ENVIRONMENTAL ASSESSMENT FOR IMPLEMENTING THE

INSTALLATION DEVELOPMENT PLAN

AT

ABRAHAM LINCOLN CAPITAL AIRPORT
AIR NATIONAL GUARD BASE
SPRINGFIELD, ILLINOIS

DRAFT

Prepared for

183d Wing, Springfield, IL

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ACRONYMS AND ABBREVIATIONS

§	Section
183 WG	183d Wing
AC	Advisory Circular
ACM	asbestos-containing materials
AFFOR	Air Force Forces
AFI	Air Force Instruction
AFMAN	Air Force Manual
AFOSH	Air Force Office of Safety and Health
AFPD	Air Force Policy Directive
AGE	Aerospace Ground Equipment
Amec FW	Amec Foster Wheeler
ANG	Air National Guard
ANGB	Air National Guard Base
ANGRC	Air National Guard Readiness Center
AOC	Air and Space Operation Center
AOG	Air Operations Group
APE	Area of Potential Effect
AQCR	Air Quality Control Region
AST	aboveground storage tank
AT	Antiterrorism
AT/FP	Antiterrorism/Force Protection
BCE	Base Civil Engineer
BMP	Best Management Practice
BRAC	Base Realignment and Closure
BTEX	benzene, toluene, ethylbenzene, xylene
CAA	Clean Air Act
CAP	Central Accumulation Point
CATM	Combat Arms Training and Maintenance
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CH2M	CH2M Hill, Inc.
CMU	Concrete Masonry Unit
cNAF	Component Numbered Air Force

CO	carbon monoxide
CO_2e	carbon dioxide equivalent
CRF	Centralized Repair Facility
CWA	Clean Water Act
DFAC	Dining Facility
DoD	Department of Defense
EA	Environmental Assessment
EBS	Environmental Baseline Survey
EIAP	Environmental Impact Analysis Process
EISA	Energy Independence and Security Act
EM	Environmental Manager
EO	Executive Order
EPA	United States Environmental Protection Agency
ERP	Environmental Restoration Program
ESA	Endangered Species Act
ESQD	Explosive Safety Quantity Distance
F	Fahrenheit
FAA	Federal Aviation Administration
FACP	Fire Alarm Control Panel
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
GHG	greenhouse gas
HW	hazardous waste
HWMP	Hazardous Waste Management Plan
IDNR	Illinois Department of Natural Resources
IDO	Installation Deployment Office
IDP	Installation Development Plan
IEPA	Illinois Environmental Protection Agency
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
IL	Illinois
ILCS	Illinois Compiled Statutes
ILANG	Illinois Air National Guard
INPC	Illinois Nature Preserves Commission

IPaC	Information for Planning and Conservation
LBP	lead-based paint
LIRB	Lower Illinois River Basin
LRF	Logistics Readiness Flight
MBTA	Migratory Bird Treaty Act
MCSATS	Modular Containerized Small Arms Training Set
µg/m^3	micrograms per cubic meter
MILCON	military construction
MMT	million metric tons
MSG	Mission Support Group
MWH Americas	MWH Americas Inc.
NA	not applicable
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves and Repatriation Act
NCA	National Climate Assessment
NEPA	National Environmental Policy Act
NGB	National Guard Bureau
NHPA	National Historic Preservation Act
NO_2	nitrogen dioxide
NOA	Notice of Availability
NOI	Notice of Intent
NO_x	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O_3	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	polycholorinated biphenyls
PFAS	per- and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic
PM	particulate matter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in diameter
POL	Petroleum, Oil, and Lubricants

POV	privately owned vehicle
ppb	parts per billion
ppm	parts per million
PRL	Potential Release Location
PSD	prevention of significant deterioration
RCRA	Resource Conservation and Recovery Act
SAP	Satellite Accumulation Point
SF	square feet
SFHA	Special Flood Hazard Area
SHPO	State Historic Preservation Office
SI	Site Inspection
SIP	State Implementation Plan
SO_2	sulfur dioxide
SO_x	oxides of sulfur
SPCC	Spill Prevention, Control, and Countermeasures
SPRP	Spill Prevention and Response Plan
SQG	small quantity generator
SR	State Route
SRM	Sustainment, Restoration, and Modernization
SWM	stormwater management
SWPPP	Stormwater Pollution Prevention Plan
tpy	tons per year
UFC	Unified Facilities Criteria
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USDA	U.S. Department of Agriculture
USEIA	U.S. Energy Information Administration
USEPA	U.S. Environmental Protection Agency
U.S.C.	United States Code
USFWS	United States Fish and Wildlife Service
UW	universal waste
UWAP	Universal Waste Accumulation Point
VOC	volatile organic compound
WOTUS	Waters of the United States

Disclosure Statement

The National Guard Bureau (NGB) is providing this draft Environmental Assessment (EA) for public comment in accordance with the National Environmental Policy Act (NEPA), the President's Council on Environmental Quality (CEQ) NEPA implementing regulations (Title 40 *Code of Federal Regulations* [CFR] Parts 1500–1508), and the Air Force's NEPA implementing regulations *Environmental Impact Analysis Process* (EIAP) (32 CFR Part 989). The EIAP requires that an opportunity be provided for public input on NGB decision-making, that the public be invited to offer inputs on alternative ways for NGB to accomplish its proposed action, and that comments be solicited on NGB's analysis of environmental effects. Public commenting enables NGB to make better-informed decisions. Submitted letters and other written or oral comments could be published in the EA. As required by law, NGB will address comments received in the EA and make them available to the public. Providing personal information with comments is voluntary. The NGB will use any personal information provided only to identify the commenter's desire to make a statement during the public comment portion of any public meeting or hearing or to fulfill requests for copies of the EA or associated documents. Private addresses will be compiled to develop a mailing list for those requesting copies of the EA. However, only the names of the individuals making comments and specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the final EA.

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CONTENTS

TABLES

FIGURES

APPENDICES

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1.0 INTRODUCTION

The National Guard Bureau (NGB) has prepared this Environmental Assessment (EA) to consider the potential consequences to the human and natural environments associated with a proposed action at the 183d Wing (183 WG) of the Illinois Air National Guard (ANG), Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, Illinois (IL). This EA also identifies applicable Best Management Practices (BMPs) that would enable the 183 WG to avoid or minimize effects resulting from implementing the Proposed Action or alternatives (to include the No Action Alternative).

The NGB has prepared this EA pursuant to the National Environmental Policy Act (NEPA) of 1969 (Title 42 United States Code [U.S.C.] §§ 4321–4347), Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (Title 40 Code of Federal Regulations [CFR] Parts 1500–1508), and the Air Force's NEPA implementing regulations *Environmental Impact Analysis Process* (EIAP) (32 CFR 989). The NGB is the lead agency for this NEPA analysis.

The Proposed Action is to adopt and implement the Capital Airport ANGB Installation Development Plan (IDP) (NGB 2020). The IDP, which was finalized in 2020, is the result of a comprehensive planning process and provides the 183 WG with a planning, programming, and development strategy that addresses current and programmed mission deficiencies and opportunities at the base.

This EA provides a full analysis of the environmental effects that could potentially result from the proposed short-range facility improvement projects. It also provides sufficient information and analysis of the long-range facility improvement projects to the extent project specific information is available so that future NEPA analyses that tier from this EA can effectively reference the broad analyses it presents. Future construction projects and other actions will undergo specific NEPA analyses as needed. In accordance with 40 CFR § 1501.11, a future NEPA document that tiers off this EA must include a finding that the conditions and environmental effects described in this EA are still valid and/or address any exceptions. Tiering can reduce or eliminate redundant and duplicative analyses and effectively address cumulative effects. Using subsequent tiered NEPA reviews for the long-term facility improvement projects would allow for a focused review at the appropriate level of NEPA analysis when specific details of project planning are available in the future.

Based on the analysis in this EA, the ANG will determine whether to issue a Finding of No Significant Impact (FONSI) and then proceed with the Proposed Action, issue a Notice of Intent (NOI) to prepare an environmental impact statement, or abandon the Proposed Action entirely. As required by NEPA and its implementing regulations, preparation of an environmental document must precede final decisions regarding the proposed projects and the document must

be available to inform decision-makers of the potential environmental effects of selecting the Proposed Action, reasonable alternatives, or the No Action Alternative.

1.1 PURPOSE AND NEED FOR THE ACTION

The purpose of the Proposed Action is to provide the 183 WG with the properly sized and configured facilities, infrastructure, and services needed to effectively accomplish its mission, as outlined in the IDP. The proposed construction and renovation projects, as well as the demolition of excess and inefficient structures, would conserve energy and resources through consolidation and modernization. This is necessary to enable the Capital Airport ANGB to maintain the level of readiness necessary to support its mission.

All proposed IDP projects would meet the purpose of and need for the Proposed Action. The period of construction, demolition, and renovation activities for the short-range facility improvements would be approximately 5 years. Long-range facility improvement projects, which would be implemented beyond 5 years, will receive a hard look as required by NEPA when they are ripe for analysis and the ANG would prepare documentation for any projects requiring additional or updated NEPA analysis.

As described in 32 CFR Part 989, the NEPA process is intended to provide Air Force planners and decision-makers with a meaningful review of environmental considerations associated with a given action. The analysis set forth in this EA allows decision-makers to carefully balance the protection of these environmental resources while fulfilling the Air Force's essential roles, including national defense, and ILANG's mission to provide adequate training facilities in support of the military mission. Both environmental staff and military personnel within ILANG were consulted and provided guidance on the development of this EA.

Per amendments to 10 United States Code (U.S.C.) 10501, described in Department of Defense (DoD) Directive 5105.77, the NGB is a joint activity of the DoD. The NGB serves as a channel of communication and funding between the Air Force and State ANG organizations in the 50 U.S. states, territories, and the District of Columbia. The National Guard Bureau Air Directorate oversees the NEPA process for Air National Guard facilities, as required under NEPA, CEQ Regulations, and 32 CFR Part 989.

1.2 LOCATION AND DESCRIPTION OF INSTALLATION

Capital Airport ANGB, home of the 183d WG, is located at Abraham Lincoln Capital Airport, a civil-military airport owned by the Springfield Airport Authority. Abraham Lincoln Capital Airport is located on 2,128 acres in Sangamon County, IL, approximately 3 miles northwest of the City of Springfield (Figure 1-1). The base makes up the central eastern portion of the airport and occupies 78 acres. Surrounding the base to the north, south, and west is the airport; to the east, the base is bordered by J. David Jones Parkway/State Route (SR) 29. On the east side of J. David Jones Parkway/SR 29 are scattered single-family homes, agricultural land, a community park, and small, isolated wooded areas.

LEGEND

Installation Boundary

183 WG Capital Airport ANGB Location Map

Figure 1-1

The 183 WG of the Illinois Air National Guard (IL ANG) is located at Abraham Lincoln Capital Airport, approximately 3 miles northwest of the central business district of the City of Springfield in Sangamon County, Illinois. The Capital Airport ANGB operates on approximately 78 acres of land leased from the Springfield Airport Authority on the eastern side of the airport. The 183 WG operates a Centralized Repair Facility (CRF). The mission of the CRF is to repair and maintain F110-GE-129, F110-GE-100, F118-GE-100, and TF34-GE-100A engines assigned to ANG and Air Force units. In addition, the 183 WG operates a Component Numbered Air Force (cNAF), including an air and space operations center (AOC) and an Air Force Forces (AFFOR) staff, which is an aerospace, operation planning, execution, and assessment system for the Joint Forces Air Component Commander. It is the primary tool for commanding and executing air, space, and cyber power. The 183 WG Air Operations Group (AOG) will augment Air Force headquarters staff in planning, coordinating, allocating, tasking, and controlling air, space, and cyber operations in a theater of operations. Besides the AOG, the unit consists of the Mission Support Group (MSG), the Medical Group, the Maintenance Squadron, and the Wing Headquarters Staff.

The 217th Engineering and Installation Squadron resides within the Mission Support Group. The major support operations performed at the base for the CRF mission include engine maintenance, Aerospace Ground Equipment (AGE) maintenance, ground vehicle maintenance, fueling, and facilities maintenance.

1.3 SUMMARY OF KEY ENVIRONMENTAL STUDY REQUIREMENTS

1.3.1 National Environmental Policy Act

NEPA requires that federal agencies consider the potential environmental consequences of proposed actions in their decision-making process. The intent of NEPA is to protect, restore, and enhance the environment through well-informed federal decisions. The CEQ was established under NEPA to implement and oversee federal policy in this process. The CEQ subsequently issued the *Regulations for Implementing the Procedural Provisions of the NEPA* (40 CFR Parts 1500–1508), updating those regulations in 2020. The activities addressed within this document constitute a federal action and therefore must be assessed in accordance with NEPA. The Air Force's NEPA implementing regulations, the EIAP*,* are detailed in 32 CFR 989*.*

1.3.2 Antiterrorism/Force Protection

The DoD has developed antiterrorism/force protection (AT/FP) standards designed to reduce the likelihood of physical damage and mass casualties from potential terrorist attacks. Antiterrorism standards are based on DoD Instruction 2000.16 (2006), *DoD Antiterrorism (AT) Standards*; Air Force Instruction (AFI) 10-245 (2017), *Antiterrorism (AT)*; and AFI 31-118 (2017), *Security*. These documents establish guidance and procedures to reduce the vulnerability of the installation and personnel to terrorism or terrorist activities. Unified Facilities Criteria (UFC) 4-010-01, *DoD Minimum Anti-Terrorism Standards for Buildings*, outlines various planning, construction, and operational standards that address potential terrorist threats.

1.3.3 Air Quality

The Clean Air Act (CAA) (42 U.S.C. §§ 7401–7671q) provided the authority for the U.S. Environmental Protection Agency (USEPA) to establish nationwide air quality standards and regulate emission of toxic air pollutants to protect public health and welfare and to regulate hazardous air pollutants. Federal standards, known as the National Ambient Air Quality Standards (NAAQS), were developed for the following six criteria pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO_2), ozone (O_3), particulate matter (PM), and sulfur dioxide (SO_2). The CAA also requires that each state prepare a State Implementation Plan (SIP) for maintaining and improving air quality and for achieving attainment with the NAAQS. Under the CAA Amendments of 1990, federal agencies are required to determine whether their undertakings conform to the applicable SIP. In addition, they must demonstrate that their actions will not cause or contribute to a new violation of the NAAQS; increase the frequency or severity of any existing violation; or delay timely attainment of any standard, emission reduction, or milestone contained in the SIP. The USEPA's General Conformity Rule (40 CFR Part 93, Subpart B) requires a proponent in a maintenance or nonattainment area to perform an analysis to determine whether its Proposed Action would conform to the SIP. Under the General Conformity Rule, the action is exempt if the total direct and indirect emissions from the Proposed Action are below *de minimis* levels.

1.3.4 Cultural Resources

The National Historic Preservation Act (NHPA) of 1966 (54 U.S.C. 300101, *et seq*.) established the National Register of Historic Places (NRHP) and the Advisory Council on Historic Preservation, outlining procedures for the management of cultural resources on federal property. Cultural resources can include archaeological remains, architectural structures, and traditional cultural properties such as ancestral settlements, historic trails, and places where significant historic events occurred. NHPA requires that federal agencies consider potential effects on cultural resources that are listed, nominated, or eligible for listing on the NRHP; designated as a National Historic Landmark; or valued by modern Native Americans for maintaining their traditional culture. NHPA Section 106 requires that federal agencies consult with the State Historic Preservation Office (SHPO) if their undertakings might affect such resources. Regulations detailed in 36 CFR Part 800, *Protection of Historic and Cultural Properties*, provides an explicit set of procedures to ensure that federal agencies meet their obligations under the NHPA, which includes inventorying resources and consultation with the SHPO.

The Archaeological Resources Protection Act of 1979 (16 U.S.C. § 470aa-mm) was enacted to protect archaeological resources and sites on public and Native American lands in addition to encouraging cooperation and exchange of information between governmental authorities, professionals, and private individuals. The act establishes civil and criminal penalties for destroying and altering cultural resources. AFI 90-2002, *Interactions with Federally Recognized Tribes*, implements the Air Force program in accordance with Department of Defense Instruction

4710.02, *DoD Interactions with Federally Recognized Tribes*, and contains requirements that must be followed as part of the analysis of proposed actions.

1.3.5 Endangered Species

The Endangered Species Act (ESA) (16 U.S.C. §§ 1531–1544) established measures for the protection of plant and animal species that are federally listed as threatened or endangered, and for the conservation of habitats that are critical to the continued existence of those species. Federal agencies must evaluate the effects of their proposed actions in accordance with a set of defined procedures, which can include preparing a Biological Assessment. This can require formal consultation with the U.S. Fish and Wildlife Service (USFWS) under ESA Section 7.

1.3.6 Hazardous Materials and Waste

Hazardous materials are defined by regulations in 49 CFR § 171.8, and transportation of hazardous materials is regulated by the U.S. Department of Transportation as detailed in 49 CFR Parts 105–180. Hazardous wastes are defined under the Resource Conservation and Recovery Act (RCRA) in 42 U.S.C. § 6903(5), as amended by the Hazardous and Solid Waste Amendments (40 CFR Parts 260–273). Special hazards are substances that could pose a risk to human health (i.e., asbestos-containing materials, lead-based paint, and polychlorinated biphenyls) and are addressed separately from other hazardous substances under the Toxic Substances Control Act (15 U.S.C. § 2602, *et seq*.). Information on the location, quantity, and condition of hazardous materials and waste assists in determining the significance of a proposed action.

1.3.7 Water Resources

The Federal Water Pollution Control Act (also known as the Clean Water Act [CWA]) has a goal to restore and maintain the chemical, physical and biological integrity of waters (lakes, rivers, streams, wetlands, estuaries, and coastal zones) throughout the nation. As such, the CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States and regulating water quality standards for surface waters. Pertinent sections of the CWA include, but are not limited to:

- Section 401 gives states and authorized tribes the authority to grant, deny, or waive water quality certification of proposed federally licensed or permitted activities that may result in a discharge into Waters of the United States (WOTUS).
- Section 402 requires that all construction sites on an acre or greater of land, as well as municipal, industrial, and commercial facilities discharging wastewater or stormwater directly from a point source (a pipe, ditch, or channel) into a surface water of the United States (a lake, river, and/or ocean), must obtain permission under the National Pollutant Discharge Elimination System (NPDES) permit.

- Section 404 regulates development activities in WOTUS, including wetlands. It requires a permit from the U.S. Army Corps of Engineers (USACE) for dredging and filling of WOTUS, including wetlands.

The Rivers and Harbors Act prohibits the construction of any bridge, dam, dike, causeway or other structures over or in navigable waterways of the United States. Section 10 of the Act prohibits (1) building of any wharfs, piers, jetties, and other structures and (2) excavating or filling within navigable waters without a Section 10 permit from the USACE.

Section 438 of the Energy Independence Security Act (EISA) of 2007 (42 U.S.C. § 17094) requires that all federal agencies, including the DoD, reduce stormwater runoff from federal development projects with a footprint that exceeds 5,000 square feet (SF). These projects shall use site planning, design, construction, and maintenance strategies for the property and maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow. Federal agencies are required to use the *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects* to comply with the requirements of EISA Section 438. The Technical Guidance was prepared by the USEPA, EPA 841-B-09-001, December 2009 as part of stormwater management design.

Executive Order (EO) 11990 *Protection of Wetlands* is intended to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands. Federal agencies are required to consider alternatives to the use of wetland sites and to limit potential damage if an activity affecting a wetland cannot be avoided.

EO 11988 *Floodplain Management* requires federal agencies to avoid the long- and short-term adverse impacts associated with the occupancy and modification of floodplains to the greatest extent possible, and to avoid direct and indirect support of floodplain development wherever there is a practicable alternative.

The Federal Emergency Management Agency (FEMA) regulates floodplains, which are recognized as Special Flood Hazard Areas (SFHAs) on the Flood Insurance Rate Maps. SFHAs are defined as the area that will be inundated by a flood event having a 1 percent chance of being equaled or exceeded in any given year (commonly referred to as the 100-year floodplain).

1.3.8 Other Executive Orders and Laws

Environmental Justice. EO 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires that, to the greatest extent practicable and permitted by law, each federal agency make achieving environmental justice part of its mission. Federal agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States.

Protection of Children. EO 13045 *Protection of Children from Environmental Health and Safety Risks* recognizes that children may suffer disproportionately from environmental health risks and safety risks. The EO prioritizes identification and assessment of environmental health and safety risks that may affect children. It also promotes federal agency policies, programs, activities, and standards to address environmental risks and safety risks to children.

Invasive Species. EO 13751 *Safeguarding the Nation from the Impacts of Invasive Species* calls for actions "to prevent the introduction of invasive species and provide for their control and to minimize the economic, plant, animal, ecological, and human health impacts that invasive species cause" utilizing the laws of the United States of America, including the NEPA of 1969, as amended (42 U.S.C. § 4321, *et seq.*); the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 (16 U.S.C. § 4701, *et seq.*); the Plant Protection Act (7 U.S.C. § 7701, *et seq.*); the Lacey Act, as amended (18 U.S.C. § 42; 16 U.S.C. § 3371-3378, *et seq.*); the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531, *et seq.*); the Noxious Weed Control and Eradication Act of 2004 (7 U.S.C. § 7781, *et seq.*); and other pertinent statutes. EO 13751 amends and replaces the earlier EO 13112 *Invasive Species*.

Migratory Birds. EO 13186 *Responsibilities of Federal Agencies to Protect Migratory Birds* furthers the intent of the Migratory Bird Treaty Act (16 U.S.C. 703–711) to ensure the conservation of migratory birds and their habitats. The EO further ensures environmental analysis of federal actions required by the National Environmental Policy Act of 1969 (42 U.S.C. 4321–4347) or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with an emphasis on species of concern.

Farmland Protection. The Farmland Protection Policy Act of 1981 (7 U.S.C. 4201) requires that federal agencies identify adverse impacts to prime and/or unique farmlands within a project action area.

1.4 RESOURCES NOT CARRIED FORWARD FOR DETAILED ANALYSIS

The determination of issues analyzed in detail in this EA and those not carried forward for detailed analysis is part of the EA scoping process as described in 40 CFR 1501.9(f)(1), which states that issues addressed in prior environmental reviews or that are not significant may be eliminated from discussion in the EA. The following environmental resource areas were found to have no significance to the Proposed Action, alternatives, or No Action Alternative, as there would be either no or negligible potential for direct, indirect, or effects considered with other foreseeable future actions as a result of implementing the Proposed Action or alternatives: aesthetics and visual resources, airspace, geological resources, land use, socioeconomics (including environmental justice and protection of children), and noise.

