utilization of the building or parking lot associated with the Proposed Action are anticipated to disturb the habitat of the pallid sturgeon or western prairie fringed orchid.

**Air Quality:** The Proposed Action is located in Leavenworth County, which has been designated as an attainment area by the 8-hour National Ambient Air Quality Standard for ozone. Past indirect effects to air quality within the ROI have included the relocation of Army staff to Fort Leavenworth and increased vehicular travel within the ROI. Presently, the direct impacts to air quality generated within the ROI are predominately comprised of vehicular travel between origins and destinations. The Proposed Action is not expected to increase traffic in the vicinity, and is thus not expected to have an increased negative impact on local air quality in the reasonably foreseeable future.

**Valued Environmental Components:** Valued environmental components are those characteristics or attributes of the environment that society seeks to use, protect, or enhance such as parks and recreation areas. Parks and recreation areas within the vicinity of the project include Riverfront Park. Riverfront Park is utilized as a campground and is accessed via Riverfront Park Road. The Proposed Action would not directly impact access to Riverfront Park in the reasonably foreseeable future. Furthermore, the Proposed Action is not likely to directly impact camping activities at Riverfront Park, as the activities and associated noises will be consistent with the building that is currently being utilized.

Agricultural land is also a valued environmental component that is sought to preserve when possible. As the Proposed Action will is located within an urban built-up area and will not impact farmland, agricultural land is not expected to be directly or indirectly impacted in the reasonably foreseeable future. Furthermore, the long-term activities conducted at the facility are not expected to have indirect or cumulative impacts to agricultural land in the vicinity.

**Vulnerable Populations:** This EA has not identified any distinct neighborhoods, ethnic groups, or other specific groups directly adjacent to the project. A long-term impact on vulnerable populations as a result of the Proposed Action is not anticipated.

**Land Transformation:** The Proposed Action would result in transformation of approximately five acres of mature woodland vegetation. This woodland is located immediately north adjacent to the existing NGB NTC and it not generally utilized for recreational purposes, despite being located adjacent to Riverfront Park. Thus, transformation of the wooded area as a result of the Proposed Action is not expected to have an indirect or cumulative impact on recreation in the vicinity.

When viewed in conjunction with the effects of other past, present, and reasonably foreseeable public and private actions in the vicinity of the Proposed Action, cumulative impacts related to land use are not expected to be substantial. The Proposed Action is not anticipated to be a direct cause of escalated development of the land in the vicinity.
Cultural Resources: In the past, construction of the current Readiness Center had a potential direct on historically- or archaeologically-significant artifacts located on the land that was ultimately developed as the Readiness Center. However, there were no known historically- or archaeologically-significant finds during the construction of the current Readiness Center. Presently, historically- or archaeologically-significant sites located in the vicinity of the Proposed Action have been well-documented. Five archeological sites identified by the 1989 McNerney survey were determined to be ineligible for NRHP listing. One site known as “14LV107,” is located on the eastern boundary of the study area and is currently pending review for NRHP. The 14LV107 is described as a “dump/discard location” consisting of historic debris dumped or discarded from military and/or civilian sources associated with the 19th and early 20th century period. None of the sites identified in the 2001 archeological survey exist within the project area of the Proposed Action. The SHPO concurred with this finding in a letter dated 15 May 2007. The SHPO concurred with the findings of ineligibility for all archeological sites on KSARNG property in a letter dated 18 January 2000. Therefore, no historically- or archaeologically-significant resources are expected to be directly or indirectly impacted by the Proposed Action in the reasonably foreseeable future.

Waters of the US: Past actions resulting in direct impacts to wetlands and streams within the ROI include construction of the present Readiness Center facility and other military and non-military buildings and roadway infrastructure in the vicinity. Construction activities resulted in temporarily increased runoff and sedimentation of the Missouri River, located approximately 0.25-mile east of the current Readiness Center. Current indirect impacts to the Missouri River include increased runoff due to the increased amount of impervious surfaces of the parking lots and buildings within the ROI. There are no ponds, streams or wetlands within the boundary of the proposed Readiness Center site with the exception of an unmapped and unnamed ephemeral tributary located along the eastern border of the proposed 500 space POV parking lot which drains north to Corral Creek. Corral Creek discharges to the Missouri River approximately 500 feet east of Fort Leavenworth property.

Reasonably foreseeable direct impacts to the tributary to Corral Creek and to the Missouri River include construction of the building and parking lot as part of the Proposed Action. Increased runoff and sedimentation of these waterbodies will be minimized to the fullest extent possible by the construction contractor by means of a SWP3. Reasonably foreseeable indirect impacts to the waterbodies within the ROI include runoff from the building and parking lot associated with the Proposed Action. Cumulatively, increased runoff from the Proposed Action, in conjunction with other future actions within the ROI, could impact the water quality of Corral Creek and the Missouri River.

Hazardous Waste: Presently, no known hazardous wastes are known to be located at the site where the Proposed Action would occur. Hazardous materials are not expected to be brought onsite as a result of the Proposed Action in the reasonably foreseeable future. Therefore, no direct or indirect impact on hazardous waste is expected as a result of the Proposed Action.
Changes in Traffic: Any change in area-wide traffic patterns as a result of the Proposed Action would be minor to non-occurring.

Coordination with the City of Leavenworth Director of Public Works indicated that it is anticipated that Centennial Bridge (the bridge connecting Kansas Route 92 (Metropolitan Avenue) to Missouri Route 92, crossing the Missouri River) will be replaced in the next 10 to 20 years. The Director of Public Works indicated that access during bridge construction may be an issue, and that alternatives access routes to be used during a future bridge project may be evaluated in the coming years. However, as the Proposed Action is located immediately west of existing buildings and infrastructure, it is unlikely that an alternative access route would be established across the site of the Proposed Action.

Table 4-1 summarizes the direct, indirect, and cumulative impacts of the No Action alternative and Proposed Action alternative on the notable features discussed above. The magnitude of cumulative impacts as a result of the proposed project are graded on a scale of comparison (none, very weak, weak, moderate, strong, and very strong) and are discussed as follows:

- The “none” comparison indicates that the proposed action would not produce cumulative impacts on the ROI.
- “Very weak” implies the cumulative impacts would result in little change to the ROI as a result of the proposed action.
- A “moderate” score includes cumulative impacts that would or could occur at an even pace level for the region.
- A rating of “strong” indicates cumulative impacts will result from the proposed action more rapidly than the general region.
- “Very strong” cumulative impacts would or could occur at an extremely high rate compared to regional development.