Aesthetics and Visual Resources. The Proposed Action would have no appreciable effects on aesthetics or visual resources. All the project sites are on Capital Airport ANGB. There are no aesthetically sensitive locations within the viewshed of the proposed sites. The existing view is of

Abraham Lincoln Capital Airport or ANGB with supporting infrastructure. The visual environment is typical of a military facility setting and does not constitute a unique or sensitive viewshed of public interest. The existing facilities are equipped with lighting throughout the parking areas, pedestrian walkways, and controlled access points. During the construction and demolition activities on Capital Airport ANGB, the visual and aesthetic characteristics of areas undergoing development would be temporarily altered by the use of construction equipment and the delivery and stockpiling of construction materials. Following completion of construction, the proposed facilities and associated infrastructure would remain as permanent visual features within the viewshed; however, the principal visual features of the facility would remain consistent with existing conditions. These effects would be negligible; therefore, aesthetics and visual resources were not carried forward for detailed analysis in this EA.

Airspace. The Proposed Action would have no effect on airspace. A flying mission is not currently assigned to the 183 WG. There would be no changes in restricted airspace, the airfield, or aircraft operations as a result of the Proposed Action; therefore, airspace was not carried forward for detailed analysis in this EA.

Geological Resources. The Proposed Action would have negligible effects on geological resources. The proposed projects would be in previously disturbed and graded locations. Ground-disturbing activities would be temporary and standard erosion control measures would be implemented to reduce or eliminate any potential soil impacts. Proposed activities would not alter the topography of the existing terrain, nor would they be located near identified geological hazards. Their effects would be negligible; therefore, geological resources were not carried forward for detailed analysis in this EA.

Land Use. The Proposed Action would have negligible effects on land use. The Proposed Action would not change current land-use patterns. The proposed activities would be within the military installation boundaries and would not alter the current on- or off-base land-use classifications or zoning. The Proposed Action is consistent with 183 WG planning policies and guidelines and projects have been designed and sited to be compatible with current land uses. As such, land use was not carried forward for detailed analysis in this EA.

Socioeconomics (including environmental justice and protection of children). The Proposed Action would have no appreciable effects on the local or regional socioeconomic environment. It would, however, have negligible, short-term beneficial effects associated with employment of construction personnel and purchases of construction equipment, materials, and supplies. The Proposed Action would not result in a long-term permanent increase or decrease in employment or population, as the action does not include changes in the number of military or civilian operations personnel. Therefore, socioeconomics was not carried forward for detailed analysis in this EA.

The Proposed Action would have no appreciable effects on environmental justice. The threshold used for identifying minority and low-income populations was developed consistent with CEQ guidance (CEQ 1997) for identifying minority population using either the 50 percent threshold or another percentage deemed "meaningfully greater" than the percentage of minority or low-income individuals in the general population. CEQ guidance does not provide a numerical definition of the term "meaningfully greater." For this analysis, the significance thresholds for environmental justice concerns were established at the state level. The county is determined to contain a meaningfully greater percentage of minority or low-income populations if the percentage substantially exceeds (by 20 percentage points or more) the state average or exceeds 50 percent of the population. Sangamon County's percentage of minority or low-income populations does not exceed the state averages. The percentage of residents with income below the 2019 poverty threshold for Sangamon County was 15 percent (Illinois' was also 13 percent), and the county's minority population was 20 percent of the total county population (Illinois' minority population was 39 percent) (USCB 2019a, 2019b). The Proposed Action would not result in disproportionate adverse environmental or health effects on low-income or minority populations; therefore, environmental justice was not carried forward for detailed analysis in this EA.

The Proposed Action would have no appreciable effects on the health and safety of children. Capital Airport ANGB has no family housing or facilities where children typically are present (e.g., childcare centers, schools). Capital Airport ANGB is a fenced facility with controlled entry points and children would not have access to the on-base project sites. Therefore, protection of children was not carried forward for detailed analysis in this EA.

Noise. Background noise levels without aircraft were estimated for the areas surrounding Abraham Lincoln Capital Airport and the Capital Airport ANGB using the techniques specified in the *American National Standard Quantities and Procedures for Description and Measurement of Environmental Sound Part 3: Short-Term Measurements with an Observer Present*. Areas in the immediate vicinity of the Capital Airport ANGB, particularly individual residents along J. David Jones Parkway and Estill Drive, are exposed to appreciable amounts of aircraft noise from Abraham Lincoln Capital Airport. Noise levels and operational frequency of aircraft from the airport are both audible and common in areas adjacent to the airport and under the runway arrival and departure flight tracks; however, with approximately 73 operations per day of primarily civilian aircraft, noise levels that are normally not recommended for residential use are confined to areas within the airport boundary. Notably, the 183 WG does not maintain an air fighting mission and does not base or fly any military aircraft at the airport.

The Proposed Action would have negligible effects on the noise environment. Short-term effects would be due to the use of heavy equipment during demolition and construction activities. Long-term effects would be due to the potential use of back-up generators at the proposed facilities. The Proposed Action would not appreciably increase areas of incompatible land use surrounding the base or lead to a violation of any applicable federal, state, or local noise regulations. Though

the construction and demolition activities would require the use of heavy equipment that would generate short-term increases in noise near the project sites, all construction and demolition activities would occur within the installation property boundary and would be collocated with other existing noise-compatible activities. Individual pieces of construction and demolition equipment typically generate noise levels of 80 to 90 dBA at a distance of 50 feet (FHWA 2006; USEPA 1971). With multiple equipment units operating concurrently, noise levels can be relatively high during daytime periods at locations within several hundred feet of active sites. All noise-sensitive areas within 800 feet of construction and demolition activities would experience some amounts of noise. These areas would include some on-base ANG facilities, areas where personnel would be present, and residences along J. David Jones Parkway. However, construction and demolition activities would be primarily confined to on-base areas and conducted primarily during daytime hours. Due to the temporary nature of the projects and the distance to nearby off-base areas, these effects would be minor. Noise from the proposed indoor small-arms range would be almost completely confined to inside the facility. In the final design stages, the modular range would be designed and sited to limit the noise to areas within the airport boundary. These changes would be in the context of an area where the primary source of noise is aircraft activities. These effects would be negligible. No new permanent sources of noise would be associated with the Proposed Action and no changes in military training activities would occur; therefore, no long-term changes in the noise environment would be expected and these effects would be negligible. As such, noise was not carried forward for detailed analysis in this EA.

1.5 PUBLIC AND AGENCY REVIEW OF ENVIRONMENTAL ASSESSMENT

The NBG provides opportunities for the public to participate in the NEPA process to promote open communication and improve their decision-making process. All persons and organizations with an interest in the Proposed Action and alternatives are encouraged to participate in the process.

EO 12372, *Intergovernmental Review of Federal Programs*, requires intergovernmental notifications prior to making any detailed statement of environmental effects. Through the process of Interagency and Intergovernmental Coordination for Environmental Planning (IICEP), the project proponent must notify concerned federal, state, and local agencies and allow them sufficient time to evaluate potential environmental effects of the Proposed Action. Through the IICEP process, the NGB notified relevant federal, state, and local agencies and tribes and allowed them 30 days to make known their environmental concerns about the Proposed Action. Copies of all correspondence are provided in Appendix A.

NEPA and the EIAP require public review of the EA before approval of the FONSI and implementation of the Proposed Action. A Notice of Availability (NOA) for public review of the Draft EA was published in the *State Journal-Register Springfield* on June 30, 2022. The Draft EA was made available in electronic form for public review at https://www.183wg.ang.af.mil. A copy of the NOA is provided in Appendix B. The Draft EA and FONSI are available for public review at the Lincoln Library, 326 S. 7th Street, Springfield, IL 62701.

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2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This section presents a detailed description of the Proposed Action, which is to adopt and implement the IDP. The details of the Proposed Action form the basis for the analysis of potential environmental effects presented in Section 3.0 of this EA. This section also discusses proposed alternatives, including the No Action Alternative.

2.1 PROPOSED ACTION AND ALTERNATIVES

2.1.1 Proposed Action

Under the Proposed Action, the 183 WG would implement the IDP construction, demolition, and renovation projects listed in Table 2-1. The proposed project sites are shown in Figure 2-1. Photos of project locations are provided at the end of this section. There would be no appreciable changes in Capital Airport ANGB operations as a result of the Proposed Action. The following subsections discuss the construction, demolition, and renovation aspects of the projects. As discussed in Sections 1.0 and 1.1, long-range facility improvement projects (Projects 16 and 18) will undergo future specific NEPA analyses as needed, tiering off this EA, when specific project planning details are available.

Table 2-1. Summary of Proposed Projects

Project Number	Project Title (ANG Project Number)	
Short-Range Projects		
1	**Repair Central Repair Facility (CRF), Building 17 (DCFT102008)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2021 (short-range)
	Project Need	Meet CRF mission requirements.
	Proposed Action	• Reinforce concrete foundation and floor slab with concrete masonry unit (CMU) walls and metal standing seam roof. Modify existing as needed to meet AT/FP criteria. • Renovate the existing facility and reconfigure interior walls to accommodate CRF mission. • Modify building systems to accommodate the reconfiguration, install interior finishes. • Upgrade plumbing, electrical, fire protection, and communications systems.
	No Action Alternative	Maintain building in current condition and configuration, which would not support mission requirements nor meet modern USAF or ANG standards. The CRF will continue to operate in violation of OSHA and AFOSH standards for a safe work environment.

Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
Short-Range Projects		
2	**Repair Base Fire Suppression System (DCFT142001)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2022 (short-range)
	Project Need	Provide adequate pressure and water flow to operate the facilities' suppression systems.
	Proposed Action	• Repair the base fire suppression system by replacing the existing 125,000-gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. • Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. • Repair existing landscaping and vegetation areas as necessary to accommodate new tank and pump house facility.
	No Action Alternative	Maintain current 30-year-old system, which is past its useful life and in very poor condition. The installation will not have functioning fire suppression systems in over half of its main and highly occupied facilities.
3	**Repair Vehicle Maintenance Facility, Building 19 (DCFT152010)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2022 (short-range)
	Project Need	Provide a properly sized and configured Vehicle Maintenance facility to support the 183 WG mission requirements.
	Proposed Action	• Renovate and reconfigure the existing Vehicle Maintenance facility for vehicle maintenance offices and administrative space, training room, and break room. • Renovate shop space for lubrication, inspection, general repair, and replacement of major assemblies (such as above-ground vehicle hoists), as well as welding, upholstery, testing, cleaning, and minor parts fabrication.
	No Action Alternative	Continue to operate the current facility with reduced operations capability. Refueling maintenance and repair will continue to operate at a backlog.
4	**Repair Base Fire Alarm Systems (DCFT172008)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2022 (short-range)
	Project Need	The base needs a centralized base-wide fire alarm control system in accordance with UFC 3-600-01 and ANG ETL 15-01-03 standards.
	Proposed Action	• Replace fire alarm systems with primary receiving and dispatching system with redundancy. • Replace non-compliant, non-addressable fire alarm control panels (FACPs) with addressable wireless control panels and transceivers with capability to report to the centralized system. • Add transceivers to existing addressable FACPs. • Install centralized system able to receive wireless transmissions from FACPs that can be integrated with base-wide Installation Notification and Warning System.
	No Action Alternative	Continue to utilize the existing fire alarm system. The reliability and maintainability of the base fire alarm system will continue to decline.

Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
5	**Demolish Buildings 12 and 13 (DCFT162900)**	
	Project Type	Demolition
	Execution Year (short- or long-range)	2023 (short-range)
	Project Need	Eliminate excess infrastructure from the CRF mission.
	Proposed Action	• Demolition of Buildings 12 and 13 will total 11,827 square feet (SF) (Building 12 [8,579 SF] and Building 13 [3,248 SF]). • Demolish all supporting utilities, excess pavements (650 SF), and return the entire site back to a sodded lawn.
	No Action Alternative	Maintain Buildings 12 and 13 in the current configuration. This will result in excess infrastructure that is not authorized. Maintenance of the facilities will be done without supporting operations and maintenance funds.
6	**Repair Access, Building 15 (DCFT192011)**	
	Project Type	Construction and Demolition
	Execution Year (short- or long-range)	2023 (short-range)
	Project Need	Improve vehicle traffic for delivery vehicles to the 183 WG Logistics Readiness Flight (LRF) and eliminate pedestrian safety concerns.
	Proposed Action	• Demolish existing loading dock. • Re-grade and construct an asphalt driving lane and depressed concrete slab for a loading dock (27,000 SF) on the north side of the LRF, Building 15. • Loading dock will be installed in the north bay of Building 15.
	No Action Alternative	Maintain the current configuration of loading dock and roadways, which would not eliminate pedestrian safety concerns or major inefficiencies for the 183 WG LRF.
7	**Construct Air Operations Group (AOG) Parking (DCFT192010)**	
	Project Type	Construction
	Execution Year (short- or long-range)	2023 (short-range)
	Project Need	After construction of the new BCE complex (Project 9), the existing center parking lot will be demolished. The 183 WG will lose 284 parking spaces and the number of parking spaces will become insufficient.
	Proposed Action	• Re-grade and construct an asphalt parking lot (54,000 SF) with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. • Repair existing landscaping and vegetation areas as necessary.
	No Action Alternative	Continue to use the remaining 386 parking spaces with no construction for a new parking lot. This would lead to personnel parking in areas of the base not designed for vehicle parking.
8	**Repair Dining Facility (DFAC) in existing Building 48 (DCFT162002)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2024 (short-range)
	Project Need	A directed serving line aimed at efficiently moving airmen and allowing proper access to dishwashing equipment is needed.

Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
	Proposed Action	• Renovate existing DFAC in Building 48 to address functional layout issues.
	No Action Alternative	Maintain DFAC in current condition and configuration. Flow of personnel through the DFAC would remain ineffective.
9	**Construct Base Civil Engineer (BCE) Complex (MILCON) (DCFT059018)**	
	Project Type	Construction and Demolition
	Execution Year (short- or long-range)	2024 (short-range)
	Project Need	Construction of a new facility would provide the 183 WG with a properly sized and configured BCE complex to accommodate BCE Maintenance Shop requirements. Existing BCE facilities are located in seven separate buildings (2, 3, 28, 30, 44, 45, and 47), three of which do not meet AT/FP stand-off distance, adversely affecting cohesive operations.
	Proposed Action	• Construct a properly designed and purpose-built 24,300 SF BCE complex. • Demolish existing BCE complex facilities (Buildings 2, 3, 28, 30, 44, 45, and 47) (23,519 SF).
	No Action Alternative	Maintain the current BCE complex facilities in their current condition and configuration, which would not support mission requirements.
10	**Repair Roof, Building 46 (DCFT162014)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2025 (short-range)
	Project Need	Renovations required to repair deteriorating roof.
	Proposed Action	• Exterior renovation to repair roof.
	No Action Alternative	Maintain building in current condition and configuration, which would not support mission requirements.
11	**Repair Deployment Processing, Building 23 (DCFT202001)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2024–2025 (short-range)
	Project Need	Renovations required to modernize and update the facility for new use.
	Proposed Action	• Interior repair/renovation of 11,331 SF to house both deployment processing, LRF/IDO (Installation Deployment Office), and gym spaces.
	No Action Alternative	Maintain building in current condition and configuration, which would not support mission requirements.
12	**Repair Bridge Cranes and CRF Operations (DCFT182004)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2025 (short-range)
	Project Need	Renovations required to modernize and update the facility to support both engine processing and repair.
	Proposed Action	• Repair bridge cranes to Building 26.
	No Action Alternative	Maintain building in current condition and configuration, which would not support mission requirements.

Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
13	**Construct Hush House Admin Facility (DCFT192001)**	
	Project Type	Construction
	Execution Year (short- or long-range)	2025 (short-range)
	Project Need	Construction of a new facility would provide hush house personnel access to potable water, restrooms, and needed safety measures assigned to hush house operations.
	Proposed Action	• Construct a permanent restroom and breakroom for personnel assigned to hush house operations. • Physical size of the facility will be determined by variance determination.
	No Action Alternative	Maintain building in current condition and configuration. The nature of work conducted within these facilities warrants a necessary quality of life, which does not exist under current conditions.
14	**Construct CRF Engine Storage (DCFT192002)**	
	Project Type	Construction
	Execution Year (short- or long-range)	2026 (short-range)
	Project Need	Accommodate additional storage needs for overflow, queued, and in process engines awaiting repair as well as tools and parts.
	Proposed Action	• Construct a dedicated engine storage facility for engines in process, awaiting parts, completed/awaiting pickup, and a staging area for queuing. • Physical size of the facility will be determined by variance determination.
	No Action Alternative	Continue use of other buildings for storage needs with no construction for new engine storage.
15	**Repair POL Facility, Building 18 (DCFT192006)**	
	Project Type	Renovation
	Execution Year (short- or long-range)	2026 (short-range)
	Project Need	Existing facility requires repair and modernization as the building has remained largely untouched since the early 1980s.
	Proposed Action	• Interior updates and renovations to the facility.
	No Action Alternative	Maintain and use in current configuration and condition, which would not support mission requirements.
17	**Repair Base Pavements (DCFT062001)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2026 (short-range)
	Project Need	Pavements around the installation are in poor condition and are cracking/separating.
	Proposed Action	• Repair/replace pavement throughout the base.
	No Action Alternative	Maintain and use in current condition. Without renovation or repair, the pavements will continue to deteriorate.
19	**Construct CRF Parking Lot (DCFT202008)**	
	Project Type	Construction

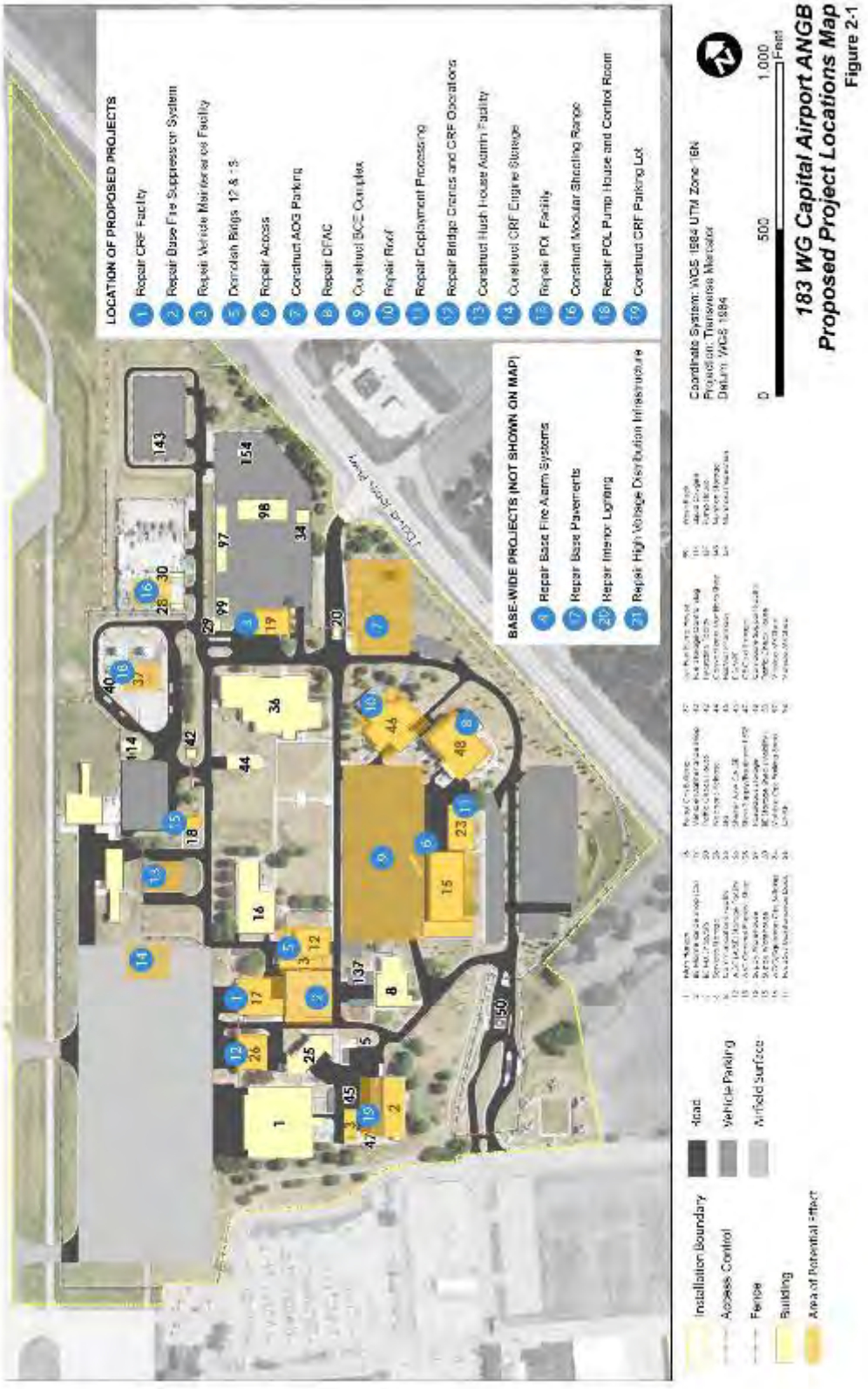
Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
	Execution Year (short- or long-range)	2022 (short-range)
	Project Need	After construction of the new BCE complex (Project 9), the existing center parking lot will be demolished and the 183 WG will lose 284 parking spaces and lack sufficient parking.
	Proposed Action	• Re-grade and construct an asphalt parking lot (63,000 SF) at the location of the existing BCE complex facilities (Buildings 2, 3, 28, 30, 44, 45, and 47) once demolished. New parking lot will include concrete curbs, new storm drainage, and lighting to accommodate facility usage at the south end of the installation. • Repair existing landscaping and vegetation areas as necessary.
	No Action Alternative	Continue to use the remaining 386 parking spaces with no construction for a new parking lot. Park additional vehicles in areas of the base not designed for vehicle parking.
20	**Upgrade Lighting Base-wide (DCFT202002)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2026 (short-range)
	Project Need	Base-wide facilities require energy upgraded lighting systems to conserve energy and provide better lighting to accomplish mission related tasks while assisting the base in complying with energy mandates.
	Proposed Action	• Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. • Exterior lighting systems upgrades will include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded.
	No Action Alternative	Maintain lighting in its current condition and configuration, which would not support mission requirements. 183 WG facilities will continue to be operated in an energy inefficient and potentially wasteful manner and would not meet energy intensity goals established by public laws.
21	**Repair High Voltage Distribution Infrastructure (DCFT202003)**	
	Project Type	Renovation and Repair
	Execution Year (short- or long-range)	2026 (short-range)
	Project Need	The 183 WG mission requires reliable electrical distribution systems to maintain operations. The primary system is over 40 years old, while most of the secondary system is over 25 years old. The system is unreliable due to its age, with replacement fuses and switches becoming difficult to procure due to scarcity. It suffers from deferred maintenance.
	Proposed Action	• Replace all obsolete high voltage primary and secondary distribution systems to include transformers, cabling, switch gear, and any damaged pathways or manholes.
	No Action Alternative	Maintain the existing system in its current condition and continue to operate in an energy inefficient manner. Facilities will continue to consume more energy than necessary. Exterior lighting will continue to degrade, compromising safety and security for personnel working on the installation. Additionally, several critical facilities are primarily dependent on electric heat pumps for thermal heating.

Table 2-1. Summary of Proposed Projects (continued)

Project Number	Project Title (ANG Project Number)	
Long-Range Projects		
16	**Construct Modular Shooting Range (DCFT219001)**	
	Project Type	Construction
	Execution Year (short- or long-range)	2031 (long-range)
	Project Need	The installation requires an adequately sized, properly configured, and correctly sited small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226.
	Proposed Action	Construct small arms firing range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a Combat Arms Training and Maintenance (CATM) facility (12,300 SF).
	No Action Alternative	Installation personnel will continue to travel considerable distances to qualify on weapons, negatively affecting 183 WG readiness and severely degrading their wartime mission.
18	**Repair CMU Pump House and Control Room**	
	Project Type	Construction and Demolition
	Execution Year (short- or long-range)	2031 (long-range)
	Project Need	Currently there are two facilities constructed of CMU that house both the electrical control equipment and the fuel pumping equipment in the Petroleum, Oil, and Lubricants (POL) area. Both structures are showing signs of joint and block failure and need to be replaced.
	Proposed Action	• Demolish existing exterior. • Current estimate of area of disturbance is approximately 140,000 SF. • Construct a new building envelope to maintain operations. • New construction will occur on existing pavement.
	No Action Alternative	Maintain building in current condition and configuration, which would not address safety concerns.

Sources: NGB 2020, Capital Airport ANGB 2021.


LOCATION OF PROPOSED PROJECTS
1 Repair CRF Facility
2 Repair Base Fire Suppression System
3 Repair Vehicle Maintenance Facility
5 Demolish Bldgs 12 & 13
6 Repair Access
7 Construct ADG Parking
8 Repair DFAC
9 Construct BCE Complex
10 Repair Roof
11 Repair Deployment Processing
12 Repair Bridge Cranes and CRF Operators
13 Construct Hush House Admin Facility
14 Construct CRF Engine Storage
15 Repair POL Facility
16 Construct Modular Shooting Range
18 Repair POL Pump House and Control Room
19 Construct CRF Parking Lot
BASE-WIDE PROJECTS (NOT SHOWN ON MAP)
4 Repair Base Fire Alarm Systems
17 Repair Base Pavements
20 Repair Interior Lighting
21 Repair High Voltage Distribution Infrastructure
Installation Boundary
Access Control
Fence
Building
Area of Potential Effect
Road
Vehicle Parking
Airfield Surface
Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984
0
500
1,000
Feet
183 WG Capital Airport ANGB
Proposed Project Locations Map
Figure 2-1

2.1.1.1 *Construction*

Eight projects involve new construction. These construction projects would add about 38,000 SF of impervious surface from new building construction or additions and about 144,000 SF of impervious surface to improve parking and building access. The construction would be on previously disturbed land. Proposed new construction projects include the following (project details are provided in Table 2-1):

- ***Project 6. Repair Access, Building 15 (DCFT192011).*** This project would be the construction of a new asphalt driving lane and depressed concrete slab for a loading dock on the north side of Building 15. The new loading dock will eliminate pedestrian safety concerns by locating the loading dock away from pedestrian areas. The new loading dock will also eliminate inefficiencies for the 183 WG LRF by allowing them to unload shipments directly into Building 15.
- ***Project 7. Construct AOG Parking (DCFT192010).*** This project would include the re-grading and construction of a 54,000 SF asphalt parking lot with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Activities would also include the repair of existing landscaping and vegetation areas as necessary.
- ***Project 9. Construct BCE Complex (DCFT059018).*** This project would be the construction of a new 24,300 SF BCE complex west of existing Buildings 15 and 23 on the existing central base parking lot. The facility is 100 percent designed and is currently awaiting funding. The facility would be constructed utilizing conventional design and construction methods to accommodate the BCE mission.
- ***Project 13. Construct Hush House Admin Facility (DCFT192001).*** This project would be the construction of a permanent restroom and breakroom for personnel assigned to hush house operations. This project can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.
- ***Project 14. Construct CRF Engine Storage (DCFT192002).*** This project would be the construction of a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment. This project can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.
- ***Project 16. Construct Modular Shooting Range (DCFT219001).*** This project would be the construction of a 12,300 SF properly configured and correctly sited 12- to 14-lane small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226. The facility will house a MCSATS and CATM. The CATM facility will provide classroom training space, administrative space, and arms cleaning and inspection areas for members using the small arms range.

- ***Project 18. Repair POL Pump House and Control Room.*** This project would require construction of a new building envelope while maintaining operation of the inside equipment.
- ***Project 19. Construct CRF Parking Lot (DCFT202008).*** This project would include the re-grading and construction of a 63,000 SF asphalt parking lot with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the south end of the installation. The project would be on the location of the existing BCE complex facilities (Buildings 2, 3, 28, 30, 44, 45, and 47) once demolished. Activities would also include the repair of existing landscaping and vegetation areas as necessary.

2.1.1.2 *Demolition*

Four projects involve demolition. These demolition projects would remove about 37,000 SF of facilities. Proposed demolition projects are the following (project details are provided in Table 2-1):

- ***Project 5. Demolish Buildings 12 and 13 (DCFT162900).*** This project would be the demolition of Buildings 12 and 13, including all above-ground structures, supporting utility connections, and subsurface foundations. Both facilities are known to contain asbestos and lead-based paint. Excess pavement would also be demolished, and the entire site would be returned back to sodded lawn.
- ***Project 6. Repair Access, Building 15 (DCFT192011).*** This project would include demolition of the Building 15 loading dock. The existing loading dock is located at an angle in the center parking lot and is not efficient for loading and unloading jet engines and large aircraft parts.
- ***Project 9. Construct BCE Complex (DCFT059018).*** This project would include the demolition of existing BCE facilities (Buildings 2, 3, 28, 30, 44, 45, and 47). The existing BCE complex facilities are located in seven separate buildings, three of which do not meet AF/TP stand-off distance, adversely affecting cohesive operations.
- ***Project 18. Repair POL Pump House and Control Room.*** This project would require demolition of the existing building envelope while maintaining operation of the inside equipment.

2.1.1.3 *Renovation and Repair*

Twelve projects involve renovation. Renovations would include base-wide alterations and repairs to the fire suppression system, fire alarm system, lighting, and high voltage distribution infrastructure, in addition to about 34,000 SF of interior building renovations. Proposed renovation projects include the following (project details are provided in Table 2-1):

- ***Project 1. Repair CRF Facility, Building 17 (DCFT102008).*** This project would include renovation and repair of the existing CRF to accommodate the current mission. Renovation will include reconfiguration of the interior wall, installation of interior finishes, and repairs to the existing floor to meet shop equipment requirements. Modifications

include updates to electrical, plumbing, fire protection, communications, HVAC, and modifications to meet current AT/FP criteria.

- ***Project 2. Repair Base Fire Suppression System (DCFT142001).*** This project would include the repair of the base fire suppression system by replacing the existing 125,000-gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. The project would also include the replacement and reconfiguration of all piping, pavements, and supporting utility infrastructure as necessary. Existing landscaping and vegetation areas would be repaired as necessary to accommodate new tank and pump house facility.
- ***Project 3. Repair Vehicle Maintenance Facility, Building 19 (DCFT152010).*** This project would include internal renovations to the existing vehicle maintenance facility for vehicle maintenance offices and administrative space, training room, and break room. The shop space would be renovated for lubrication, inspection, general repair, and replacement of major assemblies (such as above-ground vehicle hoists), as well as welding, upholstery, testing, cleaning, and minor parts fabrication.
- ***Project 4. Repair Base File Alarm Systems (DCFT172008).*** This project would include installation of a new central alarm system with redundancy. In addition, existing fire alarm control panels and all necessary transceivers would be upgraded, as required, to complete a fully functioning and operable base fire alarm system.
- ***Project 8. Repair DFAC in existing Building 48 (DCFT162002).*** This project would be interior renovations of the existing DFAC in Building 48 to address functional layout issues and would provide a directed serving line aimed at efficiently moving airmen and allowing proper access to dishwashing equipment.
- ***Project 10. Repair Roof, Building 46 (DCFT162014).*** This project would include exterior renovations to repair the roof of Building 46. The existing roof is past its useful life. This project is currently in the planning phase.
- ***Project 11. Repair Deployment Processing, Building 23 (DCFT202001).*** This project would be an all-encompassing Sustainment, Restoration, and Modernization (SRM) project and would include interior renovations/repair to the entire facility (11,331 SF) to house both deployment processing, LRF/IDO, and gym spaces.
- ***Project 12. Repair Bridge Cranes and CRF Operations (DCFT182004).*** This project would repair bridge cranes in Building 26. Renovations can only be completed if the space authorization variance is approved and additional storage space is authorized (Project 14).
- ***Project 15. Repair POL Facility, Building 18 (DCFT192006).*** This project would be interior renovations to the facility to include repair and modernization.
- ***Project 17. Repair Base Pavements (DCFT062001).*** This project would be the repair or replacement of the pavements throughout the base.

- ***Project 20. Upgrade Base-wide Lighting (DCFT202002).*** This project would include a base-wide upgrade to more energy efficient lighting with a higher color rendering index to provide better work environments and safe outdoor conditions at less cost. Lighting upgrades on exterior lighting systems to include all building wallpacks, parking lot lights, and other area lighting as well as the interior of select high and low bay facilities.
- ***Project 21. Repair High Voltage Distribution Infrastructure (DCFT202003).*** This project would be the repair of underground electrical primary and secondary distribution systems, including cabling, conduit, switches, and transformers.

2.1.2 No Action Alternative

The CEQ regulation in 40 CFR § 1502.14(d) requires analysis of the No Action Alternative in all NEPA documents. Under the No Action Alternative, the 183 WG would not implement the Proposed Action. The 183 WG would not implement the facility improvement construction and renovation projects to meet mission requirements or AT/FP requirements. Demolition of outdated, inefficient facilities also would not occur. Although the No Action Alternative does not meet the installation's needs or fulfill the purpose and need of the Proposed Action, it was carried forward for detailed analysis in the EA as required under NEPA.

2.1.3 Alternatives Considered

In the process of developing the Proposed Action, three concepts were created during the IDP planning process to provide different strategies to resolve specific issues related to space, facilities, infrastructure, and the environment. The Proposed Action is a hybrid concept incorporating the most favorable elements from the Constrained, Unconstrained, and Alternative Concepts.

2.1.3.1 *Constrained Concept*

This concept is intended to be executable with limited MILCON funding support and should be fiscally achievable in light of current DoD constraints utilizing mostly SRM funding and focusing on ANG Installation Planning Objectives and IDP Objectives. This concept involves more facility renovations and additions, and fewer new buildings than the other concepts. The constrained concept utilizes existing programmed MILCON projects in concert with planned SRM projects to address the findings of the workshop.

In all, two new facilities are to be constructed in this concept, totaling 23,012 SF. The largest project, a new 23,000 SF BCE complex, will occupy the two new construction buildings. Three other structures are to be constructed including a replacement fire suppression water tank, dedicated running track, replacement loading dock. Buildings to be demolished include: Buildings 2, 3, 12, 13, 28, 30,45, and 47. The constrained concept generates a net reduction in property footprint.

2.1.3.2 *Unconstrained Concept*

This concept considers practical facility development using military construction (MILCON) funding in concert with SRM funding. The concept creates a streamlined maintenance complex by adding additional space for maintenance and storage of engines. Additionally, the concept proposes to construct new quality of life amenities including a combined gym and DFAC centrally located with a dedicated running track. A newly reconstructed secondary entry point provides secondary access directly to Highway 29 at a signalized intersection. A new BCE complex and small arms range are also included.

Four new facilities are proposed in the concept totaling 41,416 SF while four buildings (17, 19, 23, and 48) are slated for renovation. Buildings to be demolished in this concept include: Buildings 2, 3, 20, 28, 30, 44, 45, 47, and 137. The unconstrained concept has the largest end state real property footprint.

2.1.3.3 *Alternative Concept*

This concept considers additional facility and infrastructure development options utilizing both MILCON and SRM. This concept aims to reduce the ANG real property footprint to within 10 percent of its authorization by divesting certain buildings to their users rather than continuing to rent to the users. This concept consolidates functions to minimize wasted space for mechanical, circulation, and other common spaces generated by separating uses in different buildings.

In all, the Alternative Concept proposes construction of two new facilities totaling 281,618 SF, with 252,010 SF being consolidated within one combined facility. No buildings are to be renovated in this concept. Buildings to be demolished include: Buildings 1, 2, 3, 8, 12, 13, 15, 16, 17, 19, 23, 28, 30, 34, 36, 44, 45, 46, 47, 48, 97, and 98.

Project 1. Repair Central Repair Facility (CRF), Building 17 (DCFT102008): View of front of Building 17, looking southwest. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 2. Repair Base Fire Suppression System (DCFT142001): View of paved area containing water tank, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

	Project 3. Repair Vehicle Maintenance Facility, Building 19 (DCFT152010): View of Building 19, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

	Project 5. Demolish Buildings 12 and 13 (DCFT162900): View of Building 12, looking northwest. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 5. Demolish Buildings 12 and 13 (DCFT16290): View of Building 13, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 6. Repair Access, Building 15 (DCFT192011): View of Building 15, looking southeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 7. Construct Air Operations Group (AOG) Parking (DCFT192010): View of landscaped area adjacent to existing parking area, looking east. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 8. Repair Dining Facility (DFAC) in existing Building 48 (DCFT162002): View of Building 48, looking north. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 9. Construct Base Civil Engineer (BCE) Complex (MILCON) (DCFT059018): View of paved area, location of proposed BCE Complex, looking southwest. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 9. Construct Base Civil Engineer (BCE) Complex (MILCON) (DCFT059018): View of paved area, location of proposed BCE Complex, looking south. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 10. Repair Roof, Building 46 (DCFT162014): View of Building 46, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 11. Repair Deployment Processing, Building 23 (DCFT202001): View of Building 23, looking south. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 12. Install Bridge Cranes / CRF Operations (DCFT182004): View of ceiling in Building 26 where cranes will be installed. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 13. Construct Hush House Admin Facility (DCFT192001): View of proposed construction location, looking north. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 14. Construct CRF Engine Storage (DCFT192002): View of paved area (proposed construction area) from Building 1 looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 15. Repair POL Facility, Building 18 (DCFT192006): View of Building 18, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 16. Construct Modular Shooting Range (DCFT219001): View of proposed location of modular shooting range, looking north. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 18. Repair CMU Pump House and Control Room: View of POL Pump House and Control Room, looking northeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 19. Construct CRF Parking Lot (DCFT202008): View of Buildings 2, 3, and 45, looking southwest. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

Project 19. Construct CRF Parking Lot (DCFT202008): View of Building 2, looking southeast. (Photo credit: T. Kuroiwa-Bazzan, Tetra Tech, 5/14/2021)

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3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This section describes relevant and existing environmental conditions for resources potentially affected by the Proposed Action and the environmental consequences of implementing the Proposed Action and No Action Alternative. In compliance with NEPA, CEQ regulations, and 32 CFR 989, the description of the affected environment focuses on only those aspects of the environment potentially subject to effects. In general, the description of the affected environment and assessment of environmental consequences focuses on the 183 WG installation and Sangamon County, IL.

The resources carried forward for detailed analysis include safety, air quality, water resources, biological resources, transportation and circulation, utility infrastructure, cultural resources, and hazardous materials and wastes. This section describes the affected environment and the detailed evaluation of environmental consequences on these resource areas.

The CEQ NEPA regulations issued on July 16, 2020, eliminate use of the term "cumulative impact" as a category of "effects or impacts" (40 CFR § 1508.1(g)(3)). However, in its definition of "effects or impacts", the CEQ includes effects:

> …that are reasonably foreseeable and have a reasonably close causal relationship to the proposed action or alternatives, including those effects that occur at the same time and place as the proposed action or alternatives and may include effects that are later in time or farther removed in distance from the proposed action or alternatives (40 CFR § 1508.1(g)).

The regulations limit the review of effects and impacts by acknowledging that "Effects should generally not be considered if they are remote in time, geographically remote, or the product of a lengthy causal chain" (40 CFR § 1508.1(g)(2)).

Section 4.0 of this EA presents a review of reasonably foreseeable actions to assess their potential to meet these criteria. Additional details on this review are also provided. After a thorough review of the installation and airport planning documents and the communities' comprehensive and master plans, no reasonably foreseeable projects were identified that would have a reasonably close causal relationship to the Proposed Action. Projects outlined in the plans were either speculative in nature, were temporally or geographically remote, or would require a lengthy causal chain to connect them with the Proposed Action; therefore, none were carried forward for detailed evaluation in this EA.

3.1 HEALTH AND SAFETY

3.1.1 Definition of Resource

Safety considers issues associated with human activities, operations, and maintenance activities that support mission operations. Safety and accident hazards can often be identified and reduced or eliminated. Construction site safety involves adherence to regulatory requirements imposed for

the benefit of employees and of operational practices that reduce risks of illness, injury, death, and property damage. Ground safety concerns issues associated with human activities, operations, and maintenance activities that support mission operations, including AT/FP considerations and Explosive Safety Quantity Distance (ESQD) arcs. Air Force Manual (AFMAN) 91-201, *Explosives Safety Standards*, defines required distances between sites where explosives are stored or handled and other types of facilities.

AFI 91-301, Air Force Occupational and Environmental Safety, Fire Protection, and Health Program, implements Air Force Policy Directive (AFPD) 91-3, Occupational Safety and Health, by outlining the Air Force Office of Safety and Health (AFOSH) Program the purpose of which is to protect personnel from occupational death, injury, or illness and to minimize the loss of resources by managing risks. In conjunction with the Air Force Mishap Prevention Program, these standards ensure that all Air Force workplaces meet federal safety and health requirements.

3.1.2 Existing Conditions

Operations at the 183 WG have the potential to result in occupational injuries due to slips, trips, falls, environmental exposure (e.g., noise, temperature), and operations with tools and machinery that can cause injuries. Occupational injuries have the potential to result in short-term impacts, such as lost workdays, as well as long-term impacts, such as permanent disabilities and even death.

AT/FP guidelines for military installations are intended to reduce the risk of terrorism and address a range of considerations that include access to the installation, access to facilities on the installation, facility siting, exterior design, interior infrastructure design, and landscaping as specified in UFC 4-010-01. The intent of this siting and design guidance is to improve security, minimize fatalities, and limit damage to facilities in the event of a terrorist attack.

3.1.2.1 *Explosive Safety Zones*

ESQD arcs at 183 WG are defined around the following facilities: Building 143 (Storage Magazine Above Ground Type A, B, & C), Building 154 (Conventional Munitions Shop), Building 15 (Logistics Readiness Flight Building), and Building 25 (Security Police Operations). The regulations prohibit the siting of inhabited facilities with quantity distance zones unless they are mission-related facilities approved by the relevant parties (NGB 2020).

3.1.2.2 *Construction Safety*

Construction worksite safety is largely a matter of adherence to regulatory requirements imposed for the benefit of employees and implementation of operational practices that reduce risks of illness, injury, death, and property damage. The health and safety of onsite military and civilian workers are safeguarded by numerous DoD and Air Force regulations designed to comply with standards issued by the Occupational Safety and Health Administration (OSHA) and USEPA, such as AFI 48-145 Occupational and Environmental Health Program (2018) and AFPD 90-8

Environmental, Safety & Occupational Health Management and Risk Management (2019). All contractors performing construction activities at the 183 WG are responsible for meeting OSHA standards and for protecting their employees during contracted operations.

3.1.2.3 *Airfield Clearance*

Although the 183 WG is not currently a flying mission, the airfield is civilian-owned and may support military operations; therefore, it falls under the Design Standard requirements in Federal Aviation Administration (FAA) Advisory Circular (AC) 150/5300-13, Change 13, Airport Design; and the Part 77 surfaces in Federal Aviation Regulations (FAR) Part 77, Objects Affecting Navigable Airspace (NGB 2020).

3.1.3 Environmental Consequences

3.1.3.1 *Significance Criteria*

Impacts on health and safety would be considered significant if the Proposed Action would (1) substantially increase risks associated with ground safety during construction or operations and maintenance activities, or (2) be out of compliance with safety criteria.

3.1.3.2 *Proposed Action*

Overall, the Proposed Action would have short- and long-term less-than-significant effects on health and safety. Short-term minor adverse effects would be expected during construction, renovation, and demolition activities resulting from the potential for injury associated with use of heavy equipment, bending or lifting actions, and normal construction-related activities. Long-term beneficial effects would be expected to result from creating or renovating areas to safely perform operations and mission activities, modernization of utilities, adequate fire suppression and alarm systems, base-wide lighting, and facilities and parking in compliance with AT/FP standards. The Proposed Action would not substantially increase risks associated with ground safety during construction or operations and maintenance activities or result in compliance issues with regard to safety criteria.

Short-Range Component—Implementation of facility improvement projects within the next 5 years would have minor effects on health and safety. There would be some minor effects on health and safety from individual facility repair, construction, and demolition projects (Projects 1, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, and 21); however, each will be reviewed on a case-by-case basis, and none in and of themselves would have appreciable effects on health and safety. All construction, demolition, and renovation activities would be accomplished in accordance with applicable federal, state, and local health and safety regulations, and Air Force guidelines. These guidelines include the exclusion of unauthorized personnel within construction areas, the use of personal protective equipment, and the implementation of appropriate safety training.

Projects 2, 4, and 20 would have beneficial effects on health and safety at Capital Airport ANGB. Project 2 would improve health and safety on base by providing adequate pressure and water

flow to the installation's fire suppression systems. Project 4 would improve health and safety on base by centralizing the fire alarm systems and complying with UFC 3-600-01 and ANG ETL 15-01-03 standards. Project 20 would improve health and safety on base by providing enhanced visibility for both safer working conditions indoors and greater range of vision outdoors.