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<thead>
<tr>
<th>Resource</th>
<th>Alternative 1: Proposed Action</th>
<th>Alternative 2: No Action</th>
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<tr>
<td></td>
<td>Direct Impacts</td>
<td>Direct Impact Mitigation*</td>
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<td>Public Health and Safety</td>
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<td>None</td>
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<tr>
<td>Environmental Category</td>
<td>Action Description</td>
<td>Impacts to Woodlands</td>
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<tr>
<td>----------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
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<tr>
<td>Sensitive Species and Habitats</td>
<td>Loss of five acres of woodlands</td>
<td>None</td>
</tr>
<tr>
<td>Air Quality</td>
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<td>None</td>
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<tr>
<td>Valued Environmental Components</td>
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<td>Vulnerable Populations</td>
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<tr>
<td>Land Transformation</td>
<td>Loss of five acres of woodlands</td>
<td>None</td>
</tr>
<tr>
<td>Cultural Resources</td>
<td>Minimal to no impacts</td>
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</tr>
<tr>
<td>Waters of the US</td>
<td>No stream, ponds, or wetland impacts.</td>
<td>None</td>
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<tr>
<td>Hazardous Materials</td>
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<td>None</td>
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<tr>
<td>Changes in Traffic</td>
<td>Minimal to no impacts</td>
<td>Timing of construction to avoid</td>
</tr>
</tbody>
</table>
In summary, the Proposed Action would not have measurable adverse impacts on land use, geology and soils, biological resources, cultural resources, socioeconomic, Environmental Justice, Protection of Children, utilities, or HTMW; cumulative effects are expected to be insignificant.

4.14.2 Effects of the No Action Alternative

The KSARNG would not construct a new Readiness Center for the 35ID under the No Action Alternative. Therefore, the KSARNG would not contribute to any increase to ongoing local or regional cumulative impacts under the No Action Alternative.
5.0 COMPARISON OF ALTERNATIVES AND CONCLUSIONS

This EA has evaluated the potential environmental, cultural, and socioeconomic impacts from the proposed development and operation of the 35ID HQ Readiness Center at Fort Leavenworth, Kansas as presented in Section 2.0 (Proposed Action). The potential environmental, cultural, and socioeconomic impacts of implementation of the No Action Alternative have also been evaluated.

5.1 Comparison of the Environmental Consequences of the Alternatives

Proposed Action Alternative
Under the Proposed Action Alternative, the KSARNG would construct a new Readiness Center to serve the Headquarters for the 35th Infantry Division. The new Readiness Center would consist of a 120,450 square-foot building and an approximate 17,500 square-yard (approximately five acres) parking lot to accommodate 500 privately owned vehicles. The existing parking lot located on the south end of the project area would be demolished and serve as the construction site for the new Readiness Center building.

Potential impacts associated with the implementation of the Proposed Action Alternative have been described throughout Sections 4.1 through 4.14 of this EA. Less-than-significant adverse impacts of the Proposed Action Alternative would be further reduced through implementation of the BMPs listed in Sections 4.1 through 4.14, and as summarized in Section 4.13. The BMPs discussed in this EA primarily address construction-related impacts and were identified for the following resources: air quality, geology and soils, water resources, biological resources, cultural resources, and transportation.

No Action Alternative
Under the No Action Alternative, the KSARNG would not construct a new Readiness Center for the 35ID HQ. Implementation of the No Action Alternative would not result in any significant adverse impacts.

The No Action Alternative would not satisfy the purpose and need for the project and would fail to achieve the mission objectives of the 35ID. Under the No Action Alternative, overall efficiency and operating costs would not be improved because a modernized Readiness Center facility would not be constructed.

5.2 Conclusions

The evaluations and analyses performed within this EA conclude 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 Proposed Action Alternative during construction. Therefore, this EA's analysis determines than an EIS is unnecessary for implementation of the Proposed Action Alternative, and that a FNSI is appropriate. This EA recommends implementation of the Proposed Action Alternative, proposed to be constructed in Fiscal Year
2015. No mitigation measures will be necessary to reduce any adverse environmental impacts to below significant levels.
6.0 REFERENCES


Clean Air Act Amendments of 1990.


Commander-Based Status Report, 2009.


Department of the Army Memorandum. 05 Jan 2006. *Sustainable Design and Development Policy Update – SpiRiT to LEED Transition*.


Department of Defense Instruction. September 2006. *Department of Defense Instruction Number 4710.02, DoD Interactions with Federally-Recognized Tribes*.


EO 13175, *Consultation and Coordination with Indian Tribal Governments*, November 6, 2000.
EO 13186, *Responsibilities of Federal Agencies*.
National Environmental Policy Act of 1969 (Public Law 91-190; 42 U.S.C. 4321 et seq.).
Environmental Assessment
35th Infantry Division Headquarters Readiness Center Kansas Army National Guard


USACHPPM (U.S. Army Center for Health Promotion and Preventative Medicine)

U.S. Census Bureau.


USEPA (U.S. Environmental Protection Agency)  

2012b. Level III and IV Ecoregions of the Continental United States.  


Environmental Baseline Survey No. 38-EH-0AWC-09 for the Battle Command Training Center, Fort Leavenworth Kansas, prepared for the Kansas Army National Guard by the U.S. Army Center for Health Promotion and Preventative Medicine (USACHPPM), 29 July 2009.
7.0 GLOSSARY

"Agency" means agency as such term is defined in section 551 of Title 5, United States Code.

"Ambient Air" is any unconfined portion of the atmosphere: open air, surrounding air.

"Attainment Area" is an area considered to have air quality as good as or better than the National Air Quality Standards as defined in the Clean Air Act. An area may be an attainment area for one pollutant and a non-attainment area for others.

"Critical Habitat" means the specific areas within the geographical area occupied by a threatened or endangered species, on which are found those physical or biological features (I) essential to the conversation of the species and (II) which may require special management considerations or protection.

"Endangered Species" is a species that is threatened with extinction throughout all or a significant portion of its range.

"Groundwater" is the water in the porous rocks and soils of the earth’s crust; a large proportion of the total supply of fresh water.

"Habitat" means a place where particular plants or animals occur or could occur.

"Hazardous Waste" is a waste or combination of wastes which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to an increase in mortality or an increase in serious, irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

"Historic conservation district" means an area which contains:
(A) historic properties,
(B) historic buildings having similar or related architectural characteristics,
(C) cultural cohesiveness, or
(D) any combination of the foregoing.

"Historic property" or "historic resource" means any prehistoric or 1 historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register, including artifacts, records, and material remains related to such a property or resource.

"Intermittent Stream" means a stream whose flow is interrupted during dry periods of the year.

"Indian tribe" or "tribe" means an Indian or Alaska native tribe, band, nation, pueblo, village or community that the Secretary of the Interior acknowledges to exist as an Native American tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 USC 479a.

"National Register" or "Register" means the National Register of Historic Places established under section 101.
"Nonattainment Area" is an area that has been designated by the U.S. Environmental Protection Agency and the appropriate state air quality agency as exceeding one more National Ambient Air Quality Standards.

"Preservation" or "historic preservation" includes identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance, research, interpretation, conservation, education and training regarding the foregoing activities or any combination of the foregoing activities.

"Species" is all organisms of a given kind; a group of plants or animals that breed together but are not bred successfully with organisms outside their group.