Long-Range Component—These improvement projects would be implemented beyond 5 years and would have minor effects on health and safety. There would be some minor effects on health and safety from Project 18, a facility construction and demolition project. All construction, demolition, and renovation activities would be accomplished in accordance with applicable federal, state, and local health and safety regulations, and Air Force guidelines. These guidelines include the exclusion of unauthorized personnel within construction areas, and the use of personal protective equipment and appropriate safety training.

Project 16 would have potential for adverse effects on health and safety at Capital Airport ANGB due to possible airborne lead exposure and loud noise. Both concerns can be either mitigated or eliminated through established control measures, such as using shock absorbing concrete and designing the shooting range to limit the noise to areas within the airport boundary.

3.1.3.3 *No Action Alternative*

Under the No Action Alternative, the construction, demolition, and renovation projects proposed to improve mission capabilities, unit readiness, and the operating environment of the base would not occur. The need to meet current and future mission requirements, safety protocols, and security objectives would be unmet. Existing conditions would remain unchanged; therefore, there would be no effects on health and safety.

3.2 AIR QUALITY

3.2.1 Definition of Resource

Air pollution is the presence in the outdoor atmosphere of one or more contaminants (e.g., dust, fumes, gas, mist, odor, smoke, or vapor) in quantities and of characteristics and duration that are injurious to human, plant, or animal life. Air quality as a resource incorporates components that describe air pollution within a region, sources of air emissions, and regulations governing those emissions. This section discusses the existing conditions, a regulatory overview, and a summary of greenhouse gases (GHGs) and global warming.

3.2.2 Existing Conditions

USEPA Region 5 and the Illinois Environmental Protection Agency (IEPA) regulate air quality in Illinois. The CAA (42 U.S.C. §§ 7401–7671q), as amended, assigns USEPA responsibility to establish the primary and secondary NAAQS (40 CFR Part 50) that specify acceptable concentration levels of six criteria pollutants: particulate matter (measured as both particulate matter less than 10 microns in diameter [PM_{10}] and particulate matter less than 2.5 microns in diameter [$PM_{2.5}$]), SO_2, CO, NO_2, O_3, and Pb. Primary NAAQS provide public health protection,

including protecting the health of sensitive populations such as asthmatics, children, and the elderly. Secondary NAAQS provide public welfare protection, including protection against decreased visibility, harm to animals, and damage to buildings, crops, and vegetation. Short-term NAAQS (1-, 8-, and 24-hour periods) have been established for pollutants contributing to acute health effects, while long-term NAAQS (annual averages) have been established for pollutants contributing to chronic health effects. Table 3-1 outlines the NAAQS for each criteria pollutant. While each state has the authority to adopt standards stricter than those established under the federal program, the state of Illinois has accepted the federal standards.

Table 3-1. National Ambient Air Quality Standards

Pollutant		Primary/ Secondary	Averaging Time	Level	Form
CO		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Pb		Primary and Secondary	Rolling 3-month average	0.15 micrograms/m^3	Not to be exceeded
NO_2		Primary	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Primary and Secondary	Annual	53 ppb	Annual mean
O_3		Primary and Secondary	8-hour	0.070 ppm	Annual fourth highest daily maximum 8-hour concentration, averaged over 3 years
PM	$PM_{2.5}$	Primary	Annual	12 micrograms/m^3	Annual mean, averaged over 3 years
		Secondary	Annual	15 micrograms/m^3	Annual mean, averaged over 3 years
		Primary and Secondary	24-hour	35 micrograms/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and Secondary	24-hour	150 micrograms/m^3	Not to be exceeded more than once per year on average over 3 years
SO_2		Primary	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Source: 40 CFR 50.1-50.12, USEPA 2021a.
Notes: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter.

3.2.2.1 *Local Air Quality*

Federal regulations designate Air Quality Control Regions (AQCRs) in violation of the NAAQS as nonattainment areas. Federal regulations designate AQCRs with levels below the NAAQS as attainment areas. Sangamon County, which includes all areas associated with the action, is within the West Central Illinois Intrastate Air Quality Control Region (AQCR 260) (40 CFR Part 81). The USEPA has designated Sangamon County as an attainment area for all criteria pollutants; therefore, the general conformity rule does not apply (USEPA 2021b). The Proposed Action is

within a region that the EPA has designated as an attainment area; therefore, the general conformity rule does not apply (USEPA 2021b)

3.2.2.2 *Permitting Overview*

Capital Airport ANGB is a "minor source" of air emissions, meaning it has emissions below the major source threshold outlined in the air permitting regulations, and is not required to hold a Title V operating permit. Capital Airport ANGB was issued their Lifetime Operating Permit (Permit 167120AHP) on August 23, 2018. Table 3-2 lists the base-wide emissions limits from the engine test stands which are the only appreciable stationary sources of air emissions on the base (IEPA 2018a). In addition to these limits, the test stands are restricted to not burn more than 463,200 gallons of Jet-A fuel per year. Other emissions sources on the base, such as boilers, heaters, and back-up generators, are considered insignificant sources and are regulated without the need for a permit.

Table 3-2. Emission Limits for Jet Engine Testing for Capital Airport ANGB

Pollutant	Stationary Source Potential to Emit (tpy)
Nitrogen oxides (NO_x)	20.8
Carbon monoxide (CO)	52.5
Fine particulate matter (PM_{10}/$PM_{2.5}$)	4.4
Sulfur dioxide (SO_2)	1.7
Volatile organic compounds (VOCs)	5.4

Source: IEPA 2018a.
Note: tpy = tons per year.

New stationary sources of air emissions, such as boilers or back-up generators, may require permits to construct. There are two types of construction permits available for new emissions sources in attainment and maintenance areas, including (1) prevention of significant deterioration (PSD) permits for major sources in attainment areas and (2) minor new source construction permits.

The PSD program protects air quality by imposing limits on emissions from major sources in attainment areas. The PSD process applies to all proposed new major sources of air pollutants in attainment areas, and typically takes 18 to 24 months to complete. In general, the PSD major source thresholds are 25 tons per year (tpy) for Pb, and 250 tpy for all other criteria pollutants; however, it is lower for some special categories, such as 100 tpy for industrial heating boilers. Major new sources of air emissions subject to PSD typically require a review of control technologies for criteria pollutants, predictive dispersion modeling of air emissions, and a separate public involvement process.

A minor new source construction permit would be required to construct any new sources of air emissions not subject to PSD, and typically takes 4 to 5 months to complete. Sources subject to minor new source construction permitting could be required to review control technologies for

criteria pollutants, and upon request from the state, conduct predictive dispersion modeling of air emissions.

3.2.2.3 *Climate and Greenhouse Gases*

Springfield's average high temperature is 86.5 degrees Fahrenheit (°F) in the hottest month of July and average low temperature is 17.1 °F in the coldest month of January. Springfield has average annual precipitation of 35.6 inches per year. The wettest month of the year is May with an average precipitation of 4.1 inches (Idcide 2021).

GHGs are components of the atmosphere that trap heat relatively near the surface of the earth and therefore contribute to the greenhouse effect and climate change. Most GHGs occur naturally in the atmosphere, but increases in their concentration result from human activities such as the burning of fossil fuels. Global temperatures are expected to continue to rise as human activities continue to add carbon dioxide, methane, nitrous oxide, and other greenhouse (or heat-trapping) gases to the atmosphere. Whether or not rainfall would increase or decrease remains difficult to project for specific regions (IPCC 2018).

EO 14008, *Tackling the Climate Crisis at Home and Abroad* (2021), outlines policies to reduce GHG emissions and to bolster resilience to the impacts of climate change. The EO directs CEQ to review, revise, and update its 2016 final guidance entitled *Final Guidance for Federal Departments and Agencies on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*. When considering GHG emissions and their significance, agencies should use appropriate tools and methodologies for quantifying GHG emissions and comparing GHG quantities across alternative scenarios. The CEQ guidance specifically requires agencies within the DoD to quantify GHG emissions in NEPA assessments and review federal actions in the context of future climate scenarios and resiliency.

In addition, EO 13990: *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis* requires that federal agencies capture the full costs of GHG emissions as accurately as possible, including accounting for global damages. Doing so facilitates sound decision-making, recognizes the breadth of climate impacts, and supports the international leadership of the U.S. on climate issues.

3.2.3 Environmental Consequences

3.2.3.1 *Significance Criteria*

Air quality effects would be considered significant if (1) the net emissions from the Proposed Action would exceed the PSD major source thresholds in an attainment or maintenance area or the *de minimis* thresholds in a nonattainment area, or (2) the Proposed Action would contribute to a violation of any local, state, or federal air quality regulation.

3.2.3.2 *Proposed Action*

The Proposed Action would have short- and long-term less-than-significant effects on air quality. Short-term effects would be from construction, demolition, and renovation activities. Long-term effects would be from small increases in heating and cooling requirements at the installation. Emissions from the Proposed Action would not exceed the PSD major source thresholds and would not cause or contribute to any new violation of any standard in any area, would not increase the frequency or severity of any existing violation of any standard in any area, nor would it delay the timely attainment of any standard or any interim emission reduction or other milestone in any area.

The Proposed Action consists of construction (including new construction, renovations, alterations, and additions), demolition of buildings and pavement, and administrative projects (see Table 2-1). There would be some minor adverse effects on air quality from individual projects; however, each was reviewed on a case-by-case basis, and none would individually have appreciable adverse effects on air quality. A description of effects on air quality from the full implementation of the IDP, including all projects outlined in Table 2-1, is provided in the following discussions of construction, operations, and GHGs. This is considered the reasonable upper bound of effects, and impacts would be less than those described herein.

The Proposed Action is within a region that the USEPA has designated as an attainment area; therefore, the general conformity rule does not apply (USEPA 2021b). The ANG has carried forward the PSD major source thresholds as an indicator of potential significance in an attainment area, and to determine the level of effects under NEPA.

Construction Effects—The Air Force's Air Conformity Applicability Model (ACAM) was used to estimate the total direct and indirect emissions from the Proposed Action. Construction, demolition, and renovation emissions were estimated for architectural coatings, fugitive dust, on- and off-road diesel equipment and vehicles, VOC emissions from paving, and worker trips (Table 3-3). The estimated emissions of all criteria pollutants from the proposed construction activities would be below the PSD major source thresholds; therefore, the level of effects would be less than significant.

Table 3-3. Estimated Air Emissions Compared to Significance Indicators

Pollutant	Construction Emissions (tpy)	Operational Emissions (tpy)	PSD Major Source Threshold (tpy)	Exceeds Thresholds? [Yes/No]
VOC	1.1	<0.1	250	No
NO_x	4.0	0.1		
CO	5.1	0.1		
SO_x	0.0	<0.1		
PM_{10}	3.5	<0.1		
$PM_{2.5}$	0.2	<0.1		
CO_2e	1,092	20	NA	NA

Source: USAF 2021.

Notes: CO = carbon monoxide; *de minimis* = of minimal importance; CO_2e = carbon dioxide equivalent; NA = not applicable; NO_x = oxides of nitrogen; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter; PM_{10} = particulate matter less than 10 microns in diameter; SO_x = oxides of sulfur; tpy = tons per year; VOC = volatile organic compound.

For purposes of analysis, it was assumed that all construction, demolition, and renovation activities would be compressed into one 12-month period. Therefore, regardless of the ultimate implementation schedule, annual emissions would be less than those specified herein. Small changes in facilities siting and design and moderate changes in quantity and types of equipment used would not substantially change these emission estimates, and they would not change the level of effects under NEPA.

The Illinois Administrative Code outlines requirements with which the NGB must comply when constructing new facilities, such as controlling fugitive dust and open burning. All persons responsible for any operation, process, handling, transportation, or storage facility that could result in fugitive dust would take reasonable precautions to prevent such dust from becoming airborne. Reasonable precautions might include using water to control dust from building construction, road grading, or land clearing. In addition, the Proposed Action would proceed in full compliance with current state air quality regulations using compliant practices and/or products. The Illinois Administrative Code requirements include the following:

- Visible and particulate matter emissions (35-1-212)
- Organic material emissions standards and limitations (35-1-218)
- Nitrogen oxides emissions (35-1-217)
- Open burning (35-1-237)

This listing is not all-inclusive; the NGB and any contractors would comply with all applicable air pollution control regulations.

Operational Effects—In general, there would be more facilities constructed than demolished, and the newly constructed facilities would have new heating equipment. There would be a net increase in heated space and stationary sources of air emissions from the implementation of the Proposed Action. Increases in operational emissions were estimated for heating and cooling of facilities and the potential addition of back-up generators (see Table 3-3). The estimated emissions of all criteria pollutants from the proposed operational activities would be below the PSD major source thresholds; therefore, the level of effects would be less than significant. There would be no appreciable change in the number of personnel or the overall mission at the base. There would be no changes in aircraft training or operations and no changes in vehicle emissions from commuting.

The Proposed Action does not include any new major stationary sources of air emissions, but it may include some small stationary sources such as stand-by generators or boilers. No paint booths or tank farms are planned. Any new stationary sources of air emissions could be subject to federal and state air permitting regulations, would be reviewed on a case-by-case basis, and would be added to the installation's air operating permit, as necessary. Both a new source

construction permit and a modification to the existing operating permit could be required. All older boilers and back-up generators removed during reconfiguring or demolition of existing buildings, specifically from Buildings 12 and 13, would be decommissioned.

Greenhouse Gases and Climate Change—This EA examines GHGs as a category of air emissions. It also looks at issues of temperature and precipitation trends to determine whether the affected environment or the proposed facilities would be affected by climate change. This EA does not attempt to measure the actual incremental effects of GHG emissions from the Proposed Action. There is a lack of consensus on how to measure such effects. Existing climate models have substantial variation in output, and they do not have the ability to measure the actual incremental effects of a project on the environment. Table 3-4 compares the estimated reduction in GHG emissions from the Proposed Action to the global, nationwide, and statewide GHG emissions. The estimated decrease would be minute.

Table 3-4. Global, Countrywide, and Statewide GHG Emissions

Scale	CO_2e Emissions (MMT/year)	Change from the Proposed Action
Global	43,125	0.000002%
United States	5,249	0.00002%
Iowa	75.8	0.001%
Proposed Action	0.001	-

Sources: USAF 2021; USEIA 2016.
Note: MMT = million metric tons.

Illinois is in the Midwest climate region of the United States, where climate change is expected to contribute to increased temperature, flooding, and late-spring freezes. The seasonal climate, natural systems, and accessibility of certain types of recreation are threatened by declining snow and ice, and rising temperatures. The Midwest has gotten warmer, with average annual temperatures increasing over the last several decades. Between 1900 and 2010, the average air temperature increased by more than 1.5 °F. The rate of increase in temperature has accelerated in recent decades, particularly nighttime and winter temperatures. Highly productive agricultural and forestry activities are sensitive to changing environmental conditions, including shifts in temperature, precipitation, flooding, and erosion. Many of these changes are already affecting Illinois' ecosystems, posing increasing risks to people, traditions, infrastructure, and economies (NCA 2018).

Table 3-5 outlines potential climate stressors and their effects on the proposed facilities. The Proposed Action in and of itself is only indirectly dependent on any of the elements associated with future climate scenarios (e.g., meteorological changes). At this time, no future climate scenario or potential climate stressor would have appreciable effects on any element of the proposed development. This review is consistent with the requirements outlined in EO 14008.

Table 3-5. Effects of Potential Climate Stressors

Potential Climate Stressor	Effects on the Proposed Action
Changes in precipitation patterns	negligible
Decline in snow and ice	negligible
Harm to water resources, agriculture, wildlife, ecosystems	negligible
Temperature rise	negligible

Source: NCA 2018.

3.2.3.3 *No Action Alternative*

No effects on air quality would be expected. Under the No Action Alternative, the construction, demolition, and renovation projects would not occur. Existing conditions would remain unchanged and there would be no effects on air quality.

3.3 WATER RESOURCES

3.3.1 Definition of Resources

Water resources include surface water, wetlands, floodplains, groundwater, and stormwater.

Surface Water—Surface water generally consists of lakes, rivers, and streams and is important for its contributions to the economic, ecological, recreational, and human health of a community or locale. WOTUS are defined within the CWA, as amended, and jurisdiction is addressed by the USEPA and USACE (33 CFR Part 328). Section 401 of the CWA requires that any applicant for a federal license or permit to conduct an activity that could result in a discharge into WOTUS provide the permitting agency a certification from the state in which the discharge originates certifying that the license or permit complies with CWA requirements, including applicable state water quality standards.

Wetlands—Wetlands are identified as areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. USACE regulates the discharge of dredged or fill material into WOTUS, including wetlands, pursuant to Section 404 of the CWA (33 U.S.C. § 1344), which prohibits the discharge of dredged or fill material into those waters, unless authorized by a USACE permit.

Floodplains—Floodplains are areas of low-level ground present along rivers, stream channels, or coastal waters subject to periodic or infrequent inundation due to rain or melting snow. Risk of flooding typically depends on local topography, the frequency of precipitation events, and the size of the watershed above the floodplain. Flood potential is evaluated by FEMA, which defines flood hazard areas as the area that will be inundated by the flood event having a 1 percent chance of being equaled or exceeded in any given year. The 500-year flood zone is characterized as 0.2 percent annual chance flood hazard. Federal, state, and local regulations often limit floodplain development to passive uses such as recreational and preservation activities to reduce the risks to human health and safety. Floodplain ecosystem functions include natural moderation of floods,

flood storage and conveyance, groundwater recharge, nutrient cycling, water quality maintenance, and diversification of plants and animals.

Groundwater—Groundwater is water that exists in the saturated zone beneath the Earth's surface and includes underground streams and aquifers. It is an essential resource that functions to recharge surface water and is used for drinking, irrigation, and industrial processes. Groundwater features include depth from the surface, aquifer or well capacity, quality, recharge rate, and surrounding geologic formations.

Stormwater—Stormwater is rain or snowmelt that runs off rooftops, paved streets, parking lots, and other impervious surfaces. As water runs off these surfaces, the runoff can pick up pollutants such as oil, fertilizers, pesticides, soil, trash, and animal waste. The runoff might flow directly into a local canal, stream, or lake, or it might enter a storm drain and continue through storm pipes until it is released untreated into a local waterway. The quality and quantity of water runoff generally depends upon the land-use types and number of impervious surfaces in an area. Minimizing impervious surfaces and retaining vegetative cover help to reduce pollutants entering waterways.

3.3.2 Existing Conditions

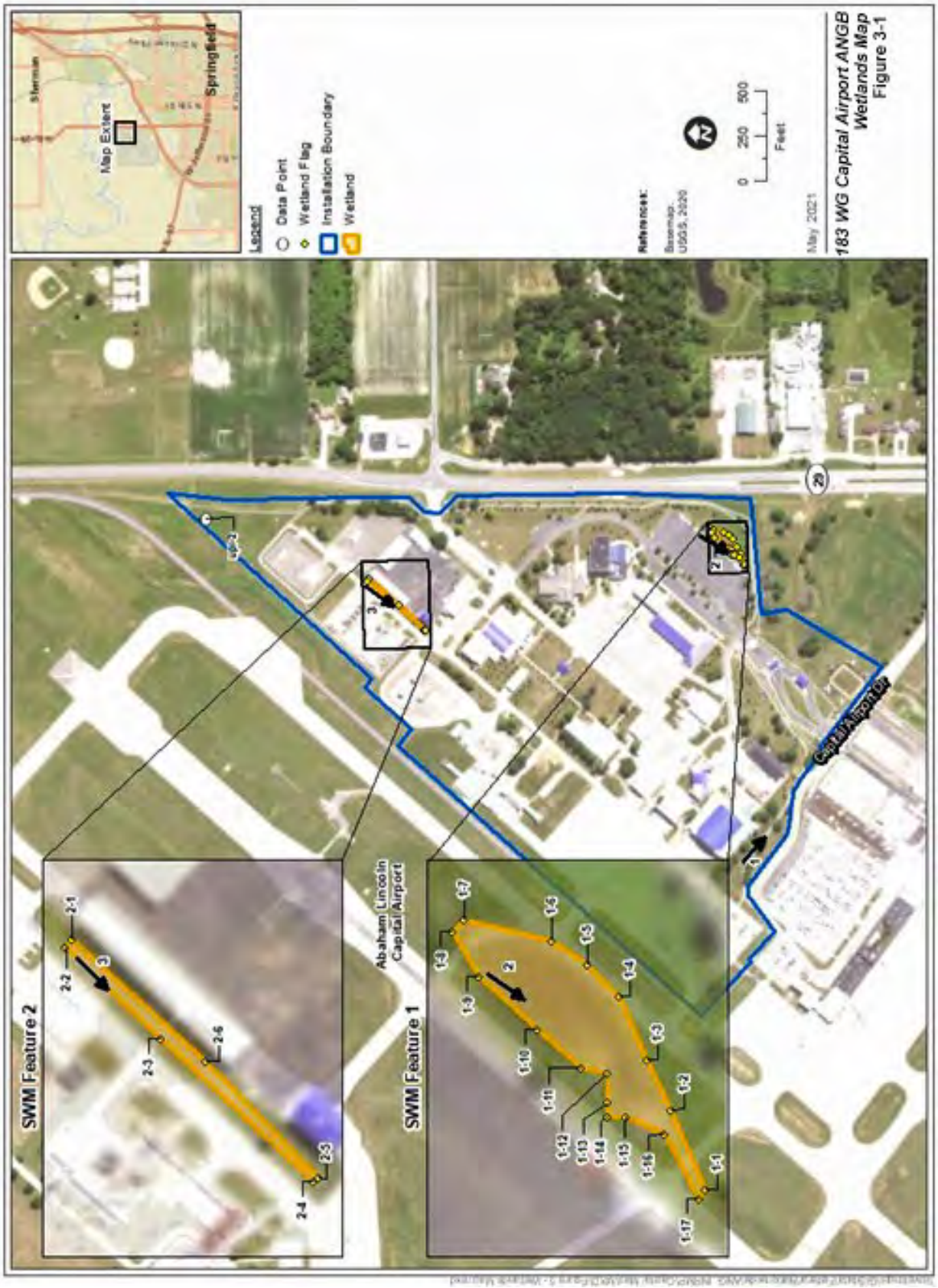
Surface Water—The Sangamon River is to the north and Spring Creek is to the south and east of Capital Airport ANGB. The Sangamon River and Spring Creek are identified as impaired waters (USEPA 2021c). The USFWS National Wetlands Inventory reports an intermittent streambed located approximately 500 feet east of the base and a diked freshwater pond approximately 400 feet east of the base (USFWS 2021a). Surface runoff is collected in open ditches and drainage swales on Capital Airport ANGB and flows into Lightfoot Creek, a tributary of Spring Creek, via storm drains (ILANG 2009). Lightfoot Creek is approximately 3,000 feet from the eastern boundary of Capital Airport ANGB.