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

"Wetlands" are considered areas that are inundated or saturated with surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil, including swamps, marshes, bogs, and other similar areas.
## 8.0 LIST OF PREPARERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Education &amp; Experience</th>
<th>Primary Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms. Amy Dzialowski, AICP</td>
<td>• B.S. Environmental Science</td>
<td>EA Task Manager; development of DOPA</td>
</tr>
<tr>
<td>Project Manager</td>
<td>• Master of Urban Planning, Environmental Planning and Land Use</td>
<td></td>
</tr>
<tr>
<td>Lochner</td>
<td>• 10 Years of Experience</td>
<td></td>
</tr>
<tr>
<td>Mr. Alex Bartlett</td>
<td>• B.G.S. Environmental Studies, Concentrations in Biology and Policy</td>
<td>Project Scientist; data collection, preparation of EA text and agency coordination.</td>
</tr>
<tr>
<td>Environmental Scientist</td>
<td>• 6 Years of Experience</td>
<td></td>
</tr>
<tr>
<td>Lochner</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LTC Anthony S. Randall, Ph.D.</td>
<td>• B.S.Ed. Earth Science Education</td>
<td>Environmental Program Manager/State Environmental Officer; Responsible for overall</td>
</tr>
<tr>
<td>Chief, Environmental Management Branch, Kansas Army National Guard</td>
<td>• M.S.Ed. Earth Science Education</td>
<td>Management of the KSARNG Environmental Program</td>
</tr>
<tr>
<td>Mr. James R. Tubach, REM</td>
<td>• B.S.E. Chemistry and Physics</td>
<td>NEPA &amp; EMS Manager</td>
</tr>
<tr>
<td>Adjutant General’s Dept.</td>
<td>• 10 Years of Experience</td>
<td></td>
</tr>
<tr>
<td>Ms. Valerie Arkell</td>
<td>• B.S. Geography, 3 Yrs of Experience</td>
<td>Natural &amp; Cultural Resource Manager</td>
</tr>
<tr>
<td>Adjutant General’s Dept.</td>
<td></td>
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</tr>
</tbody>
</table>
9.0 AGENCIES AND INDIVIDUALS CONSULTED

**Federal Agencies**

**US Army Corps of Engineers – Kansas City District**
Department of the Army  
US Army Corps of Engineers  
Kansas City Regulatory Office  
601 East 12th  
Kansas City, Missouri 64106

**USFWS – Region 6**
Mr. Michael J. LeValley, State Field Supervisor  
United States Department of the Interior  
Ecological Services/Partners for Fish & Wildlife  
2609 Anderson Ave.  
Manhattan, Kansas 66502-2801

**USDA-NRCS, Kansas State Office**
Mr. William M. Gilliam  
Assistant State Conservationist  
Natural Resources Conservation Service  
3020 West 18th, Suite B  
Emporia, KS 66081-6191

**US Environmental Protection Agency – Region 7**
Ms. Dianna Whitaker  
Acting Freedom of Information Officer  
EPA Region 7  
901 N. 5th St.  
Kansas City, KS 66101

**State Agencies**

**Kansas State Historic Preservation Officer**
Ms. Jennie Chinn, Director  
Kansas State Historical Society  
Kansas History Center  
6425 SW 6th Avenue  
Topeka, Kansas 66615-8682

**Kansas Department of Wildlife, Parks, and Tourism**
Mr. Eric Johnson, Aquatic Ecologist  
Department of Wildlife & Parks  
Environmental Services Section, Operations Office  
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Pratt, Kansas 67124-8174

**Kansas Department of Agriculture – Division of Water Resources**
Mr. David L. Pope, Chief Engineer-Director  
Division of Water Resources  
Kansas Department of Agriculture  
901 South Kansas Avenue, Second Floor  
Topeka, Kansas 66617-1285

**Kansas Biological Survey**
Ms. Jennifer Delisle, Information Manager  
Kansas Biological Survey  
The University of Kansas  
2101 Constant Avenue, Room 106  
Lawrence, Kansas 66047-3759

**Kansas Water Office**
Mr. Tracy Streeter, Director  
Kansas Water Office  
Suite 300, 109 SW 9th Street  
Topeka, Kansas 66612-1367

**Kansas Department of Health and Environment - Division of Environment**
Ms. Donna Fisher  
Curtis State Office Building  
1000 SW Jackson Street, Suite 400  
Topeka, Kansas 66620-0001

**Kansas Department of Transportation**
Mr. W. Clay Adams, District Engineer  
Kansas Department of Transportation  
District One  
121 SW 21st Street  
Topeka, Kansas 66612-1367
### Native American Tribes

- Iowa Tribe of Kansas and Nebraska
- Kickapoo Tribe in Kansas

### Local Agencies

**City of Leavenworth, Kansas**
Mr. Michael McDonald  
Director of Public Works  
City of Leavenworth  
100 North 5th Street  
Leavenworth, Kansas 66048
FIGURES

Figure 1: Site Vicinity Map
Figure 2: Site Concept Map
Figure 3: Site NWI Map
Figure 4: Site FEMA Map
Figure 5: Site Soils Map
Figure 6: Site Topographic Map
FIGURE 1: SITE VICINITY MAP

USGS BASEMAP DATA

35TH INFANTRY DIVISION HEADQUARTERS
READINESS CENTER
DRAFT ENVIRONMENTAL ASSESSMENT
FORT LEAVENWORTH, KANSAS

Capital city
Major city
Interstate
FIGURE 2: SITE CONCEPT MAP

NAIP 2012 IMAGERY; NHD

35TH INFANTRY DIVISION HEADQUARTERS
READINESS CENTER

DRAFT ENVIRONMENTAL ASSESSMENT
FORT LEAVENWORTH, KANSAS
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KANSAS ARMY NATIONAL GUARD
FIGURE 5: SITE SOILS MAP
NAIP 2012; SSURGO; NHD
35TH INFANTRY DIVISION HEADQUARTERS
READINESS CENTER
DRAFT ENVIRONMENTAL ASSESSMENT
FORT LEAVENWORTH, KANSAS

Study Area
Current Property Line
Soil Series
Water

Buildable area for 35th Infantry Division Readiness Center

Main Site

Ladoga silt loam,
3 to 8 percent slopes

North Parking Site

Knox complex,
18 to 30 percent slopes

Kennebec silt loam,
frequently flooded

7285

7957

7955

7051

0 100 200 300 400 500 ft
0 50 100 150 m
FIGURE 6: SITE USGS MAP
LEAVENWORTH (1988) USGS 7.5' QUADRANGLE

35TH INFANTRY DIVISION HEADQUARTERS
READINESS CENTER

DRAFT ENVIRONMENTAL ASSESSMENT
FORT LEAVENWORTH, KANSAS
# APPENDIX A

## AGENCY AND PUBLIC COORDINATION AND COMMENTS

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THIS PAGE INTENTIONALLY LEFT BLANK
A-1 Agency Coordination/Response Letters
FYI

James R. Tubach, REM
Environmental Scientist
Adjutant General's Dept
2800 SW Topeka Blvd
Topeka KS 66611-1287
(785) 274-1176
fax 274-1196
james.tubach@us.army.mil

-----Original Message-----
From: Joe Cothern [mailto:Cothern.Joe@epamail.epa.gov]
Sent: Wednesday, July 18, 2012 8:36 AM
To: Tubach, James Mr CIV US NG KS ARNG
Subject: Proposed 35th Infantry Readiness Center, Fort Leavenworth, Kansas

Dear Mr. Tubach,

Thank you for including the U.S. Environmental Protection Agency in your coordination for this project. Our evaluation of available data shows no environmental impediments to the proposed work. You may wish to look at other factors relevant to your assessment at the following webpage: http://nepassisttool.epa.gov/nepassist/entry.aspx.

Also, I invite you to visit EPA's sustainability website to promote useful features and ideas into your final design.
http://www.epa.gov/sustainability/

If you have any questions about any of these materials, or if other reviewers identify issues requiring EPA's assistance, please contact me.

Sincerely,

Joseph E. Cothern
NEPA Team Leader
U.S. Environmental Protection Agency
Region 7 - Kansas City
(913) 551-7148
cothern.joe@epa.gov

Classification: UNCLASSIFIED
Caveats: FOUO
July 20, 2012

James R. Tubach, REM
Adjutant General’s Dept.
2800 SW Topeka Blvd.
Topeka, KS 66611-1287

RE: Environmental Assessment
35ID HQ Readiness Center
Rare species information

Dear Mr. Tubach:

I have conducted a database search for rare species at the referenced site. The Southern Flying Squirrel (*Glaucomys volans*) is known to use upland and floodplain forest along the Missouri River although we do not have data on specific locations occupied. The Southern Bog Lemming (*Synaptomys cooperi*) has been documented to occur at Fort Leavenworth. These are both Species in Need of Conservation (SINC) in Kansas.

All suitable habitat in Leavenworth County is designated as critical habitat for the Smooth Earth Snake (*Virginia valeriae*) and Red-bellied Snake (*Storeria occipitomaculata*). The Missouri River at Leavenworth County is designated as critical habitat for several species of fish. Please contact the Kansas Dept. of Wildlife, Parks and Tourism for guidance regarding these species.

Please feel free to call me at 785-864-1538 if I can be of further assistance.

Sincerely,

Jennifer M. Delisle
Information Manager
Kansas Natural Heritage Inventory
-----Original Message-----
From: Lytle, Bob [mailto:Bob.Lytle@KDA.KS.GOV]
Sent: Friday, August 03, 2012 4:36 PM
To: Tubach, James Mr CIV US NG KS ARNG
Subject: Environmental Review Readiness Center for the 35th Infantry Division at Fort Leavenworth (35ID HQ Readiness Center)

Mr. Tubach:

This correspondence will acknowledge receipt on July 13, 2012 of a request for an environmental review of the proposed Readiness Center at Fort Leavenworth located at the northeast corner of Sherman Avenue and Metropolitan Avenue intersection. The existing parking lot and the proposed overflow parking lot are not located in the floodplain and will not require any permitting from this Agency.

Sincerely, Bob Lytle

Environmental Scientist

Kansas Dept of Ag / Div of Water Resources

Classification: UNCLASSIFIED
Caveats: FOUO
Comments by: KDHE

This form provides notification and the opportunity for your agency to review and comments on this proposed project as required by Executive Order 12372. Review Agency, please complete Parts II and III as appropriate and return to contact person listed below. Your prompt response will be appreciated.

RETURN TO: James R. Tubach, REM
Environmental Scientist
Adjutant General’s Dept.
2800 SW Topeka Blvd.
Topeka, KS 66611-1287

PART I
_Aging
_Agriculture
_Biological Survey
_Conservation Commission
_Corporation Commission

PART II
COMMENTS: (Attach additional sheet if necessary) Re: Proposed construction of a Readiness Center for the 35th Infantry Division Headquarters at Fort Leavenworth, Leavenworth County, KS
Please see the enclosed comments submitted by Scott Yankey, Bureau of Environmental Remediation and Don Carlson, Bureau of Water.

REVIEW AGENCIES/COMMISSION
_Education
_Geological Survey, KS
_X Health & Environment
_Historical Society
_Social & Rehabilitation
_STATE FORESTER
_Transportation
_Water Office, KS
_Wildlife & Parks
_Commerce

AGENCY REVIEW COMMENTS

PART III
RECOMMENDED ACTION COMMENTS:

_X Clearance of the project should be granted.

__ Clearance of the project should not be granted.

__ Clearance of the project should be delayed until the issues or questions above have been clarified.

__ Request a State Process Recommendation in concurrence with the above comments.

Clearance of the project should not be delayed but the Applicant should (in the final application) address and clarify the question or concerns indicated above.

Request the opportunity to review final application prior to submission to the federal funding agency.

DIVISIONS/ AGENCY/COMMISSION

John W. Mitchell, Director
Division of Environment

JM/df
MEMORANDUM

TO:        Donna Fisher
FROM:      Scott Yankey
DATE:      July 23, 2012
RE:        Intergovernmental Agency Review requested by the Departments of the Army and the Air Force, Joint Forces Headquarters Kansas, Adjutant General’s Department for the 35th Infantry Division Headquarters Readiness Center Construction Project in Fort Leavenworth, Kansas.

The Kansas Department of Health and Environment (KDHE), Bureau of Environmental Remediation (BER), Assessment and Restoration Section, Superfund and Drycleaner Remediation Unit has identified one known contaminated drycleaner facility located about 0.85 miles south-southwest of the proposed project. This facility is the former Norge Village Cleaners site located at 711 Delaware Street. There is currently only a limited amount of information related to this site. However, contaminated groundwater has been identified and is believed to flow to the south, away from the proposed project. Therefore, contamination from the known contaminated facility is not anticipated to impact the proposed project.

Staff member(s) from the Adjutant General’s Department are welcome to come and view the KDHE-BER files in accordance with the Kansas Open Records Act. Please contact me by telephone at (785) 296-8025 or by e-mail at syankey@kdheks.gov if you have any questions.
August 1, 2012

James R. Tubach, REM
Environmental Scientist
Adjutant General’s Dept.
2800 SW Topeka Blvd.
Topeka, KS 66611-1287

Re: Proposed construction of a Readiness Center for the 35th Infantry Division Headquarters at Fort Leavenworth, Leavenworth County, KS

Dear Mr. Tubach:

Please see the following comments submitted by Don Carlson, Bureau of Water.

I have no objection to the proposal but offer the following comment for review and consideration:

Any construction activity which disturbs one acre or more is required to file a National Pollutant Discharge Elimination System (NPDES) permit application for stormwater runoff resulting from construction activities. The project owner (party responsible for the project) must obtain authorization from KDHE to discharge stormwater runoff associated with construction activities prior to commencing construction. The Kansas construction stormwater general permit, a Notice of Intent (application form), a frequently asked questions file and supplemental materials are on-line on the KDHE Stormwater Program webpage at www.kdhe.state.ks.us/stormwater. Answers to questions regarding or additional information concerning construction stormwater permitting requirements can be obtained by calling 785.296.5549.

Sincerely,

Donna Fisher
Director’s Office

DC/df
August 8, 2012

James R. Tubach, REM
Environmental Scientist
Adjutant General’s Dept.
2800 SW Topeka Blvd.
Topeka, KS 66611

Dear Mr. Tubach:

We have reviewed the information for the proposed project, Construction and Operation of Readiness Center for the 35th Infantry Division Headquarters, Fort Leavenworth, KS, located North of Metropolitan Ave. and East of Sherman Ave., within Leavenworth County, Kansas. The project was reviewed for potential impacts to crucial wildlife habitats, current state-listed threatened and endangered species and species in need of conservation, and Kansas Department of Wildlife, Parks, and Tourism managed areas for which this agency has administrative authority.

We have no objections to the proposed project; however, we would like to recommend the following:

- Avoid impacts to streams and rivers, adjacent riparian zones, wetlands, and native prairie.