Wetlands—A wetland delineation conducted in 2021 identified two stormwater management (SWM) features within Capital Airport ANGB that appear to meet the characteristics of wetlands (Figure 3-1) (EA 2022a). These stormwater management features, SWM 1 and SWM 2, are believed to be non-jurisdictional under the CWA since they are maintained features in uplands with no contributing wetlands or streams from upslope locations. SWM 1 is located in the southeastern part of the installation. It is a constructed basin that is approximately 210 feet long and 35 feet wide (EA 2022a). SWM 2 is a constructed swale and is located in the northern part of the installation; it is approximately 350 feet long and 15 feet wide and lies between two paved areas. The area is regularly mowed, but sufficient indicators were observed to identify it as non-jurisdictional wetland (EA 2022a). The request for an Approved Jurisdictional Determination was submitted to the USACE Rock Island District. There are areas of freshwater emergent wetland west and south of the base; the closest area is approximately 200 feet west of the base (USFWS 2021a).

Floodplains—There are no 100- or 500-year floodplains within Capital Airport ANGB (FEMA 2007). The nearest floodplain is greater than 1,000 feet from Capital Airport ANGB (FEMA 2007).

Groundwater—Groundwater aquifers in the vicinity of Capital Airport ANGB occur in the Sangamon River Valley and Middleton Bedrock Valley. The water table at the Capital Airport ANGB ranges from 1 to 15 feet below ground surface and flows east into Spring Creek (ILANG 1994). At Capital Airport ANGB, groundwater depth is 5 feet below ground surface near Building 1 and 6 feet below ground surface at the northern part of the installation. There are no potable water wells on the installation, but there are some in residential areas in the vicinity (ILANG 2009).

Stormwater—The condition and maintenance of these drainage systems plays an important role in stormwater management on the facility. At Capital Airport ANGB, stormwater discharges into Lightfoot Creek (ILANG 2009). The IEPA issued a Non-Major NPDES Permit (IL0067865) for Outfall 2 for discharge from fuel farm stormwater runoff, and Outfall 3 for fuel containment area stormwater (IEPA 2018c). Outfall 1 was removed from the permit in 2020 (IEPA 2020). Under the permit, discharge is monitored monthly for flow, pH, oil and grease, and total suspended solids; and twice a year for benzene, toluene, ethylbenzene, xylene, total BTEX (benzene, toluene, ethylbenzene, and xylene), and total polynuclear aromatic hydrocarbons. The permit will expire on March 31, 2023. Any construction or land-disturbing activity that would create greater than 1 acre of soil disturbance would require a permit from IEPA under the General NPDES Permit for Storm Water Discharges from Construction Site Activities. For coverage under this permit, a notice of intent must be submitted in accordance with the NPDES Permit (Number ILR100) (IEPA 2018c). A stormwater pollution prevention plan (SWPPP) is required for each construction site covered by NPDES Permit ILR100. In accordance with Section 438 of the Energy Independence and Security Act, a variety of stormwater management practices would be incorporated, to the maximum extent technically feasible, in the proposed development and redevelopment projects to maintain or restore predevelopment site hydrology.


183 WG Capital Airport ANGB
Wetlands Map
Figure 3-1
May 2021
References:
Basemap: USGS, 2020
0 250 500
Feet
Legend
Data Point
Wetland Flag
Installation Boundary
Wetland
Map Extent
Springfield
Sherman
SWM Feature 2
SWM Feature 1
Abraham Lincoln Capital Airport
Capital Airport Dr
29

3.3.3 Environmental Consequences

3.3.3.1 *Significance Criteria*

Effects on water resources would be considered significant if the proposed activities would (1) reduce water availability or supply, (2) exceed safe annual yield of water supplies, (3) adversely affect water quality, (4) threaten or damage hydrology, or (5) violate water resources laws or regulations.

3.3.3.2 *Proposed Action*

The Proposed Action would have short- and long-term less-than-significant adverse effects on water resources. Effects on water resources would not reduce water availability or supply, exceed safe annual yield of water supplies, adversely affect water quality, threaten or damage hydrology, or violate water resources laws or regulations. The USFWS and Illinois Department of Natural Resources (IDNR) reviewed the proposed projects and did not identify potential issues with these projects. The concurrence and consultation with USFWS and IDNR is provided in Appendix A.

The Proposed Action would be implemented in accordance with Section 438 of the EISA. Where applicable, the SWPPP would incorporate erosion and sediment controls, stabilization and structural practices, and other controls to minimize long-term erosion and sediment production at each site in accordance with the NPDES Permit ILR100. In addition, to minimize erosion, runoff, and sedimentation, BMPs would be a part of the construction, demolition, and renovation projects of the Proposed Action.

The projects outlined in Section 2.0 consist of construction (including new construction, renovations, repair, alterations, and additions) and demolition of buildings, pavement, loading dock and building exterior (Table 2-1). There would be some minor adverse effects on water resources from individual projects; however, each was reviewed on a case-by-case basis, and none in and of themselves would have appreciable adverse effects on water resources. A description of effects on water resources from the full implementation of the IDP, including all projects outlined in Table 2-1, is provided later in this section. This is considered the reasonable upper bound of effects, and impacts would be less than those described herein.

Construction Effects—Construction and demolition activities would have site-specific temporary effects on water resources. Temporary effects could include soil erosion and sedimentation. Construction activities, including grading and clearing, and installation of new utilities, would result in ground surface disturbance and could cause soil erosion and subsequent transport of sediment via stormwater. However, potential effects would be minimized through proper implementation of environmental protection measures such as silt fencing, following policies and procedures as detailed in erosion and sediment control plans, and regulatory agency coordination for required permits prior to ground-breaking activities. The depth of excavation during construction would generally not reach the depth of groundwater at Capital Airport ANGB. There would be no effects on surface waters because there are no permanent surface waters in the proposed project

locations. In accordance with Section 438 of the EISA, a variety of stormwater management practices would be incorporated to the maximum extent technically feasible in the proposed development and redevelopment projects to maintain or restore predevelopment site hydrology. Therefore, the Proposed Action would have less-than-significant effects on water resources.

The proposed construction projects include the construction of many facilities (maintenance shop, loading dock, hush house, storage, and training areas), additions or alterations to existing facilities, and parking areas. The Proposed Action includes some construction projects that will disturb more than 1 acre of land (Projects 7 and 19). The size of land disturbance for Projects 13 and 14 are yet to be determined. Projects 7 and 19 and other projects determined to meet the criteria will require coverage under NPDES Permit ILR100. A notice of intent must be submitted to the IEPA in accordance with the permit prior to construction for Projects 7 and 19. Construction and demolition Projects 5, 6, 9, 16, and 18 will not require coverage under NPDES Permit ILR100.

Since the proposed project areas are in previously developed areas of the installation, there would be no appreciable loss of water resources from the proposed construction activities. These activities would have short- and long-term less-than-significant effects on water resources.

The proposed repair and renovation projects include modifications to existing facilities. Since the proposed project areas are in previously developed areas of the installation, there would be no appreciable loss of water resources from the proposed construction activities. The proposed repair and renovation projects would be implemented to maintain site hydrology. These activities would have short- and long-term less-than-significant effects on water resources.

Renovation and Repair Effects—There would be less-than-significant effects on water resources because of the renovation and repair activities associated with the Proposed Action. Renovation and repair projects will not involve impacts on undisturbed land.

Operational Effects—There would be less-than-significant effects on water resources because of the maintenance and operations activities associated with the Proposed Action. The nature and overall level of operations at the base would be similar to the existing operations. The efficiencies gained from construction, renovation, and demolition would reduce the maintenance and operational requirements of facilities and project areas; therefore, the operational effects on water resources would be minor.

3.3.3.3 *No Action Alternative*

Under the No Action Alternative, the construction and demolition, and renovation and repair projects proposed to improve mission capabilities, unit readiness, and the operating environment of the base would not occur. The need to meet current and future mission requirements and national security objectives would be unmet. The existing conditions of water resources would remain unchanged.

3.4 BIOLOGICAL RESOURCES

3.4.1 Definition of Resource

Biological resources include native and naturalized plants and animals and the habitats in which they occur. These include vegetation, wildlife, and threatened, endangered, and sensitive species in a specific area. Biological resources are integral to ecosystem integrity. The existence and preservation of biological resources are intrinsically valuable to society for aesthetic, recreational, and socioeconomic purposes, and a system of legal requirements and best practices exists to protect them for these purposes.

3.4.2 Existing Conditions

Capital Airport ANGB is adjacent to and within Abraham Lincoln Capital Airport. Both are located in Sangamon County, IL. Abraham Lincoln Capital Airport is located in the Springfield Section of the Grand Prairie Division in the black soil prairie community. It is characterized by the following features, which make it highly productive agricultural land: flat landscapes, deep loess soils, and poor natural drainage (ILANG 2009).

Vegetation—Historically, the landscape of the region was characterized by prairie, level to rolling upland, and deep loess soil (INPC 1973). During the development of Capital Airport ANGB and Abraham Lincoln Capital Airport, most of the natural vegetation was removed. The developed land provides little habitat for natural vegetation. The vegetated areas are covered in areas of non-native mowed grass and landscaped trees and shrubs including juniper, oak, pine, ash, and maple (ILANG 2009). The 2021 flora and fauna survey identified two distinct habitat types and 74 species of plants (EA 2022b). No federally or state-listed vegetation species were observed during the flora survey (EA 2022b). Appendix D has a complete list of plants observed on the installation. Habitat 1 covers approximately 77.79 acres and is characterized by mowed or maintained lawn with mature trees, such as black locust (*Robinia pseudoacacia*), Norway maple (*Acer platanoides*), sweetgum (*Liquidambar styraciflua*), Chinquapin oak (*Quercus muehlenbergii*), and white ash (*Fraxinus americana*). Habitat 2, characterized by a stormwater management feature and grassy stormwater swales, is dominated by narrowleaf cattail (*Typha angustifolia*) and covers approximately 0.21 acres.

Wildlife—Wildlife observed on the installation are likely adapted to high levels of human activity. Table 3-6 lists the fauna identified in the 2021 fauna survey, which included 29 species of birds, two invertebrates, one mammal, and one amphibian. No federally or state-listed fauna species were observed during the fauna survey (EA 2022b). All of the identified species were observed in Habitat 1 and one species was observed in Habitat 2. The developed land on the base provides low habitat value for wildlife, but the most suitable areas are the open spaces covered with maintained grass. The 2021 acoustic bat survey identified the following bat species as likely to be present on the installation: big brown bat (*Eptesicus fuscus*), eastern red bat (*Lasiurus borealis*), hoary bat (*Lasiurus cinereus*), and evening bat (*Nycticeius humeralis*) (EA 2022a). The installation

provides limited foraging habitat, but bats may roost in buildings. None of the bat species identified in the acoustic bat survey are federally or state-listed species.

Table 3-6. Wildlife Species Observed During the Fauna Survey

Group	Scientific Name	Common Name	Habitat Unit 1	Habitat Unit 2
Amphibian	*Anaxyrus americanus*	American toad	X	
Bird	*Agelaius phoeniceus*	Red-winged blackbird	X	X
Bird	*Branta canadensis*	Canada goose	X	
Bird	*Buteo jamaicensis*	Red-tailed hawk	X	
Bird	*Cardinalis*	Northern cardinal	X	
Bird	*Cathartes aura*	Turkey vulture	X	
Bird	*Chaetura pelagica*	Chimney swift	X	
Bird	*Charadruis coviferus*	Killdeer	X	
Bird	*Columba livia*	Rock pigeon	X	
Bird	*Contopus virens*	Eastern wood-pewee	X	
Bird	*Corvus brachyrhynchos*	American crow	X	
Bird	*Dumetella carolinensis*	Gray catbird	X	
Bird	*Falco sparverius*	American kestrel	X	
Bird	*Haemorhousmexicanus*	House finch	X	
Bird	*Hirundo rustica*	Barn swallow	X	
Bird	*Leiothlypis peregrina*	Tennessee warbler	X	
Bird	*Passer domesticus*	House sparrow	X	
Bird	*Quiscalus quiscula*	Common grackle	X	
Bird	*Setophaga castanea*	Bay-breasted warbler	X	
Bird	*Setophaga palmarum*	Palm warbler	X	
Bird	*Setophaga ruticilla*	American redstart	X	
Bird	*Setophaga striata*	Blackpoll warbler	X	
Bird	*Spinus tristis*	American goldfinch	X	
Bird	*Spizella passerina*	Chipping sparrow	X	
Bird	*Sturnella magna*	Eastern meadowlark	X	
Bird	*Sturnus vulgaris*	European starling	X	
Bird	*Troglodytes aedon*	House wren	X	
Bird	*Turdus migratorius*	American robin	X	
Bird	*Vireo gilvus*	Warbling vireo	X	
Bird	*Zenaida macoura*	Mourning dove	X	
Invertebrate	*Colias* sp.	Sulphur butterfly	X	
Invertebrate	*Vanessa atalanta*	Red admiral	X	
Mammal	*Sciurus* sp.	Ground squirrel	X	

Source: EA 2022b

Threatened, Endangered, or Sensitive Species—No federally-listed vegetation or wildlife species have been reported on the installation (EA 2022b; ILANG 1994, 1995). Table 3-7 lists four federally protected species with the potential to occur in Capital Airport ANGB as identified by the USFWS Information for Planning and Conservation (IPaC) website (USFWS 2021b). Two mammal species, the Indiana bat (*Myotis sodalist*) and northern long-eared bat (*M. septentrionalis*); an insect, the monarch butterfly (*Danaus plexippus*); and a flowering plant, the eastern prairie fringed orchid (*Plantanthera leucophaea*), were identified as potential inhabitants

of Capital Airport ANGB (USFWS 2021b). None of these species were observed during the flora and fauna survey or the acoustic bat survey (EA 2022a,b). The potential for listed bat species to occur on the installation is either not considered likely during the maternity season or they are present in numbers too low for detection by approved USFWS protocols (EA 2022a).

Indiana Bat. The Indiana bat is listed as endangered under the ESA anywhere it is found. It is a medium-sized bat with gray-chestnut fur and pink underparts (USFWS 2021c). The biggest threats to the species include human disturbance of caves where Indiana bats hibernate, the use of caves for commercial purposes, loss of summer habitat, and the fungal disease known as white-nose syndrome (USFWS 2019). This species hibernates in caves during the winter and roosts under peeling bark in dead trees during the summer (USFWS 2019). Summer habitat occurs in river and stream corridors in mature riparian woods, woodlots near rivers and streams, and upland forests. Indiana bats forage at night to feed on flying insects. No critical habitat is designated on Capital Airport ANGB (USFWS 2021b).

Northern Long-Eared Bat. The northern long-eared bat is listed as threatened under the ESA anywhere it is found. White-nose syndrome is the main threat to this species, causing significant losses of the population (USFWS 2021d). Capital Airport is within the white-nose syndrome zone (USFWS 2020a). The northern long-eared bat is a medium-sized bat distinguished from other species in the genus by its long ears (USFWS 2020b). Caves and mines serve as winter habitat; in summer, the species roosts in colonies or singly under peeling bark, tree cavities, or snags (dead standing trees). Tree species favored by this species include black locust (*Robinia pseudoacacia*), American elm (*Ulmus americana*), shagbark hickory (*Carya ovata*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), oaks (*Quercus* spp.), and white pine (*Pinus strobus*) (USDA 2016). At dusk, northern long-eared bats hunt for insects in the understory of forested areas (USFWS 2020b). This species does not have critical habitat.

Monarch Butterfly. The monarch butterfly is a candidate species under the ESA anywhere it is found (USFWS 2021e). The adult monarch butterfly is large with bright orange wings with a black border and black veins. Monarchs lay eggs on their obligate milkweed host plant in the genera *Asclepias* and *Ampelamus* (IDNR 2021a). Milkweed habitat is not present on Capital Airport ANGB, so although monarchs will not reproduce on the installation, it may potentially occur as monarchs migrate to and from overwintering grounds in Mexico. At night, they roost in trees or shrubs.

Eastern Prairie Fringed Orchid. The eastern prairie fringed orchid is listed as threatened under the ESA anywhere it is found (USFWS 2021f). This species does not have critical habitat. The eastern prairie fringed orchid plant is 8 to 40 inches tall with a single flower spike with 5 to 40 white flowers. This orchid inhabits prairies, wetlands, sedge meadows, marsh edges, and bogs. The wetlands on Capital Airport ANGB are constructed stormwater management areas and do not provide suitable habitat for this species. None of the other orchid habitat types are found on Capital Airport ANGB; therefore, it is not likely to occur at the installation. In addition, the Illinois

Natural Heritage Database does not have records of this species occurring in Sangamon County (IDNR 2021b).

Table 3-7. Protected Species with Potential to Occur on Capital Airport ANGB

Common name	Scientific name	Federal status	Occurrence on Mansfield Lahm ANGB
Mammals			
Indiana bat	*Myotis sodalis*	E	Unlikely, marginal roosting habitat
Northern long-eared bat	*M. septentrionalis*	T	Unlikely, marginal roosting habitat
Insects			
Monarch butterfly	*Danaus plexippus*	C	Unlikely, no milkweed and marginal roosting habitat
Flowering Plants			
Eastern prairie fringed orchid	*Platanthera leucophaea*	T	Unlikely, no suitable habitat

Source: USFWS 2021b.
Notes: E = endangered; T = threatened; C = candidate.

Due to the lack of forested areas and limited abundance of preferred tree species, the installation does not provide optimal roosting habitat for Indiana bats or northern long-eared bats. Information regarding the location of maternity roots or hibernacula were not available for the northern long-eared bat. The USFWS does not have reported occurrences of the Indiana bat or hibernacula in Sangamon County where Capital Airport ANGB is located (USFWS 2017b). The likelihood of northern long-eared bat and Indiana bat occurring on Capital Airport ANGB is very low given the lack of reported occurrences, reported hibernacula, or identified maternity roosts on the installation.

Migratory Birds—The Migratory Bird Treaty Act (MBTA) protects migratory birds from illegal take except under permit. Identified through IPaC, there are four migratory bird species protected by the MBTA that potentially occur on Capital Airport ANGB: Kentucky warbler (*Oporornis formosus*), prairie warbler (*Dendroica discolor*), red-headed woodpecker (*Melanerpes erythrocephalus*), and wood thrush (*Hylocichla mustelina*) (USFWS 2021a). All of these species are Birds of Conservation Concern throughout their range. None of these migratory bird species were reported as observed at Capital Airport ANGB or have reported occurrences in Sangamon County in the Illinois Natural Heritage Database (IDNR 2021b; ILANG 1994, 1995). In addition, these species were not observed during the fauna survey (EA 2022b). The habitats preferred by the Kentucky warbler (upland or bottomland forests and ravines), prairie warbler (coniferous forests), wood thrush (bottomland forests and wooded ravines in river bluffs), and red-headed woodpecker (woodland edges, open areas with deciduous and coniferous woodlands) are not present on

Capital Airport ANGB (IDNR 2021c,d,e; IDNR 2020b). Other habitats that the red-headed woodpecker will inhabit include open areas with scattered trees and telephone poles, which do exist on Capital Airport ANGB (IDNR 2020b). The Kentucky warbler and prairie warbler are migrating and summer residents in the southern part of Illinois including Sangamon County (IDNR 2021c,d). The wood thrush is a common migrant and summer resident throughout Illinois (IDNR 2021e). The red-headed woodpecker is a common migrant, summer resident, and winter resident statewide in Illinois (IDNR 2020b). The red-headed woodpecker is the only species with potential habitat on Capital Airport ANGB; avoidance of potential nesting trees from May through July will reduce the potential for adverse effects on this species.

State-Listed Species—The Illinois DNR lists 484 species of plants and animals that have threatened or endangered status in Illinois (IDNR 2020a). The federally listed Indiana bat (state-endangered), northern long-eared bat (state-threatened), and eastern prairie fringed orchid (state-threatened) are also listed in Illinois. There are 18 state-endangered and threatened species that have recorded observations in Sangamon County; see Table 3-8 (IDNR 2021b). No state-listed flora or fauna species were observed during the 2021 surveys of Capital Airport ANGB (EA 2022b).

Table 3-8. Stated-listed Species with Recorded Observations in Sangamon County

Common Name	Scientific Name	State Protection	Last Observed
Smooth Softshell	*Apalone mutica*	T	8/20/2010
Short-eared Owl	*Asio flammeus*	E	1/12/2019
Rusty Patched Bumble Bee	*Bombus affinis*	E	Pre-2021
Northern Harrier	*Circus hudsonius*	E	1/22/2017
Kirtland's Snake	*Clonophis kirtlandii*	T	9/1/2019
Least Bittern	*Ixobrychus exilis*	T	7/27/1985
Loggerhead Shrike	*Lanius ludovicianus*	E	6/30/1994
Virginia Bunchflower	*Melanthium virginicum*	E	6/27/1955
Mudpuppy	*Necturus maculosus*	T	4/27/2014
Black-crowned Night-Heron	*Nycticorax*	E	6/21/2014
Heart-leaved Plantain	*Plantago cordata*	E	8/23/2007
Franklin's Ground Squirrel	*Poliocitellus franklinii*	T	6/7/2020
Rock Chestnut Oak	*Quercus montana*	T	2013
Royal Catchfly	*Silene regia*	E	8/12/2020
Great Chickweed	*Stellaria pubera*	E	4/22/2016
Ornate Box Turtle	*Terrapene ornata*	T	6/30/1978
Prairie Spiderwort	*Tradescantia bracteata*	E	5/18/2016
Lined Snake	*Tropidoclonion lineatum*	T	8/11/2001

Source: IDNR 2021b
Notes: E= endangered; T = threatened

3.4.3 Environmental Consequences

3.4.3.1 *Significance Criteria*

Effects on biological resources would be considered significant if construction or operation activities would reduce the distribution or viability of species or habitats of concern, including take of a listed species.

3.4.3.2 *Proposed Action*

The Proposed Action would have short-term less-than-significant effects on biological resources. Short-term effects would be caused by site-specific temporary disturbance during construction. Proposed activities would not adversely affect native vegetation or wildlife resources, including threatened and endangered species. Effects on biological resources would not reduce the distribution or viability of species or habitats of concern or violate biological resources laws or regulations. There would be less-than-significant effects regarding loss, degradation, or fragmentation of wildlife habitat. The concurrence and consultation with USFWS, FAA, City of Springfield, and Illinois DNR is provided in Appendix A.

The projects outlined in Section 2.0 consist of construction (including new construction, renovations, repair, alterations, and additions) and demolition of buildings, pavement, loading dock and building exterior (Table 2-1). There would be some minor adverse effects on biological resources from individual projects; however, each was reviewed on a case-by-case basis and none in and of themselves would have appreciable adverse effects on biological resources. This section describes effects on biological resources from the full implementation of the IDP, including all projects outlined in Table 2-1. This is considered the reasonable upper bound of effects, and impacts would be less than those described in this EA.

Construction Effects—Construction and demolition activities would have site-specific temporary effects on biological resources. No federally or state-listed vegetation, wildlife, or bird species protected by the MBTA have been reported at Capital Airport ANGB; therefore, they would not be impacted by the proposed projects (EA 2022a,b; IDNR 2021b; ILANG 1994, 1995). The proposed activities may require vegetation removal, but it would involve mowed and landscaped vegetation. Construction activities would displace locally common wildlife species that are adapted to high levels of human activity and disturbance. Any wildlife disturbed by construction activities, however, could temporarily or permanently relocate to similar habitat nearby. Prior to demolition, buildings should be examined for bat use (i.e., staining from bat urine and guano under eaves and shutters). The proposed projects would be on previously developed areas which would require minimal vegetation removal and there would be no appreciable loss of wildlife habitat from the proposed construction and demolition activities. In addition, as design documents are finalized, when feasible, the Proposed Action will avoid negative impacts on established vegetation. When possible, and to the maximum extent practicable, the guidelines set by USFWS

for migratory bird management strategies would be implemented (i.e., avoidance of potential nesting trees May through July).

Renovation and Repair Effects—The proposed repair and renovation projects include modifications to existing facilities and will not involve impacts on undisturbed land. These activities would have short-term less-than-significant effects on biological resources.

Operational Effects—There would be less-than-significant effects on biological resources as a result of the maintenance and operations activities associated with the Proposed Action. The nature and overall level of operations at the base would be similar to the existing operations. The collocation and consolidation of facilities and functions specified in the Proposed Action would provide operational efficiencies. The efficiencies gained from construction, renovation, and demolition would reduce the maintenance and operational requirements of facilities and project areas. The Proposed Action would not have any additional effects on vegetation, wildlife, or threatened and endangered species when compared to existing conditions; therefore, long-term effects on biological resources would be negligible.

3.4.3.3 *No Action Alternative*

Under the No Action Alternative, the construction and demolition, and renovation and repair projects proposed to improve mission capabilities, unit readiness, and the operating environment of the base would not occur. The need to meet current and future mission requirements and national security objectives would be unmet. Existing conditions would remain unchanged, and there would be no effects on biological resources.

3.5 TRANSPORTATION AND CIRCULATION

3.5.1 Definition of Resource

Transportation and circulation are defined as the movement of goods and individuals from place to place and the associated infrastructure. In general, transportation refers to air, water, and ground vehicles and the services that make use of that infrastructure.

3.5.2 Existing Conditions

3.5.2.1 *Regional and Local Circulation*

The Capital Airport ANGB is in the northwestern portion of the City of Springfield, within Abraham Lincoln Capital Airport. Primary roads consist of two interstate freeways which trend north-south (Interstate 55) and east-west (Interstate 72). Interstate 55 leads north to Chicago, Illinois and south to St. Louis, Missouri, while Interstate 72 leads east to Champaign, Illinois and west to Hannibal, Missouri.

Key arterials in the area of Abraham Lincoln Capital Airport are Veteran's Parkway/SR 4 along the southern boundary of the airport and J. David Jones Parkway/SR 29 along the eastern boundary. In the vicinity of the existing Capital Airport ANGB entrance, J. David Jones

Parkway/SR 29 has two travel lanes, one in each direction. There is a back gate along J. David Jones Parkway/SR 29, opposite Hackmore Drive that is not open. Further south, J. David Jones Parkway/SR 29 has four travel lanes (two in each direction) with a 20-foot-wide raised median. The main entrance for the base and Abraham Lincoln Capital Airport is provided from J. David Jones Parkway/SR 29 by Capital Airport Drive. There is a light for the main entrance to the airport. To the right there is the main entrance for the base that has a dedicated turn lane and acceleration/deceleration lanes to ease access and exit.

3.5.2.2 *On-Installation Circulation*

The perimeter of the installation is fully enclosed by a fence. Primary access to the base is provided from J. David Jones Parkway/SR 29 via Capital Airport Drive. The base's main entrance is gated, and vehicles must pass through a security and identification checkpoint before access is granted. Consequently, circulation is congested near the main entrance at the start and end of the workday.

Roads within the base are roughly grid-patterned, allowing full directional access to facilities and designated privately owned vehicle (POV) parking areas. Major routes within the installation are curbed and easily distinguishable, though less heavily used routes often have no clear markings or curbing.

3.5.2.3 *Parking*

The Air Force has established guidelines intended to ensure that adequate parking is available at USAF and ANG facilities; according to these standards, the ratio of available parking spaces to personnel should be no less than 0.75. The installation currently includes two main POV parking lots and one smaller POV parking lot, totaling 709 marked on-site parking spaces. Based on a peak weekend population of 1,081 personnel, the ratio of on-site parking spaces to personnel is currently about 0.66, which represents a shortfall of 102 spaces compared to Air Force requirements (ILANG 2009).

3.5.3 Environmental Consequences

3.5.3.1 *Significance Criteria*

Traffic effects would be considered significant if the Proposed Action would (1) require long-term closure of off-post roadways, (2) substantially increase congestion on any primary off-post roadways, or (3) otherwise interfere with the functionality of the regional transportation network.

3.5.3.2 *Proposed Action*

The Proposed Action would have short-term less-than-significant effects and long-term beneficial effects on transportation and traffic. Short-term effects would result from construction vehicles and from small changes in localized traffic patterns due to the construction and demolition projects. Long-term beneficial effects would result from the construction of the new parking facilities on the base. The Proposed Action would not (1) require long-term closures of off-post

roadways, (2) substantially increase congestion on any primary off-post roadways, or (3) otherwise interfere with the functionality of the regional transportation network.

Construction Effects—The construction and demolition activities would require use of personal operating vehicles and delivery trucks to and from the sites. Construction traffic would compose a small percentage of the total existing traffic both on and off the installation and would occur at various times and various locations throughout the immediate area over a multi-year period. Road closures or detours to accommodate utility system work would be expected in some on-base areas, creating short-term traffic delays. These effects would be primarily confined to on-base areas, would be temporary in nature, and would end with the construction phase.

There would be an incremental increase in off-base traffic from worker commutes and delivery trucks in support of the on-base demolition and construction activities. The local roadway infrastructure would be sufficient to support this limited increase in construction vehicle traffic, and there would be no perceptible change in off-base traffic conditions when compared to existing conditions. Although the effects would be minor, the following measures would be implemented:

- All demolition and construction vehicles would be equipped with backing alarms, two-way radios, and slow-moving-vehicle signs when appropriate;
- Demolition and construction traffic would be routed and scheduled to minimize conflicts with other traffic; and
- Staging areas would be located to minimize traffic impacts.

Operational Effects—The Proposed Action would not introduce long-term increases in personnel or traffic at the base. There would be no new permanent ongoing sources of congestion; therefore, no long-term changes in traffic would occur. The establishment of a new south-base parking area would have long-term moderate beneficial effects to on-base transportation infrastructure and parking.

3.5.3.3 *No Action Alternative*

No effects on transportation would be expected. Under the No Action Alternative, the construction, demolition, and renovation projects would not occur. Existing conditions would remain unchanged and there would be no effects on transportation or traffic.

3.6 UTILITY INFRASTRUCTURE

3.6.1 Definition of Resource

Site infrastructure includes basic resources and services required to support planned construction and operations activities and the continued operation of existing facilities. For the purposes of this EA, infrastructure is defined as water, sanitary sewer, stormwater, electricity, and natural gas.

3.6.2 Existing Conditions

This section summarizes available information on the condition of the utility systems at Abraham Lincoln Capital Airport ANGB. The utility infrastructure at Capital Airport ANGB is aging, but is not exhibiting signs of major failure, as routine maintenance is performed to minimize outages on the installation (NGB 2020). A summary of the base's primary utilities is shown in Table 3-9.

Table 3-9. Primary Utilities at Lincoln Capital Airport ANGB

Utility	Provider
Water (Potable)	Springfield City Water, Light and Power
Sanitary Sewer	Springfield City Water, Light and Power
Electricity	Springfield City Water, Light and Power
Natural Gas	Ameren Illinois

Source: NGB 2020.

Water—Water service for Capital Airport ANGB is provided by Springfield City Water, Light and Power. The primary potable water source in the area is Lake Springfield. Water usage is measured by three master meters on the base. The distribution system on the installation is owned and maintained by the Air National Guard. Only seven of the individual facilities are metered and only five of these building's water meters are tied into the energy management control system, which limits the available water usage data. There are no natural bodies of water on Capital Airport ANGB (NGB 2020).

Sanitary Sewer—Sewer service for Capital Airport ANGB is provided by Springfield City Water, Light and Power. Sewer usage is not metered separately and is billed based on water usage. The collection system on the main base is owned and maintained by the Air National Guard (NGB 2020).

Stormwater Sewer—Capital Airport ANGB is located within the Lower Illinois River Basin (LIRB) physiographic province, an extremely flat region with relief extending no more than 20 feet in most areas. According to the FEMA flood map, the installation is in an area of minimal flood hazard. No floodplains or wetlands exist on Capital Airport ANGB (NGB 2020).

Drainage of the base is by overland flow to storm drain inlets and catch basins which are collected by a network of underground pipes. Stormwater runoff enters the conveyance system through a system of open ditches. The open drainage systems generally drain slowly because of the high water table and gentle slopes. All stormwater drainage systems on the base eventually discharge through one primary outfall (on the east side of the base) into Lightfoot Creek, a tributary of Spring Creek, which discharges to the Sangamon River (NGB 2020).

A NPDES industrial permit regulates stormwater runoff at Capital Airport ANGB, which allows stormwater discharge under the terms and conditions of the permit. The permit (NPDES Permit No. IL006785) requires sampling and analytical testing to control pollutants from two locations

(Outfalls 002 and 003) that could potentially be discharged from the installation. The base performs monthly and biannual sampling of stormwater, depending on the analyte.

Electrical Service—Capital Airport ANGB purchases electricity from Springfield City Water, Light and Power. Electrical usage is measured by a single master meter near the fence in the northwest parking lot. The distribution system on the main base is owned and maintained by the ANG and most individual facilities are metered with usage data available from the energy management control system (NGB 2020).

The current primary system is over 40 years old, while most of the secondary system is over 25 years old. The system is unreliable due to its age, with replacement fuses and switches becoming difficult to procure due to scarcity. Very little maintenance has been performed on the electrical system in 25 years. Local power company representatives have recommended a complete replacement of the system to include transformers. A portion of transformers were replaced with building repairs, but several are still outdated and not high efficiency, requiring replacement (Capital Airport ANGB 2015).

Natural Gas Service—Natural gas service for Capital Airport ANGB is provided by Ameren Illinois under multiple accounts and is reported through separate meters for specific buildings throughout the base. The distribution system on the base is privatized; however, some individual facilities are also metered with usage data available from the energy management control system (NGB 2020).

3.6.3 Environmental Consequences

3.6.3.1 *Significance Criteria*

Impacts on utilities infrastructure would be considered significant if the Proposed Action increased demand on utilities so that systems were unable to keep up with the demand. Less-than-significant impacts would occur if demands were increased on local utilities, but the systems had sufficient capacity to handle the increased demand, or the increased demand could be mitigated or managed with BMPs.

3.6.3.2 *Proposed Action*

The Proposed Action would have long-term beneficial effects on utility resources. Long-term beneficial effects would result from upgrades, modernization, and infrastructure construction projects related to electrical and natural gas services and domestic water, sanitary sewer, stormwater, fuel, and communication systems. Discrete portions of the domestic water, sanitary sewer, stormwater, and natural gas would be replaced and improved, as needed, during project construction. Federal policy requires that new facilities optimize energy use, conserve water, enhance indoor environmental quality, and optimize operational and maintenance practices. Therefore, improvements to and replacement of outdated facilities and equipment resulting from the Proposed Action would result in more efficient use of energy and potential reduction in consumption.

Under the Proposed Action, the following projects would involve modification and improvement to the existing utility infrastructure:

- Project 1 would involve repair of the Central Repair Facility in which plumbing, electrical, communication system, and fire protection would be upgraded.
- Project 2 would include the repair of the base fire suppression system by replacing the existing 125,000-gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. The project would also include the replacement and reconfiguration of all piping, pavements, and supporting utility infrastructure as necessary. Modern electrical design and pumping systems would be used, resulting in decreased use of electricity and natural gas (Capital Airport ANGB 2020).
- Project 5 would involve the demolition of Buildings 12 and 13, including all above-ground structures, supporting utility connections, and subsurface foundations. Excess pavement would also be demolished, and the entire site would be returned to sodded lawn. This project would eliminate the excess infrastructure from the 183 WG.
- Project 9 would involve the construction of a new 24,300 SF BCE complex west of existing Buildings 15 and 23 on the existing central base parking lot. Meanwhile, demolition of existing BCE facilities (Buildings 2, 3, 28, 30, 44, 45, and 47) (23,519 SF) would be performed. The construction of the new BCE complex would result in upgrades to utilities and equipment resulting in energy savings, particularly from a consolidated, upgraded HVAC system.
- Project 20 would involve upgrade of lighting base-wide to more energy efficient lighting to provide better work environments and safe outdoor conditions. Exterior lighting systems upgrades would include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded. The more efficient lighting fixtures will reduce electrical consumption.
- Project 21 would involve base-wide repair of underground electrical primary and secondary distribution systems including cabling, conduit, switches, and transformers. These repairs will increase the reliability of the electrical system, and more efficient transformers will reduce electrical consumption.

Overall, the projects under the Proposed Action would beneficially impact the base's infrastructure, as further described below.

Domestic Water—Under the Proposed Action, improvements to the domestic water system would be made in discrete areas during implementation of new facility construction and renovation. During operations, potable water usage would not change significantly, with possible reductions in use as installation of more efficient and water saving technology is employed during new construction.

Sanitary Sewer—Under the Proposed Action, improvements would be made in discrete areas during implementation of new facility construction and renovation. During operations, wastewater generation would not change significantly.

Stormwater—Under the Proposed Action the stormwater system would be improved during construction of new parking areas, which would include new stormwater drainage.

Electrical Service—Under the Proposed Action, the electrical system would be improved during implementation of Project 21, which would entail base-wide repair of underground electrical primary and secondary distribution systems including cabling, conduit, switches, and transformers. Additionally, improvements to the electrical system would be made in discrete areas during implementation of new facility construction and renovation. During operations, the electrical system would be more reliable and electrical consumption may decrease as antiquated equipment would be replaced with modern efficient equipment.

Natural Gas Service—Under the Proposed Action, improvements to the natural gas system would be made in discrete areas during implementation of new facility construction and renovation. During operations, natural gas consumption is not expected to change significantly.

Under the Proposed Action, there would be beneficial impacts on the infrastructure, particularly electrical, where base-wide renovation would be performed. Discrete portions of the domestic water, sanitary sewer, stormwater, and natural gas would be replaced and improved, as needed, during project construction. Federal policy requires that new facilities optimize energy use, conserve water, enhance indoor environmental quality, and optimize operational and maintenance practices. Therefore, improvements to and replacement of outdated facilities and equipment resulting from the Proposed Action would result in more efficient use of energy and potential reduction in consumption.

3.6.3.3 *No Action Alternative*

Under the No Action Alternative, the 183 WG would not implement the Proposed Action. The 183 WG would not implement the facility improvement construction and renovation projects to meet mission requirements or AT/FP requirements. Demolition of outdated, inefficient facilities also would not occur. Existing conditions would remain unchanged and potential impacts from the No Action Alternative would be associated with the aged utility systems and facilities with identified deficiencies. Both continued use or additional demand on the infrastructure without renovation would lead to eventual system failure and mission requirements not being met, while potential health and safety risks would increase. Current and planned activities at Capital Airport ANGB would continue as required to support various missions.

3.7 CULTURAL RESOURCES

3.7.1 Definition of Resource

Cultural resources are defined as prehistoric or historic districts, sites, buildings, structures or objects considered important to a culture, subculture, or community for scientific, historical, traditional, religious, or other purposes. They include archaeological, architectural, and traditional resources. Archaeological resources contain artifacts, features, or other archaeological indications of past human life or activities from which archaeologists interpret information about history or prehistory. Architectural resources include buildings, structures, landscapes, and objects that document the history of an area. Traditional resources can include archaeological or architectural resources, as well as places or natural features that Native American groups or other groups consider essential for the persistence of traditional culture or practices.

Cultural resources are determined to be significant if they are eligible for listing in the NRHP. The NRHP is a listing maintained by the federal government of prehistoric, historic, and ethnographic buildings, structures, sites, districts, and objects that are considered significant at a national, state, or local level. Listed resources can have significance in the areas of history, archaeology, architecture, engineering, or culture. Cultural resources listed on the NRHP, or determined eligible for listing, have been documented and evaluated according to uniform standards, found in 36 CFR 60.4, and have been found to meet criteria of significance and integrity. Generally, resources evaluated for eligibility are 50 years old or older, though there are exceptions to this standard, particularly resources associated with the Cold War era or Native American cultural properties. Cultural resources that meet the criteria for listing on the NRHP, regardless of age, are called historic properties. Resources that have undetermined eligibility are treated as historic properties until a determination is made.

Illinois has several state laws that address or intersect with historic and/or archaeological issues:

- (20 Illinois Compiled Statutes [ILCS] 3420/) Illinois State Agency Historic Resources Preservation Act;
- (20 ILCS 3435/) Archaeological and Paleontological Resources Protection Act;
- (20 ILCS 3440/) Human Skeletal Remains Protection Act;
- (35 ILCS 200/) Property Tax Code;
- (35 ILCS 5/221) Sec. 221. Rehabilitation costs; qualified historic properties; River Edge Redevelopment Zone;
- (35 ILCS 5/228) Sec. 228. Historic Preservation Credit;
- (35 ILCS 31/1) Historic Preservation Tax Credit Act;
- (20 ILCS 3410/1) Illinois Historic Sites Advisory Council Act;
- (55 ILCS 5/Div. 5-29 heading) Code of Ordinances and Regulations;
- (65 ILCS 5/Art. 11 Div. 48 heading) Preservation of Historical Documents;
- (55 ILCS 95/0.01) (from Ch. 81, par. 69.9) County Historical Research Act; and

- (50 ILCS 130/0.01) (from Ch. 85, par. 5700) the Local Historian Act.

Of these, Illinois State Agency Historic Resources Preservation Act (20 ILCS 3420/), the Archaeological and Paleontological Resources Protection Act (20 ILCS 3440/) and the Human Skeletal Remains Protection Act (35 ILCS 200/) are the most applicable to this project. However, based on Supremacy Clause of the Constitution of the United States (Article VI, Clause 2), the federal statutes, including the Native American Graves and Repatriation Act (NAGPRA), take precedent on federally owned or controlled lands. In addition to NAGPRA, a number of federal laws, regulations, and Executive Orders address cultural resources and federal responsibilities regarding them. Foremost among these statutory provisions, and most relevant to the current analysis, are two Sections of the NHPA (54 U.S.C. 300101, *et seq.*), Section 106 and 110. Section 106 of the NHPA requires federal agencies to take into account the effect of their undertakings on historic properties. The regulations that implement Section 106 (36 CFR Part 800) describe the process for identifying and evaluating historic properties; assessing effects of federal actions on historic properties; and consulting to avoid, minimize, or mitigate any adverse effects. The NHPA does not mandate preservation of historic properties, but it does ensure that federal agency decisions concerning the treatment of these properties result from meaningful consideration of cultural and historical values, and identification of options available to protect the properties. As part of the Section 106 process, agencies are required to consult with the SHPO on their determinations and decisions. Federal agencies are responsible for assessing the effects on historic properties that are listed or that could be listed on the NRHP that fall within the area of potential effect (APE) of the project. According to 36 CFR 800.16(d), “The area of potential effects means the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist. The APE is influenced by the scale and nature of an undertaking and may be different for different kinds of effects caused by the undertaking.” For the projects discussed here, the APE is the Capital Airport ANGB and any adjacent area in which historic properties could be indirectly affected.

Section 110 of the NHPA outlines the historic preservation responsibilities of federal agencies and ensures that historic preservation is fully integrated into the ongoing programs of all federal agencies. Specifically, it states the following:

- Historic properties under the jurisdiction or control of the agency are to be managed and maintained in a way that considers the preservation of their historic, archeological, architectural, and cultural values;
- Historic properties not under agency jurisdiction or control but potentially affected by agency actions are to be fully considered in agency planning;
- Agency preservation-related activities are to be carried out in consultation with other federal, state, and local agencies, Indian tribes, Native Hawaiian organizations, and the private sector;

- Agency procedures for compliance with Section 106 of the Act are to be consistent with regulations issued by the Advisory Council on Historic Preservation; and
- An agency may not grant assistance or a license or permit to an applicant who damages or destroys historic property with the intent of avoiding the requirements of Section 106, unless specific circumstances warrant such assistance.

3.7.2 Existing Conditions

3.7.2.1 *Archaeological and Architectural Cultural Resources*

In 2002, MWH Americas, Inc. was contracted to perform a Phase I Archaeological Reconnaissance Survey to identify archaeological resources at Capital Airport ANGB and to evaluate any identified resources according to the NRHP eligibility criteria. In June 2002, the entire 91-acre ANGB was subjected to investigation. A large portion of the ANGB has been disturbed by roads, buildings, and/or other construction activities. These areas were deemed to have a low probability for archaeological sites and were photographically documented, but not subjected to subsurface testing (MWH Americas 2002).

The survey identified no precontact sites, but did locate two historic archaeological sites, 11SG1290 and 11SG1291. Both sites lacked stratigraphic integrity and were judged unlikely to yield information important to local history (MWH Americas 2002). Subsequently, neither site was recommended eligible for listing on the NRHP and the IL SHPO concurred (letter dated February 25, 2022). No further archaeological investigations were recommended for Capital Airport ANGB.

An architectural resources survey of Capital Airport ANGB was performed in 2010 and was conducted at the request of the NGB and the Air National Guard Readiness Center (ANGRC) to identify and determine the eligibility of resources dating to the Cold War era for listing on the NRHP. The survey was required to ensure compliance with state and federal regulations and was conducted in accordance with Section 110 and Public Law 89-665 of the NHPA of 1966 (amended), 16 U.S.C. 470f, AFI 32-7065, and Executive Order 11593, *Protection and Enhancement of the Cultural Environment*. The survey complied with the Secretary of the Interior's *Standards and Guidelines for Archaeology and Historic Preservation* (Federal Register, Vol. 48, No. 190, 1983), and with the standards of the SHPO located in the Illinois Historic Preservation Agency.