- Incorporate principles of Low Impact Development, such as permeable asphalt pavement, swales, bioretention, raingardens and on-site phytoremediation.

- Implement and maintain standard erosion control Best Management Practices such as silt fencing, hay bale ditch checks, erosion control blankets, storm drain inlet protection and temporary weed-free seeding/mulching.

- Reseed and landscape with native warm season grasses, forbs, shrubs and trees to permanently revegetate all areas disturbed by construction.

Results of our review indicate there will be no significant impacts to crucial wildlife habitats; therefore, no special mitigation measures are recommended. The project will not impact any public recreational areas, nor could we document any potential impacts to currently listed threatened or endangered species or species in need of conservation. No Department of Wildlife, Parks and Tourism permits or special authorizations will be needed if construction is started within one year, and no design changes are made in the project plans.

Since the Department’s recreational land obligations and the State’s species listings periodically change, if construction has not started within one year of this date, or if design changes are made in the project plans, the project sponsor must contact this office to verify continued applicability of the sections review. For our purposes, we consider construction started when advertisements for bids are distributed.
Thank you for the opportunity to provide these comments and recommendations. If you have any questions or concerns please contact me at (620)-672-0795 or jason.luginbill@ksoutdoors.com.

Sincerely,

[Signature]

Jason S. Luginbill, Aquatic Ecologist
Ecological Services Section

PRATT OPERATIONS OFFICE
512 SE 25th Ave., Pratt, KS 67124-8174
(620) 672-5911 • Fax: (620) 672-6020
Subject: Ft Leavenworth Project (UNCLASSIFIED)

-----Original Message-----
From: McBride, Susie - NRCS, Salina, KS [mailto:susie.mcbride@ks.usda.gov]
Sent: Friday, July 27, 2012 11:01 AM
To: Tubach, James Mr CIV US NG KS ARNG
Subject: RE: Ft Leavenworth Project (UNCLASSIFIED)

James

Thank you for clarification.

Since no farmland will be converted, a Farmland Protection Policy Act, FPPA review is not needed. It is our policy to not send negative replies.

Below is a brief summary for the FPPA. This may help you to understand if and/or when to send in a request.

These are the activities that are subject to FPPA:

*Any projects which may permanently convert (either directly or indirectly) farmland to non-agricultural use;

And are completed by a Federal agency or completed with Federal agency financial or technical assistance.

(Farmland can be defined as cultivated cropland, pasture and/or hay land, forested land, truck crops, fruit and nut trees and/or land that is capable of being farmland).

Examples:
*State Highway construction projects
*Airport expansions
*Electric cooperative construction
*Housing projects
*Reservoir and hydroelectric projects
*Dam or levee construction

Activities NOT subject to FPPA:
*Federal permitting licensing
*Projects on land already in urban development*** or used for water storage *Construction for national defense purposes *Construction of on-farm structures necessary for farm operations - barns, livestock watering facilities, ponds, and manure management structures *Construction of minor new structures, such as garages or storage sheds; Surface mining, where restoration ag use is planned

***Exception: areas 10 acres or larger without structures are not considered urban built-up are subject to FPPA.

As policy in KS, we do not send negative replies.

Therefore, if you would use the above guidelines in sending out requests for reviews, it would save us both a lot of time.
Thank you.

Feel free to contact me if you have questions or concerns.

Susie

Susan McBride
USDA NRCS
Water Resources Staff
Soil Conservationist
760 S Broadway Blvd.

Salina, KS 67401-4604
785-823-4551 office
785-823-4540 fax

"The Mighty Oak was once a nut that stood his ground." Anonymous

-----Original Message-----
From: Tubach, James Mr CIV US NG KS ARNG [mailto:James.Tubach@us.army.mil]
Sent: Friday, July 27, 2012 10:53 AM
To: McBride, Susie - NRCS, Salina, KS
Subject: RE: Ft Leavenworth Project (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Yes this project is considered to be inside the city limits (see map). It is somewhat strange but the city has not zoned areas north of Metropolitan Avenue which include Fort Leavenworth properties and there is no code enforcement for these areas as well.

James R. Tubach, REM
Environmental Scientist
Adjutant General's Dept
2800 SW Topeka Blvd
Topeka KS 66611-1287
(785) 274-1176
fax 274-1196
-----Original Message-----
From: McBride, Susie - NRCS, Salina, KS [mailto:susie.mcbride@ks.usda.gov]
Sent: Friday, July 27, 2012 8:53 AM
To: Tubach, James Mr CIV US NG KS ARNG
Subject: Ft Leavenworth Project

Good Morning James

I have a question regarding the Ft. Leavenworth Project you submitted for review. Is this project inside the city limits?

Thank you

Susie

Susan McBride
USDA NRCS
Water Resources Staff
Soil Conservationist

760 S Broadway Blvd.

Salina, KS  67401-4604
785-823-4551 office
785-823-4540 fax

"The Mighty Oak was once a nut that stood his ground." Anonymous
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Classification: UNCLASSIFIED
Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: FOUO
July 23, 2012

James R. Tubach, REM
Environmental Scientist
Adjutant General's Department
2800 SW Topeka Boulevard
Topeka KS 66611-1287

RE: Readiness Center Construction
    Fort Leavenworth
    Leavenworth County

Dear Mr. Tubach:

The Kansas State Historic Preservation Office has reviewed its cultural resources files for the area of the above-referenced project in accordance with 36 CFR 800. The project as proposed should have no effect on properties listed in the National Register of Historic Places or otherwise identified in our files. This office has no objection to implementation of the project.

Any changes to the project area that include additional ground disturbing activities will need to be reviewed by this office prior to beginning construction. If construction work uncovers buried archaeological materials, work should cease in the area of the discovery and this office should be notified immediately.

This information is provided at your request to assist you in identifying historic properties, as specified in 36 CFR 800 for Section 106 consultation procedures. If you have questions or need additional information regarding these comments, please contact Tim Weston 785-272-8681 (ex. 214). Please refer to the Kansas Review & Compliance number (KSR&C#) above on all future correspondence relating to this project.

Sincerely,
Jennie Chinn
State Historic Preservation Officer

[Signature]

Patrick Zollner
Deputy State Historic Preservation Officer
United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
Kansas Ecological Services Field Office  
2609 Anderson Avenue  
Manhattan, Kansas 66502

August 17, 2012

James Tubach, REM  
Environmental Scientist  
Adjutant General’s Dept  
2800 SW Topeka Blvd  
Topeka, KS 66611-1287

RE: Readiness Center for the 35th Infantry Division HQ, Ft. Leavenworth  
FWS Tracking # 2012-CPA-0826

Dear Mr. Tubach:

This is in response to your July 10, 2012 letter requesting comment on the construction, and operation of a Readiness Center for the 35th Infantry Division Headquarters at Fort Leavenworth. The project will be built on an existing 3.5-acre parking lot, and includes an additional 6.0-acres disturbed for a 350-space overflow parking lot.

These comments are being provided pursuant to our authorities under the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.); section 404(b) of the Clean Water Act (33 U.S.C. 1344); the Migratory Bird Treaty Act of 1918 (MBTA), as amended (16 U.S.C. 703 et seq.); the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.); the Bald and Golden Eagle Protection Act; the Fish and Wildlife Act of 1956; the Sikes Act, as amended (16 USC 670a-670o, 74 Stat. 1052); executive orders 11990 (wetland protection), and 11988 (floodplain management); and are consistent with the intent of the National Environmental Policy Act of 1969.