Twenty-five buildings and three static displays were assessed within the context of three overarching themes: the history of the ILANG, the history of the 183 WG, and the Cold War (ANGRC 2011). Seven of the buildings were at least 50 years old when the survey was conducted and were assessed for significance relative to NRHP Criteria A-D, in addition to Criterion Consideration G in reference to the Cold War. None of these were determined to be eligible for the NRHP and the SHPO concurred (letter dated February 2, 2012). The remaining 18 structures were not yet 50 years old and were assessed only for Criterion G. The survey concludes that these 18 structures should be reassessed once they reach 50 years of age. According to the 2011

study (ANGRC 2011), as of 2021, only one of the structures that the survey identified for reassessment has reached 50 years of age—Building P-2. The next building, P-15, will qualify for reevaluation in 2024.

The ANG submitted a letter to the SHPO on January 18, 2022, which recommended that Building P-2 was not eligible as an individual resource and was not eligible as a contributing resource to a historic district. The SHPO concurred with the P-2 recommendation in their comment letter dated February 22, 2022, and the SHPO found overall that no historic resources will be affected.

3.7.2.2 *Traditional Cultural Resources*

Currently, there are no known traditional cultural resources, including Traditional Cultural Properties or sacred sites, within the Capital Airport ANGB. The NGB initiated consultation with four federally recognized tribes identified as attaching religious or cultural significance to the property via email and certified letter on January 7, 2022. Per EO 13175, *Consultation and Coordination with Indian Tribal Governments*; EO 12372, *Intergovernmental Review of Federal Programs*; and NHPA Section 106 (36 CFR §§ 800.2, 800.3, and 800.4) the 183 WG and NGB also invited the tribes to consult on a range of issues including the effects of undertakings on cultural resources, the identification of possible traditional cultural resources, and protocols for issues of concern. The tribes contacted are listed below. The Miami Tribe of Oklahoma responded with no further coordination required.

- Peoria Tribe of Oklahoma
- Miami Tribe of Oklahoma
- Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
- Kickapoo Tribe of Oklahoma

3.7.3 Environmental Consequences

3.7.3.1 *Significance Criteria*

This section provides a discussion of the environmental effects of the Proposed Action and No Action Alternative on cultural resources. According to NEPA implementing regulations in 1501.3(b)(2)(iv), an agency should also consider effects that would violate tribal, federal, state, or other local law protecting the environment.

The NHPA is the overarching federal law that applies to cultural resources. The effects on cultural resources would be considered significant if the ANG did not conduct and complete proper coordination with the Illinois SHPO before physically altering, damaging, or destroying all or part of a cultural resource or introducing visual or audible elements that are out of character with a historically sensitive property.

Under Section 106 of the NHPA, an action might have no effects on historic properties (no historic properties finding), no adverse effects on historic properties, or adverse effects on historic

properties. An adverse effect under Section 106 of the NHPA would not necessarily be significant under NEPA if effects were not considered substantial and could be mitigated. Measures developed to minimize or mitigate adverse effects on historic properties under Section 106 of the NHPA could result in an action having no significant impacts on cultural resources under NEPA.

3.7.3.2 *Proposed Action*

The undertaking is composed of 21 repair, renovation, replacement, and demolition projects. The 183 WG would implement all proposed short-term infrastructure projects as summarized in the Summary of Proposed Projects (Table 2-1). The EA will also provide sufficient analysis of mid- to long-range projects (within the next six to 20 years) so that future NEPA analyses that tier from this EA can effectively reference the broad analyses of those improvements. The APE (Figure 2-1) for the Proposed Action is defined as any area where ground disturbance will occur; this includes the staging areas for equipment and materials as well as the viewsheds of historic properties as appropriate.

Archaeological Resources— No NRHP-listed or eligible archaeological resources are present on Capital Airport ANGB; as such, the Proposed Action would not affect any NRHP-listed or eligible archaeological resources (MWH Americas 2002).

Architectural Resources— Of the 21 projects, three may affect Building P-2. Project 9 Construct BCE Complex (DCFT059018) and Project 19 Construct CRF Parking Lot (DCFT202008) (Table 2-1) would result in the demolition of Building P-2. In addition, Project 5 Demolish Buildings 12 and 13 (DCFT162900) may have indirect visual impacts to Building P-2 (if it is not demolished). It was determined that Building P-2 is not eligible as a contributing resource to a historic district.

Traditional Cultural Resources— No Traditional Cultural Resources or other Tribal Resources have been identified within the Capital Airport ANGB.

3.7.3.3 *No Action Alternative*

Under the No Action Alternative, the construction and demolition, and renovation and repair projects proposed to improve mission capabilities, unit readiness, and the operating environment of the base would not occur. Existing conditions would remain unchanged, and there would be no effects on cultural resources.

3.8 HAZARDOUS MATERIALS AND WASTE

3.8.1 Definition of Resource

The terms “hazardous materials” and “hazardous waste” (HW) refer to substances defined as hazardous by the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601, *et seq.*) and the Solid Waste Disposal Act, as amended by RCRA (42 U.S.C. 6901, *et seq.*). Hazardous wastes that are regulated under RCRA are defined as any solid, liquid, contained gaseous, or semisolid waste or any combination of wastes that exhibits one or more of the hazardous characteristics of ignitability, corrosivity, toxicity, or reactivity or is listed as a

hazardous waste under Title 40 of the Code of Federal Regulations, Part 261. Universal waste (UW) is a federally designated subset of hazardous waste with reduced regulatory requirements to encourage recycling. This includes batteries, pesticides, mercury-containing equipment, and fluorescent light tubes. In general, hazardous materials include substances that, because of their quantity; concentration; or physical, chemical, or infectious characteristics; may present substantial danger to public health or the environment when released into the environment or otherwise improperly managed.

This analysis of hazardous materials and wastes includes discussion of the management of hazardous materials, hazardous waste, and petroleum products; hazardous building materials such as asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyls (PCBs); and Environmental Restoration Program (ERP) sites within and adjacent to the project sites. Per- and polyfluoroalkyl substances (PFAS) are emerging contaminants with no maximum contaminant level guidelines from USEPA because their effects on humans and the environment are still under active research (USEPA 2016). A health advisory has been issued for perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), but health advisories are non-regulatory guidelines.

The primary agencies responsible for regulation of hazardous materials and waste are the USEPA, Illinois Pollution Control Board, and IEPA, Bureau of Land, Division of Land Pollution Control. The 183 WG is registered with the EPA under the following generator ID: IL1572825882 and the IEPA under the following agency ID 170000145965. The region of influence for the hazardous materials and waste analysis is the proposed project areas and surrounding areas that could affect or be affected by activities at those sites.

3.8.2 Existing Conditions

The ILANG at Abraham Lincoln Capital Airport has a base-specific hazardous materials and waste management program implemented through the 183 WG Hazardous Waste Management Plan (HWMP) (ILANG 2021a) and the Oil and Hazardous Substances Spill Prevention and Response Plan (SPRP) (ILANG 2021b). The HWMPs provide guidance to personnel who work with hazardous waste and prescribe the roles and responsibilities with respect to the waste stream inventory, waste analysis plan, hazardous waste management procedures, training, emergency response, and pollution prevention. The SPRP is intended to fulfill the requirements of both a Spill Prevention, Control, and Countermeasures (SPCC) Plan and an Oil and Hazardous Substances Pollution Contingency Plan and provides guidance specific to containment, handling, disposal, and emergency response of spills. These resources are intended to be used collectively and may contain overlapping information. All guidance documents for operations conducted at Capital Airport ANGB are regularly reviewed by the Environmental Manager (EM) to ensure compliance with current federal, state, and local requirements regarding the management of hazardous wastes as they relate to environmental protection and worker safety. The guidance documents apply to all base personnel and external support organizations on Capital Airport ANGB.

The 183 WG is regulated as a small quantity generator (SQG) of HW (ILANG 2021b). This means that the 183 WG generates more than 220 pounds, but less than 2,205 pounds of HW in a calendar month. Hazardous waste is separated and temporarily stored on-base before being transferred off-base for disposal or reclamation. The EM is responsible for arranging the shipment and disposal of waste through a disposal contractor. To maintain its status as a SQG, quantities of HW accumulated on base cannot exceed 13,200 pounds at any one time (ILANG 2021b).

During normal operations, the 183 WG uses hazardous materials and petroleum products such as fuels, solvents, paints, oils, lubricants, adhesives, corrosives, pesticides, deicing fluid, refrigerants, and cleaners. Older buildings at Capital Airport ANGB may contain ACM and LBP.

Generated wastes are stored in three areas on Capital Airport ANGB:

- Satellite Accumulation Point (SAP)—A SAP is where HW is initially accumulated. It must be at or near the point of generation. The 183 WG manages 15 SAPs on base.
- Universal Waste Accumulation Point (UWAP)—A UWAP is where UW is stored prior to recycling off base. Managing these wastes allows for a lower count of HW, enabling the 183 WG to maintain its status as a SQG. There are seven UWAPs on base.
- Central Accumulation Point (CAP)—A CAP is a singular location on base where HW may accumulate. Due to its status as a SQG and distance to a Treatment, Storage, and Disposal facility the 183 WG may store HW on base for up to 270 days (ILANG 2021b).

Hazardous and universal waste storage locations at the 183 WG are presented in Table 3-10.

Table 3-10. Hazardous and Universal Waste Storage Locations

Location (Bldg.)	Storage Type	Organization
P-01	HW SAP	Engine Shop
P-02	UW – Lamps	Supply
P-02	UW – Batteries	Supply
P-03	HW SAP	Power Pro
P-08	UW – Batteries	Communications
P-12	HW SAP	Structural Shop
P-12	HW SAP	AGE
P-12	HW SAP	Trailer Maintenance
P-13	HW SAP	Metals Technology
P-15	UW – Batteries	Supply
P-17	HW SAP	Structural Shop/Paint Operations
P-17	HW SAP	NDI
P-18	HW SAP	Petroleum, Oil, and Lubricants Fuels Lab
P-19	HW SAP	Vehicle Maintenance

Location (Bldg.)	Storage Type	Organization
P-19 (outdoor shed)	UW – Lamps	Vehicle Maintenance
P-19 (outdoor shed)	UW – Batteries	Vehicle Maintenance
P-25	HW SAP	Security Forces
P-45	HW CAP	EMO
P-45	HW SAP	Hazmat
P-46	UW – Batteries	217 Engineering Installation Squadron
P-48	SAP - Medical	Medical
P-119	HW SAP	Hush House

Source: ILANG 2021b.

An asbestos survey conducted in August 2007 determined that ACM exists in Buildings 1, 2, 3, 5, 8, 12, 13, 14, 15, 16, 17, 18, 19, 23, 15, 26, 36, and 137. Most material found was in "good" or "poor" condition but did not pose a health threat or require immediate action (ILANG 2009). Asbestos and lead are inventoried and inspected each year. Light capacitors and ballasts that are found to have PCBs at Capital Airport ANGB are recycled (NGB 2020).

Phase 1 Regional Site Inspections for PFCs—Site Inspection (SI) field activities were conducted in September 2017 and May 2018 to determine the presence or absence of PFCs at five Potential Release Locations (PRLs) identified at Capital Airport ANGB and the base boundary (Amec FW 2018). Soil, groundwater, and sediment samples were collected and analyzed for the PFCs listed on the USEPA's Third Unregulated Contaminant Monitoring Rule list and compared against screening criteria for PFOA, PFOS, and PFBS. Based on the comparison of analytical data to screening criteria, further investigations are recommended at the five PRLs. Only soil samples collected from the five PRL sites and groundwater collected from the base boundary showed no exceedances of the screen criteria. Groundwater samples exceeded one or more of the screening criteria.

- PRL 1: Building 1
- PRL 2: Building 26
- PRL 3: Wash Rack
- PRL 5: Building 25
- PRL 6: Stormwater Sewer System
- Base Boundary

Environmental Baseline Survey—An Environmental Baseline Survey (EBS) was conducted in 2005 to analyze existing documentation, conduct visual surveys, and interview appropriate personnel to investigate the presence of hazardous and toxic substances in addition to other materials that could affect human health and the environment (ILANG 2005).

The 2005 EBS investigated and categorized 56 buildings or sites on base. Of those investigated, 29 were listed as Category 1, 22 as Category 3, and 5 as Category 5. Property category codes are used to indicate the degree of contamination associated with the subject properties. Four ERP sites were identified during the 2005 EBS (ILANG 2009). Currently, there are two active ERP sites at Capital Airport ANGB (NGB 2020).

ERP Site 5 is located north of Building 23 and beneath Building 46. Between 1971 and 1989, the wing tanks from F-4 aircraft were serviced at this site. Fuel tanks were emptied of excess JP-4 onto the ground during maintenance, causing soil and groundwater contamination (NGB 2020).

ERP Site 6 is located adjacent to Building 17. From 1971 until February 2016, miniscule amounts of penetrants, developers, and emulsifiers were rinsed with water and discharged through a drain that was believed to discharge to the sanitary sewer (NGB 2020).

In February 2018, project closeout activities were implemented for ERP Sites 3 and 5. Project closeout activities consisted of abandoning select monitoring wells associated with Sites 3 and 5. Thirteen monitoring wells were abandoned at Site 3 and two monitoring wells were abandoned at Site 5 (CH2M 2018).

3.8.3 Environmental Consequences

3.8.3.1 *Significance Criteria*

Effects would be considered significant if the Proposed Action would (1) cause or increase the risk of human exposure to hazardous substances without adequate protection; (2) substantially increase the risk of spills or releases of hazardous substances; (3) disturb the progress of cleanup activities so adverse effects on human health or the environment could result; (4) conflict with established land-use controls; or (5) result in noncompliance with applicable federal, state, or local laws and regulations or with permits related to hazardous materials and waste.

3.8.3.2 *Proposed Action*

The Proposed Action would have short- and long-term adverse effects regarding the presence and use of hazardous materials and wastes. Short-term minor adverse effects would be due to increased use of hazardous materials and generation of wastes during construction, renovation, and demolition activities. Long-term, the Proposed Action would cause a minor increase in the use of hazardous materials and generation of hazardous waste due to the additional operations and maintenance requirements of the facility additions, new facilities, and potential support of the future mission. Overall, the Proposed Action would reduce the likelihood of exposure to or potential contamination from hazardous materials and waste through the removal of hazardous materials by demolition and renovation of outdated facilities and through the replacement with upgraded facilities and systems. Therefore, long-term effects would be negligible.

Trenching and digging operations would require prior coordination with installation personnel. Approved dig permits to be obtained prior to commencing work as well as documentation indicating that any fill brought on-site is clean. If contaminated soils or groundwater are encountered during construction, installation or contractor personnel would manage it in accordance with Air National Guard Readiness Center, Air Force Civil Engineer Center, and Air Force guidance. With proper media management, no further contamination or migration of PFOS or PFOA from the soil or groundwater would be expected to occur. Future sampling events and project construction would be coordinated with regulatory agencies, as needed. The 183 WG would ensure that the Proposed Action would not interfere with future PFAS investigations and would appropriately handle any excavated soils.

The projects outlined consist of construction, demolition, and renovation and repair. There would be minimal effects on hazardous materials usage and waste management from individual projects. This section describes the effects on hazardous materials usage and waste management from the full implementation of the IDP, including all projects. This is considered the reasonable upper bound of effects, and impacts would be less than those described in this EA.

Construction Effects—The use of hazardous materials and generation of wastes at the construction, renovation, and demolition areas would occur; however, the increase in hazardous materials and wastes would be limited and temporary. General construction activities involve hazardous materials such as petroleum, oil, and lubricants (POLs), batteries, and pesticides for site maintenance. Use of hazardous materials and management of hazardous waste would involve some minor risk of spills and human exposure; however, those risks would be minimized by complying with established management plans for hazardous materials and waste, and spill prevention and response. Construction BMPs would be implemented at all sites, including personnel safety training, proper storage and signage of containers, routine inventory, and readily available Safety Data Sheets for all hazardous materials used on-site. In addition, equipment would receive regular maintenance and vehicles would use drip pans when stationary to prevent contamination from leaks.

Contractors on-site would comply with local, state, and federal regulations for the use, handling, and disposal of hazardous materials. All construction sites would have a designated Health and Safety Officer on-site to ensure compliance with applicable regulations and the Health and Safety Plan. Ground-clearing and digging operations that encounter contaminated soils or groundwater would be managed in accordance with established procedures.

Ground-clearing and digging operations would require prior coordination with the EM and approved dig permits to be obtained prior to commencing work as well as documentation indicating that any fill brought on-site is clean. If contaminated soils or groundwater are encountered during construction, the EM, installation personnel, or contractor personnel would manage it in accordance with established procedures.

Short-term minor adverse effects would also result from sites at which renovation and repair of facilities could expose materials that require special handling, such as ACM and LBP; however, removal of those materials would result in long-term minor beneficial impacts because it would eliminate future threats to human health and the environment. Workers on the site would be advised to the extent known of the type, condition, and quantity of hazardous materials that might be present, and appropriate personal protective equipment would be required. Testing would be conducted, as necessary, to determine presence and extent of ACM and LBP in a facility.

The safe-handling, storage, and use procedures managed under the HWMP, in accordance with all federal, state, and local regulations, would be implemented. Solid wastes generated over the course of the construction period would be collected and transported off-site as necessary to a permitted landfill or handled in accordance with the HWMP. Disposal of special wastes (listed in the HWMP) would require prior coordination with the EM to ensure the appropriate permits are obtained. Construction debris would be recycled or reused as much as possible in accordance with the Air Force Qualified Recycling Program (DoD Manual 4160.28) or would be managed in accordance with AFMAN 32-7002, *Environmental Compliance and Pollution*. These effects would be less than significant.

Renovation and repair activities would be performed in accordance with federal, state, and local regulations. These activities would have short- and long-term less-than-significant effects on hazardous materials and wastes.

Proposed Facilities at ERP Sites—Project 2 involves renovation and repair activities, which include the replacement and reconfiguration of piping, pavements, and supporting utility infrastructure at ERP Site 6. Project 9 involves construction and demolition at ERP Site 4. Construction that occurs on an ERP site would require prior verification to ensure it meets the following required controls: restrictions on land use, restrictions on groundwater withdrawals, and land transfer notifications. For compliant locations, site inspections and confirmation sampling would be conducted to test for the presence of hazardous materials and, if they are present, that their concentrations are within regulatory limits before ground-disturbing activities begin. If remediation is required, the EM and installation personnel would determine the next steps.

Storage Tanks—There are 12 aboveground storage tanks (ASTs) and two mobile ASTs on base. There are no underground tanks located on the base. Prior to construction activities, ASTs on the project site may have to be drained and removed. In that case, contractor personnel would visually inspect the ASTs for damage and leaks. If there is evidence of a release of a tank's contents or if the tank is being replaced, the tank would be drained and removed, and the surrounding soil would be sampled to determine if hazardous material concentrations are above regulatory limits. Soil containing hazardous materials would be excavated, stored in a separate spoil pile, and disposed of off-site at an approved facility. The drained contents of the AST would be stored and disposed of in accordance with applicable regulations for that material.

The Proposed Action would be performed in accordance with federal, state, and local regulations. Construction activities would have short- and long-term less-than-significant adverse effects on hazardous materials and wastes.

Operational Effects—Post-construction and during normal operations, the use, generation, or disposal of hazardous materials and wastes would be similar to the levels under existing conditions. The HWMPs and SPRP would guide short- and long-term hazardous materials management and would continue to ensure compliance with DoD Directive 5030.41, Oil and Hazardous Substances Pollution Prevention and Contingency Program. Long-term beneficial impacts on hazardous materials and petroleum product management could occur with respect to storage conditions, as older buildings are replaced or renovated with modern hazardous material and petroleum product storage. The proposed activities would not result in substantially different operational activities; therefore, the Proposed Action would result in less-than-significant adverse effects with respect to hazardous materials and wastes.

3.8.3.3 *No Action Alternative*

Under the No Action Alternative, the Proposed Action would not be implemented. Handling, use, and transportation of hazardous materials would remain unchanged compared to existing conditions. Any beneficial impacts on hazardous materials usage and waste generation from the upgrade of on-base facilities, the efficiency of operations and maintenance activities associated with a modernized system, and eliminating ongoing advancements otherwise required to meet current and future mission requirements and national security objectives would be unmet.

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4.0 CUMULATIVE EFFECTS

Effects on environmental resources can result from individually minor, but collectively substantial, actions taken over time. The CEQ NEPA published a final rule on April 20, 2022 (to take effect on May 20, 2022), revising the definition of "effects" to include direct, indirect, and cumulative effects.

To fulfill these requirements, the ANG has considered actions that occur at the same time and place as the Proposed Action in this section of the EA. The EA looks at current or past actions with ongoing impacts, the effects of which could combine with those of the Proposed Action to produce an overall impact. This EA does not consider future actions that are speculative.

4.1 REASONABLY FORESEEABLE PROJECTS AND PLANNING

The effects from the projects identified in the IDP and associated activities have been evaluated in Section 3.0. In addition to these projects, the ANG often conducts other planning efforts and implements other projects at their installations that are outside the scope of the IDP. These projects can include land-use planning, construction, demolition, and renovation activities to help support ANG's mission. Although some projects are outside the scope of the IDP, the installation generally implements strategies that support the DoD-wide overarching installation planning philosophy, which is to develop a sustainable platform to support the effective execution of assigned military missions as efficiently as possible.

Projects and planning for off-base development at the airport and in the City of Springfield and Sangamon County, in which the installation is located, are authorized by the Illinois state legislature to prepare comprehensive or master plans as long-range guiding documents. These comprehensive plans promote the community's vision, goals, objectives, and policies; establishes a process for orderly growth and development; addresses both existing and long-term needs; and provides for a balance between the natural and built environments. Elements addressed in projects identified in a comprehensive plan might include recreation and tourism, transportation, land use, economic development, affordable housing, environment, parks and open space, natural and cultural resources, hazards, capital improvements, water supply and conservation, efficiency in government, sustainability, energy, and urban design.

A review of other planning documents was conducted to identify other ongoing or reasonably foreseeable projects in addition to those outlined in the IDP. Table 4-1 lists ongoing or reasonably foreseeable on- and off-base projects currently planned. After a thorough review of the installation and airport planning documents, no reasonably foreseeable projects were identified that would have a reasonably close causal relationship to the Proposed Action. Projects outlined in the plans were either speculative in nature, were temporally or geographically remote, or would require a lengthy causal chain to connect them with the Proposed Action; therefore, none were carried forward for detailed evaluation in the EA.