In accordance with section 7(c) of the Endangered Species Act, it has been determined that the federally listed pallid sturgeon (Scaphirhynchus albus), and the western prairie fringed orchid (Platanthera praeclara) may occur in the project area. If the project may affect listed species, the Department of the Army should initiate section 7 consultation with this office.

The Missouri River borders Fort Leavenworth on two sides, and is inhabited by the federally listed endangered pallid sturgeon. Although management of the sturgeon is not controlled by the installation, the EA should note the presence of the sturgeon; discuss habitat enhancement efforts by the US Army Corps of Engineers, and stocking of hatchery-raised pallid sturgeon in the immediate area. Management practices to consider; include providing access for sturgeon monitoring efforts, and requiring Best Management Practices on construction sites near tributary streams to prevent soil erosion/siltation to assure discharge and storm water runoff are not released to areas likely to attract pallid sturgeon.

Western prairie fringed orchid is a perennial orchid, and is found most often on unplowed, calcareous moist prairies and sedge meadows. It may also occur at disturbed sites such as borrow pits, old fields, and roadside ditches. This orchid species occurs in fire and grazing
adapted communities which are dominated by big bluestem (*Andropogon gerardii*), little bluestem (*Andropogon scoparius*), Indiangrass (*Sorghastrum nutans*) and switchgrass (*Panicum virgatum*).

If a permit from the Corps of Engineers is required, the USFWS will be given the opportunity to review the public notice on the proposed action and provide additional comments at that time. Section 404 guidelines require the sequence of avoidance of impacts, minimization of impacts and compensation for unavoidable impacts. When we review the public notice we will request information on alternatives considered, how the project avoided and minimized impacts to aquatic ecosystems, and the compensatory mitigation proposal, if one is required by the Corps.

The Migratory Bird Treaty Act prohibits the taking, killing, possession, and transportation, (among other actions) of migratory birds, their eggs, parts, and nests, except when specifically permitted by regulations. While the Act has no provision for allowing unauthorized take, the USFWS realizes that some birds may be killed during project construction even if all known reasonable and effective measures to protect birds are used. The USFWS Office of Law Enforcement carries out its mission to protect migratory birds through investigations and enforcement, as well as by fostering relationships with individuals, companies, and industries that have taken effective steps to avoid take of migratory birds, and by encouraging others to implement measures to avoid take of migratory birds. It is not possible to absolve individuals, companies, or agencies from liability even if they implement bird mortality avoidance or other similar protective measures. However, the Office of Law Enforcement focuses its resources on investigating and prosecuting individuals and companies that take migratory birds without identifying and implementing all reasonable, prudent, and effective measures to avoid that take. Companies are encouraged to work closely with Service biologists to identify available protective measures when developing project plans and/or avian protection plans, and to implement those measures prior to/during construction or similar activities.

The Department of Defense (DoD) has an authorization to take migratory birds, with limitations, that result from DoD military readiness activities. A “military readiness activity” is defined in the Authorization Act to include all training, and operations of the Armed Forces that relate to combat, and the adequate and realistic testing of military equipment, vehicles, weapons, and sensors for proper operation, and suitability for combat use. **It does not include the routine operation of installation operating support functions, such as: administrative offices; military exchanges; commissaries; water treatment facilities; storage facilities; schools; housing; motor pools; laundries; morale, welfare and recreation activities; shops; and mess halls, the operation of industrial activities or the construction or demolition of facilities listed above.** This language should be incorporated into the EA, and measures developed to avoid impacts to migratory species during construction/operation of the project.

The bald eagle is common during the winter months near the project site, and may be present in the area during the breeding season. It was delisted from the Endangered Species Act in 2007; however it remains protected by the Bald and Golden Eagle Protection Act (Eagle Act) and the Migratory Bird Treaty Act (MBTA).

The USFWS has developed National Bald Eagle Management Guidelines to advise landowners, land managers, and others who share public and private lands with bald eagles when and under
what circumstances the protective provisions of the Eagle Act may apply to their activities. These Guidelines are intended to help people minimize such impacts to bald eagles, particularly where they may constitute "disturbance," which is prohibited by the Eagle Act.

Disruption, destruction, or obstruction of roosting, and foraging areas can negatively affect bald eagles. Disruptive activities in, or near eagle foraging areas can interfere with feeding, reducing chances of survival. Interference with feeding can also result in reduced productivity (number of young successfully fledged). Migrating, and wintering bald eagles often congregate at specific sites such as the Missouri River near Ft. Leavenworth, for purposes of feeding and sheltering. Human activities near foraging areas may prevent eagles from feeding, or taking shelter. Activities that permanently alter important foraging areas can altogether eliminate the elements that are essential for feeding eagles.

Where a human activity agitates or bothers foraging bald eagles to the degree that causes injury, or substantially interferes with breeding, feeding, or sheltering behavior, and causes, or is likely to cause, a loss of productivity or nest abandonment, the conduct of the activity constitutes a violation of the Eagle Act's prohibition against disturbing eagles. The circumstances that might result in such an outcome are difficult to predict. If your project may disturb roosting or foraging bald eagles, you should contact this office for advice, and recommendations for how to avoid such disturbance.

The recommendations provided in this letter are to assist you in minimizing adverse impacts resulting from this project. Please notify this office with the results of any surveys for western prairie fringed orchid, so that we may determine whether there may be any impacts to these species.

Thank you for this opportunity to comment on the proposal. If we can be of any assistance, please call Ms. Michele McNulty, of this office, at 785-539-3474 ext. 106.

Sincerely,

Daniel W. Mulhern
Acting Field Supervisor

cc: KDWPT, Pratt, KS (Ecological Services)
Good Morning, Ms. McNulty:

Thank you for discussing the subject project with me yesterday. As discussed, we are forwarding correspondence received from the Kansas Biological Survey and the Kansas Department of Wildlife, Parks and Tourism for your review. We note that the August 17th letter from your office indicates that the pallid sturgeon (Scaphirhynchus albus) and the western prairie fringed orchid (Platanthera praeclara) may occur in the project area.

The project area for the 35ID Readiness Center is located approximately 1,200 feet west of the Missouri River and no portion of the proposed project will impact pallid sturgeon habitat, habitat enhancement efforts, or stocking programs. Best Management Practices on construction sites near tributary streams will be implemented throughout the construction phase of the project to prevent soil erosion and to assure discharge and storm water runoff are not released to areas likely to attract pallid sturgeon. Due to the distance of the project area from the Missouri River, and because various BMPs will be implemented during construction, we do not expect pallid sturgeon or its habitat to be adversely affected by the proposed project.

In 2007, a Habitat Assessment was completed in the project area by the Watershed Institute (TWI). Although the habitat assessment focused primarily on the determination of suitable habitat for two snake species (redbelly snake (Storeria occipitomaculata) and smooth earth snake (Virginia valeriae)), a vegetation survey of the project area was also completed. The vegetation of the undeveloped areas within the proposed Readiness Center site, particularly in the area of the proposed 350 POV overflow parking area, is comprised of mixed-deciduous forest. Eastern red cedar (Juniperus virginiana), cottonwood (Populus deltoids), honey locust (Gleditsia triacanthos), boxelder (Acer negundo), hackberry (Celtis occidentalis), green ash (Fraxinus pennsylvanica), oaks (Quercus spp.), hickories (Carya spp.), sycamore (Platanus occidentalis), eastern redbud (Cercis canadensis), and pawpaw (Asimina triloba) are among the dominant canopy tree species. Numerous species of shrubs and vines are common throughout the project area, while grasses and forbs are generally found in isolated patches. Lochner visited the site on July 3, 2012 and confirmed these observations. Prairie and sedge meadow habitat is not located within the project area and to our knowledge, no part of the project area has historically been subject to fire or grazing activities. For these reasons, we do not expect the western prairie fringed orchid to be adversely affected by the proposed project.

It should be noted that the 2007 Habitat Assessment completed by TWI concluded that critical habitat for the two abovementioned snake species does occur in the vicinity. However, no critical habitat for either species was found anywhere within, or adjacent to, the boundaries of the proposed Readiness Center site.

We are requesting concurrence from the US Fish and Wildlife Service that the proposed 35ID Readiness Center is not likely to adversely affect the pallid sturgeon or western prairie fringed orchid. Please do not hesitate to contact me if you need additional information or have any questions.

Thank you.

Alex L. Bartlett
Environmental Scientist
LOCHNER
United States Department of the Interior
FISH AND WILDLIFE SERVICE
Kansas Ecological Services Field Office
2609 Anderson Avenue
Manhattan, Kansas 66502

October 5, 2012

Alex Bartlett, Environmental Scientist
Lochner
903 East 104th Street, Suite 800
Kansas City, MO 64131

RE: Readiness Center for the 35th Infantry Division HQ, Ft. Leavenworth
FWS Tracking # 2012-CPA-0826

Dear Mr. Bartlett:

This is in response to your September 17, 2012 email requesting review and concurrence on the construction, and operation of a Readiness Center for the 35th Infantry Division Headquarters at Fort Leavenworth. The project will be built on an existing 3.5-acre parking lot, and includes an additional 6.0-acre of land disturbance for a 350-space overflow parking lot.

Based on our discussion of the proposed action, including planned BMPs, and the habitat assessment completed by the Watershed Institute (2007), it is not likely that the proposed project will adversely affect the western prairie fringed orchid, or the pallid sturgeon. Further consultation is not necessary.

Thank you for this opportunity to comment on the proposal. If we can be of any assistance, please call Ms. Michele McNulty, of this office, at 785-539-3474 ext. 106.

Sincerely,

[Signature]
Daniel W. Mulhern
Acting Field Supervisor

cc: KDWPT, Pratt, KS (Ecological Services)
THIS PAGE INTENTIONALLY LEFT BLANK
July 30, 2012

James R. Tubach, REM
Environmental Scientist
Adjutant General's Dept.
2800 SW Topeka Blvd.
Topeka KS 66611-1287

Re: City of Leavenworth Environmental Assessment Concerns
Kansas Army National Guard Proposed Construction

Dear Mr. Tubach:

This office has the following concerns over this project. The most significant concern is Item 1 which relates to possible conflicts with future bridge construction. I have sent a copy of this letter to Jim Pickett of KDOT and Frank Weatherford of Transystems Engineering as they are involved in that project.

1. **Potential conflicts with future bridge construction.** It is reasonable to assume that a new parallel and/or replacement bridge will be built in the vicinity of the existing Centennial Bridge within the next ten to twenty years. Any permanent structures constructed on this site should be coordinated with this effort so as to minimize future conflicts. Access during bridge construction may be an issue – it may be appropriate to evaluate alternative access routes to be used during a future bridge project.

2. **Adverse impact on traffic congestion at 4th (K-7) and Metropolitan Avenue (US73).** It is requested that traffic patterns and impacts be evaluated by a traffic engineer. It may be necessary to revise signal operations at 4th and Metropolitan. It is assumed that all access will be from Sherman Avenue.

3. **Concerns over sanitary sewer connection.** City has concerns over location of sewer connection and volume of sewer. Additional detail will be necessary to evaluate this issue.

4. **Concerns over storm sewer locations.** It is assumed that all storm water will be addressed according to State and Federal regulations. Additional detail will be necessary to evaluate any impacts upon the City.

5. **Possible adverse impact to the campground.** It is requested that the site be designed to mitigate light and noise infiltration to the Riverfront Park Campground which is now open year-round.

Sincerely,

Michael G. McDonald, P.E.
Director of Public Works

CC: J. Scott Miller, City Manager
James Pickett, KDOT Metro Engineer, (pickett@ksdot.org)
Frank L. Weatherford, Transystems Engineering, (flweatherford@transystems.com)
File

100 N. 5th Street • Leavenworth, Kansas 66048-1970 • (913) 684-0375
www.lvks.org

A-1-27
Directorate of Facilities Engineering

SUBJECT: Effects of New Readiness Center Construction (Project Number 200101) on Personnel Assignment and Automobile Parking at Fort Leavenworth National Guard Enclave

TO: All Interested Parties

1. The Kansas Army National Guard is scheduled to construct a new Readiness Center to serve as Headquarters for the 35th Division. This project includes construction of a 120,450 SF building and a 17,500 SY parking lot for privately owned vehicles. The large existing parking lot located on the south end of the property (see enclosure) is the construction site for the new facility and will, for the most part, be demolished.

2. There is no increase in stationing of either personnel or equipment associated with the planned construction. It is intended to meet existing requirements which will alleviate gross space shortages now experienced at current facilities. The number of fulltime employees at this location is not expected to increase significantly.

3. Following construction, a significant increase in vehicular traffic at this location is not anticipated. Congestion related to the insufficient number of parking places experienced during large exercises conducted by either the 35th Division or the Mission Training Center (MTC) will be much improved.

4. LEED Silver rated energy conservation measures will be included in the design of exterior lighting. Light beams from poles will be shielded and directed downward and should have a negligible effect on the surrounding nighttime light levels.

5. Point of Contact is CPT Daniel Ball, (785) 274-1132 or email daniel.e.ball@us.army.mil.

Encl

ERIC D. BLANKENSHIP
LTC, EN, KSARNG
Construction & Facilities
Management Officer
Memorandum;

14 Aug., 2012

TO: LTC Tony Randall

RE: KDOT Regional Meeting on Metropolitan Ave. Modifications
7 Aug., 2012
Leavenworth City Council Chambers

I attended the above reference meeting which started at approximately 1:00 PM CDST on 7 Aug., 2012 in the Leavenworth City council Chambers. The meeting began with introductions of all parties present and then Mike Moriarty with KDOT turned the floor over to their consultant to give a rundown of findings to date. The study was to determine future needs for Metropolitan Avenue in the way of traffic volume and how to incorporate a new bridge across the Missouri river at some future date when the current bridge has surpassed its useful life. The consultant had recently received the information on the plans for a new readiness center and 35th ID move to a new facility to be constructed on the existing ANG campus at Ft. Leavenworth and asked what we may expect in the way of additional traffic. I explained that little or minor increases in traffic would be expected due to the new facility. The 35th ID is currently located in facilities on site and is simply changing locations. They could expect periods of increased traffic at various points throughout the year as the campus hosts training exercises. The construction of the new building would facilitate larger training groups.

The consultant currently envisions a new bridge being placed to the north of the current bridge with a 75 foot standoff distance to allow ample room for construction. This would require a new tie-in to the existing metropolitan avenue as it heads west. While the preliminary drawing and documents at the meeting showed land acquisition from the city water treatment plant the tie in would occur prior to the Army National Guard property. Current or future utility easements would be placed along the south side of our property but per the illustration would be located south of the current fence line.

I was then asked as to the timing of the new readiness center. I explained that we will be hiring a design firm this fall with 30% design to be completed in spring of 2013. Final design and bidding should be accomplished in late summer of 2014 and construction would begin based upon availability of FY15 funds or basically fall of 2014.
As for the timing of the bridge replacement work, this is an initial project study and funding has not even been discussed to date. It is estimated that project funding would be at least 10 years from now or beyond.

Based upon my observation of the plan on hand, the National Guard would not be asked for land to complete work. Depending upon actual property line location in relationship to current fence line we may be asked to give up easement space.

KDOT will call / initiate additional meetings as it sees fit to complete the study. Parties present will be notified of any future meetings, findings, etc.

A copy of the meeting agenda was handed out at the start of the meeting and a copy of attendees was handed out at the end.

The written documentation as stated above is based upon notes and memories taken from the meeting at the time and is my understanding and interpretation of what transpired over the course of the meeting. Supporting documentation as available is attached.

Richard Dechant Jr., AIA, NCARB
Deputy Chief, Design and Project Management Branch Architect
JFHQKS-LC-DOFE
2800 SW Topeka Blvd.
Topeka, Kansas 66611-1287
P: 785-274-1131
F: 785-274-1619
E: richard.dechant@us.army.mil
Agenda

Metropolitan Avenue (US-73/K-7/K-92) Traffic Study (KA-2337-01)
Leavenworth, Kansas
August 7, 2012

Purpose
To affirm or modify assumptions used to forecast traffic volumes and to establish a road/bridge alignment.

Traffic Volume Growth
City of Leavenworth
Bureau of Prisons
Fort Leavenworth
National Guard

Current Traffic Operations
Level of Service
Crash Experience

Future Traffic Split at Fort Leavenworth
Influence of Expanded Sherman Gate

Road/Bridge Alignment
Separation from existing bridge
Width of bridge
Horizontal geometry
Impact on water plant

Other Issues, Comments, Questions, Etc.

Next Steps
Intersection Analyses and Improvement Recommendations
Identify Right-of-Way Need (if any)
# ATTENDANCE RECORD

**DATE:** 8/7/12  **TIME:** 1 PM  
**PROJECT NUMBER:** KA-2337-01  
**LOCATION:** Leavenworth City Hall  
**MEETING ARRANGED BY:** KDOT  
**PURPOSE:** Metropolitan Traffic Study

<table>
<thead>
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<th>TITLE &amp; ORGANIZATION</th>
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**DATE:**

**TIME:**

**PROJECT NUMBER:**

**LOCATION:**

**MEETING ARRANGED BY:**

**PURPOSE:**
Good afternoon – It appears I forgot to send out the appointment for this meeting (yes, even I make mistakes).

If you recall, the preferred meeting date was August 7th from 1-3 pm at Leavenworth City Hall in the Commission Room. I will send out an appointment directly.

Mike Moriarty
Access Management & Economic Development Manager

Kansas Department of Transportation
Bureau of Transportation Planning
700 SW Harrison, Second Floor
Topeka, KS 66603
785.296.8864 direct
316.239.8995 mobile
Hearing Impaired: 711
September 17, 2012

Mr. James R. Tubach, REM
Adjutant General’s Department
2800 SW Topeka Boulevard
Topeka, Kansas 66611-1287

Dear Mr. Tubach:

This is in response to a letter received July 13, 2012 for environmental documentation and the need for a Department of the Army (DA) permit. The proposed project is to construct a Readiness Center for the 35th Infantry Division Headquarters (35ID HQ Readiness Center) at Fort Leavenworth, Kansas. The proposed work is located in the area of Corral Creek in the Southwest quarter of Section 24 and in the Northwest quarter of Section 25, both in Township 8 south, Range 22 east, in Leavenworth County, Kansas.

The Corps of Engineers has jurisdiction over all waters of the United States. We have preliminarily identified waters of the United States within the project area. Discharges of dredged or fill material in waters of the United States, including wetlands, may require prior authorization from the Corps under Section 404 of the Clean Water Act (Title 33 United States Code Section1344). The implementing regulation for this Act is found at Title 33 Code of Federal Regulations Parts 320-332.

A review of the information provided indicates that a jurisdictional stream is located in the project area. However, your consultant later informed us that you have modified your project to not construct an access road in the stream area.

We have reviewed the information furnished and have determined that the proposed activity will not involve the discharge of dredged or fill material in waters of the United States. Therefore, Department of the Army permit authorization is not required. Although an individual DA permit is not required, other Federal, state and/or local permits may be required. You should verify this yourself.

We are interested in your thoughts and opinions concerning your experience with the Kansas City District, Corps of Engineers Regulatory Program. We have placed an automated version of our Customer Service Survey form on our website at: http://per2.nwp.usace.army.mil/survey.html. At your request, we will mail you a paper copy that you may complete and return to us by mail or fax.

Mr. Michael T. McFadden, Regulatory Project Manager, reviewed the information furnished and made this determination. If you have any questions concerning this matter, please feel free to contact Mr. McFadden at 816-389-3432 (FAX 816-389-2032). Please reference Permit No. NWK 2012-01020 in all comments and/or inquiries relating to this project.

Copies Furnished (electronically):

Environmental Protection Agency,
Watershed Planning and Implementation Branch
U.S. Fish and Wildlife Service, Manhattan, Kansas
Kansas Department of Wildlife, Parks and Tourism
Kansas Department of Health and Environment
Kansas Department of Agriculture
James, even though this is beyond the requested review date, I am sending this as a no concern response for your files. Thank you.

Margaret Fast
Kansas Water Office
785-296-0865
www.kwo.org


KS_KWOLogo_Blue-Gold_PMS

Please think before you print!

Help reduce paper use and only print this email if necessary.
August 9, 2012

Department of the Army and the Air Force
Joint Forces Headquarters Kansas/Adjutant General’s Department
Director of Facilities Engineering
2800 SW Topeka Blvd.
Topeka, KS. 66611-1159

Thank you for your correspondence letter dated August 9, 2012 concerning the following project:

RE: Environmental Planning and Section 106 Consultation for Proposed Construction of a Readiness Center for the 35th Infantry Division at Fort Leavenworth, Kansas.

☐ SHPO Report Requested

☐ No interest in the area geographically

☐ No comment objections on the proposed undertaking

☒ No objections to the project as proposed if cleared through the SHPO. I wish to be notified if any consultations are requested or of any new historical properties are discovered. If human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, please stop immediately and notify this office.

☐ An objection requires additional project information. Please send the following:

Sincerely,

Coreena Adkins, Section 106 Coordinator
Iowa Tribe of Kansas and Nebraska
A-2  Agency Comments on the Draft EA
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A-3         Public Comments on the Draft EA
A-4  Responses to Public and Agency Comments on the Draft EA
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