Table 4-1. Reasonably Foreseeable Projects and Planning Efforts

Planning document reviewed	Projects identified	Implementation timeline	Would the effects from the project be temporarily or geographically remote?	Would the project have a reasonably close causal relationship to the Proposed Action?
Abraham Lincoln Capital Airport Public Notice	Upgrade perimeter fence/wildlife hazard mitigation	Phase 4	No, proposed project is located at Abraham Lincoln Capital Airport	No, the FAA returned a FONSOI on a condensed EA
Illinois Department of Transportation's Annual Draft IDOT FY-2022 Proposed Airport Improvement Program	Rehabilitate / Reconstruct Runway13/31	Phase 1-Preliminary Design	No, proposed project is located at Abraham Lincoln Capital Airport	No
Illinois Department of Transportation's Annual Draft IDOT FY-2022 Proposed Airport Improvement Program	Rehabilitate Public Safety Building	Phase 2	No, proposed project is located at Abraham Lincoln Capital Airport	No
FAA Airport Improvement Program Grant Detail Report	Remove 18/36 Runway	Phase 2	No, proposed project is located at Abraham Lincoln Capital Airport	No

5.0 MANAGEMENT ACTIONS / SPECIAL PROCEDURES

This section summarizes special operating procedures associated with this EA. Evaluations contained in this EA have determined that no significant environmental effects would result from implementing the Proposed Action at the Capital Airport ANGB. This determination is based on thorough review and analysis of existing resource information, coordination with installation personnel, and relevant agency coordination.

"Special operating procedures" are defined as measures that would be implemented to address minor potential environmental effects associated with implementation of the Proposed Action. The environmental protection measures described in this EA, in addition to standard BMPs, such as implementing control measures to reduce fugitive dust emissions; engineering and site development to account for soil constraints; conforming to all federal, state, and local requirements related to stormwater pollution prevention during construction activities; and safe removal of potentially hazardous materials, would be applied. "Environmental protection measures" are actions used to minimize impacts that are not required as a part of statutes or regulations, or to fulfill permitting requirements, but are typically taken during design and construction phases of a project to reduce impacts on the environment. BMPs are actions required by statutes or regulations, or to fulfill permitting requirements, which reduce potential impacts. Since implementation of the Proposed Action at the 183 WG would result in less-than-significant effects on the resources evaluated, recommendations for special procedures are unnecessary.

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Appendix A

IICEP Correspondence

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IICEP Distribution List

Agency	Name	Address
Federal		
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U.S. Army Corps of Engineers Rock Island District, Regulatory Branch	Trevor Popkin Chief, Eastern Branch	Clock Tower Building PO Box 2004 Rock Island, IL 61204-2004
U.S. Fish and Wildlife Service Rock Island Field Office	Kraig McPeek Field Office Supervisor	1511 47th Avenue Moline, IL 61265
Federal Aviation Administration Great Lakes Region Office of the Regional Counsel	James W. Tegtmeier Regional Counsel	O'Hare Lake Office Center 2300 East Devon Avenue, AGL-7 Des Plaines, IL 60018
State and Local		
Illinois Department of Transportation Office of Planning & Programming, District 6	Jeffrey Myers Engineer	126 East Ash Street Springfield, IL 62704-4792
Illinois Department of Natural Resources Division of Ecosystems and Environment, Impact Assessment Section - Interagency Review	Nathan Grider Division Manager	One Natural Resources Way Springfield , IL 62702-1271
Illinois Environmental Protection Agency	Charles Gunnarson Chief Legal Counsel	1021 North Grand Avenue East PO Box 19276 Springfield, IL 62794-9276
Illinois State Historic Preservation Office Illinois Department of Natural Resources	Colleen Callahan Director, SHPO	1 Natural Resources Way Springfield, IL 62702-1271
Springfield Airport Authority Capital Airport	Roger Blickensderfer Director of Facilities and Maintenance	1200 Capital Airport Drive Springfield, IL 62707
City of Springfield Planning and Economic Department	Director	800 Monroe Room 207 Springfield, IL 62701
Springfield-Sangamon County Regional Planning Commission	Molly Berns Executive Director	200 South 9th Street Room 212 Springfield, IL 62701-1629
Federally Recognized Tribes		
Miami Tribe of Oklahoma	Douglas Lankford Chief	3410 P St. P.O. Box 1326 Miami, OK 74354
Peoria Tribe of Oklahoma	Craig Harper Chief	118 South Eight Tribes Trail P.O. Box 1527 Miami, OK 74355
Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas	Lester Randall Chairman	824 111th Drive Horton, KS 66439
Kickapoo Tribe of Oklahoma	Darwin Kaskaske Chairman	105365 South Highway 102 PO Box 70 McLoud, OK 74851

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NATIONAL GUARD BUREAU
3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

17 December 2021

Ms. Christine Yott
NEPA Program Manager
Air National Guard Readiness Center, NGB/A4AM
3501 Fetchet Ave
Joint Base Andrews MD 20762-5157

Kenneth Westlake, Deputy Director
Office of Multimedia Programs
U.S. Environmental Protection Agency, Region 5
Office of the Regional Administrator
77 W. Jackson Blvd.
Chicago IL 60604-3507

Dear Mr. Westlake,

The National Guard Bureau (NGB) is currently investigating the feasibility of short-term construction, demolition, and renovation infrastructure improvement projects at the Air National Guard (ANG) 183d Wing (183 WG) located at the Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL (Attachment 1). The purpose of the Proposed Action is to implement these projects from the Installation Development Plan (IDP) to provide the 183 WG with properly sized and configured facilities needed to effectively accomplish their mission. The Proposed Action provides a planning, programming, and development strategy that would address current mission deficiencies and opportunities for the 183 WG. As directed by the National Environmental Policy Act (NEPA), the NGB, with support from Tetra Tech, is preparing an Environmental Assessment (EA) in order to evaluate the potential environmental effects associated with the Proposed Action.

The undertaking is comprised of 21 repair, renovation, replacement, and demolition projects. The 183 WG would implement all proposed short-term infrastructure projects as summarized in the 183 WG Project List (Attachment 2). The EA will also provide sufficient analysis of mid- to long-range projects (within the next six to 20 years), so that future NEPA analyses that tier from this EA can effectively reference the broad analyses of those improvements. The Area of Potential Effects (APE) (Attachment 3) for the Proposed Action is defined as any area where ground disturbance will occur; this includes the staging areas for equipment and materials.

The NGB and 183 WG are interested in information or agency-specific preliminary comments that would alleviate or highlight areas of concerns preceding this EA. Areas of concern may include potential effects to physical, ecological, social, cultural, and archaeological resources. The NGB and 183 WG also request any information that your agency may have

regarding other proposed, ongoing, or recently completed projects that could create or exacerbate impacts to the Proposed Action.

Please respond within thirty (30) days of receipt of this letter to Christine Yott, NEPA Program Manager, ATTN: 183 WG EA, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject titled as ATTN: 183 WG EA. Thank you for your assistance.

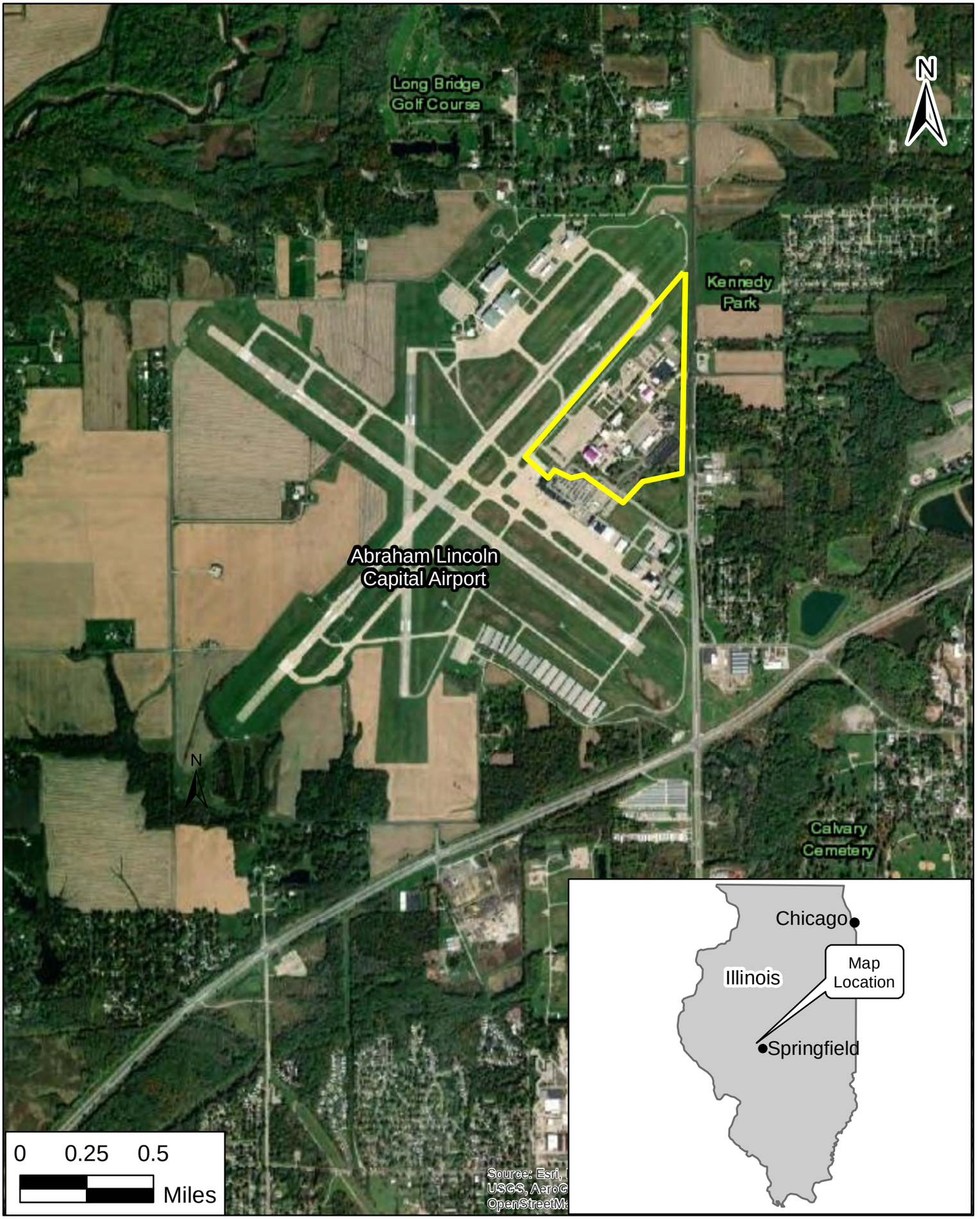
Sincerely

YOTT.CHRISTINE.JUNE.1287505015 Digitally signed by YOTT.CHRISTINE.JUNE.1287505015 Date: 2021.09.13 09:20:46 -04'00'

CHRISTINE J. YOTT, GS-13, DAF
NEPA Program Manager

3 Attachments:
1. 183 WG Location Map, July 2021
2. 183 WG Project List and Descriptions, July 2021
3. 183 WG Proposed Project Locations Map, July 2021

Attachment 1: 183d WG Abraham Lincoln Capital Airport AGS Location Map



LEGEND

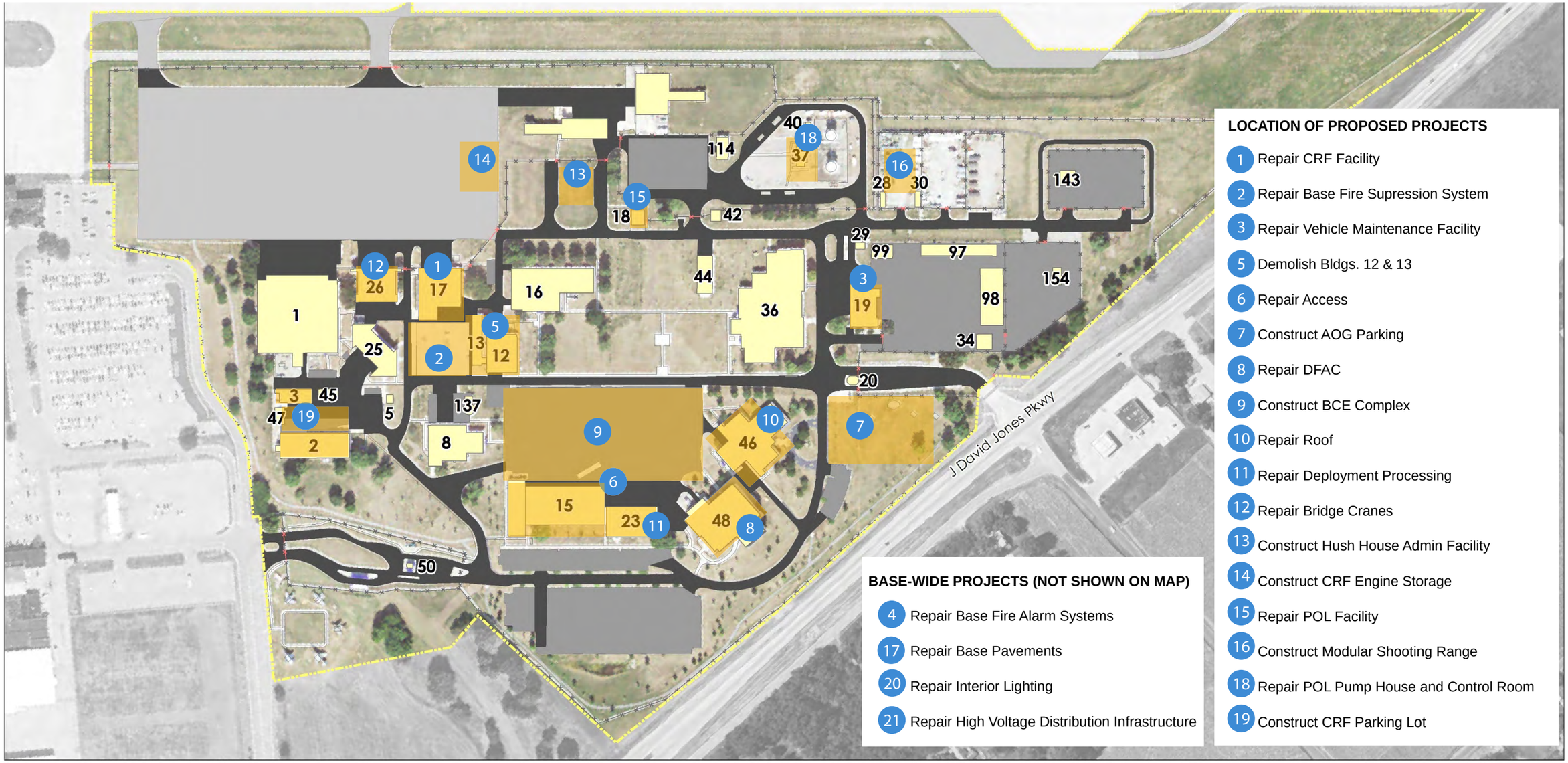
Installation Boundary

Attachment 2: 183 WG Project List and Descriptions

Project #	Project Title and Description	Project ID Number	Estimated Year
1	**Repair CRF Facility, Building 17.** Reinforce concrete foundation and floor slab with concrete masonry unit (CMU) walls, install metal standing seam roof, and modify as needed to meet AT/FP criteria. Renovate the existing facility and reconfigure interior walls to accommodate CIRF mission. Modify building systems to accommodate the reconfiguration and install interior finishes. Upgrade plumbing, electrical, fire protection, and communications systems.	DCFT102008	2020
2	**Repair Base Fire Suppression System.** Replace the existing 125,000 gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. Repair existing landscaping and vegetation areas as necessary to accommodate new tank and pump house facility.	DCFT142001	2022
3	**Repair Vehicle Maintenance Facility, Building 19.** Reconfigure interior administrative space, bathrooms, and vehicle work bays. Upgrade electrical, HVAC, and fire suppression. Add door entrance canopies.	DCFT152010	2022
4	**Repair Base Fire Alarm Systems.** Base-wide project to replace fire alarm systems with primary receiving and dispatching system with redundancy. Replace non-compliant, non-addressable fire alarm control panels (FACPs) with addressable wireless control panels and transceivers with capability to report to the centralized system. Upgrade buildings with non-addressable components.	DCFT172008	2022
5	**Demolish Buildings 12 & 13.** Buildings 12 and 13 (11,827 square feet) and all supporting utilities and excess pavements (650 square feet) will be demolished and the entire site will be returned back to a sodded lawn. All sidewalks will be extended as necessary to ensure safe pedestrian flow through the site once demolition is complete.	DCFT162900	2023
6	**Repair Access, Building 15.** Re-grade and construct an asphalt driving lane (3,000 square yards) and depressed concrete slab for loading dock including repairs to the north side of Building 15 (500 square yards).	DCFT192011	2023
7	**Construct AOG Parking.** Re-grade and construct an asphalt parking lot (6,000 square yards) with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Repair existing landscaping and vegetation areas as necessary.	DCFT192010	2023
8	**Repair DFAC in existing Building 48.** Repair building to address functional layout issues.	DCFT162002	2024
9	**Construct BCE Complex (MILCON).** Construction of a new 23,000 square foot BCE Complex west of existing Buildings 15 and 23 on the existing central base parking lot. The existing BCE buildings (2, 3, 28, 30, 44, 45, and 27) will be demolished.	DCFT059018	2024
10	**Repair Roof, Building 46.** Repair roof.	DCFT162014	2025

Project #	Project Title and Description	Project ID Number	Estimated Year
11	**Repair Deployment Processing, Building 23.** Interior repair/renovation.	DCFT202001	2024-2025
12	**Repair Bridge Cranes / CRF Operations.** Proposed project to add bridge cranes in Building 26. Can only be completed if the space authorization variance is approved and additional storage space is authorized (Project 14).	DCFT182004	2025
13	**Construct Hush House Admin Facility.** Proposed project to construct a permanent restroom and breakroom for personnel assigned to hush house operations. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192001	2025
14	**Construct CRF Engine Storage.** Proposed project to construct a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment out. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192002	2026
15	**Repair POL Facility.** Existing facility requires repair and modernization as the building has remained largely untouched since the early 1980's.Interior updates and renovations to the facility.	DCFT192006	2026
16	**Construct Modular Shooting Range.** The installation requires an adequately sized, properly configured, and correctly sited small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226. Construct small arms firing range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a combat arms training and maintenance (CATM) facility (12,300 SF).	DCFT219001	2031
17	**Repair Base Pavements.** Base-wide project to renovate or repair pavement on the installation.	DCFT062001	2026
18	**Repair POL Pump house and control room.** Repair of dilapidated buildings. Currently there are two facilities constructed of CMU that house both the electrical control equipment and the fuel pumping equipment in the POL area. Both structures are showing signs of joint and block failure and need to be replaced. Equipment inside can't be moved, so the project will require demolition and construction of a new building envelope to maintain operation of the equipment located inside.	DCFTXXXXX	2031
19	**Construct CRF Parking Lot.** New parking lot will be constructed on the location of the existing BCE Building (after buildings are demolished). Buildings 2, 3, 28, 30, 44, 45, and 27 will be demolished.	DCFT202008	2022
20	**Repair Interior Lighting.** Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. Exterior lighting system upgrades will include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded.	DCFT202002	2026

Project #	Project Title and Description	Project ID Number	Estimated Year
21	**Repair High Voltage Distribution Infrastructure.** Base-wide project through the base's energy program to replace all obsolete high voltage primary and secondary distribution systems to include transformers, cabling, switch gear and any damage pathways or manholes.	DCFT202003	2026



LOCATION OF PROPOSED PROJECTS

1. Repair CRF Facility
2. Repair Base Fire Supression System
3. Repair Vehicle Maintenance Facility
5. Demolish Bldgs. 12 & 13
6. Repair Access
7. Construct AOG Parking
8. Repair DFAC
9. Construct BCE Complex
10. Repair Roof
11. Repair Deployment Processing
12. Repair Bridge Cranes
13. Construct Hush House Admin Facility
14. Construct CRF Engine Storage
15. Repair POL Facility
16. Construct Modular Shooting Range
18. Repair POL Pump House and Control Room
19. Construct CRF Parking Lot

BASE-WIDE PROJECTS (NOT SHOWN ON MAP)

4. Repair Base Fire Alarm Systems
17. Repair Base Pavements
20. Repair Interior Lighting
21. Repair High Voltage Distribution Infrastructure

Installation Boundary
Access Control
Fence
Building
Area of Potential Effect
Road
Vehicle Parking
Airfield Surface

1	Main Hangar	18	Petrol Ops Building	37	Jet Fuel Pump House	99	Wash Rack
2	BE Maintenance Shop (CE)	19	Vehicle Maintenance Shop	40	Fuel Storage Control Bldg	114	Liquid Oxygen
3	BE MX Shop/SFS	20	Traffic Check House	42	Hydrazine Facility	137	Pump House
5	Services Storage	23	Weapons Release	44	Conventional Munitions Shop	143	Munition Storage
8	Communications Facility	25	SFS	45	HazMat Pharmacy	154	Munitions Inspection
12	AGE (A/SE) Storage Facility	26	Shelter A/W CALBR	46	EIS/MPF		
13	A/C General Purpose Shop	28	Shed Supply/Equipment BSE	47	CE Cold Storage		
15	Supply Warehouse	29	Hazardous Storage	48	Composite Support Facility		
15	Supply Warehouse	30	BE Storage Shed (Mobility)	50	Traffic Check House		
16	AOG/Squadron Ops Building	34	Vehicle Ops Parking Shed	97	Vehicle MX Shed		
17	Fuels Sys Maintenance Dock	36	CNAF	98	Vehicle MX Shed		

Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984

0 500 1,000 Feet

183d WG Capital Airport ANGB Proposed Project Locations Map

Attachment 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

January 14, 2022

REPLY TO THE ATTENTION OF:
Mail Code RM-19J

Christine Yott
National Guard Bureau
3501 Fetchet Avenue
Joint Base Andrews, Maryland 20762-5157

Re: Project Scoping for Proposed Construction, Renovation, and Demolition Projects at the 183rd Airlift Wing, Abraham Lincoln Capital Airport, Springfield, Sangamon County, Illinois

Dear Ms. Yott:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced project scoping document, which was prepared by the National Guard Bureau (NGB). We are providing comments pursuant to our authorities under the National Environmental Policy Act (NEPA), Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

The proposed action involves 21 construction, renovation, and demolition projects at the 183rd Airlift Wing (183 AW), which is located at the Abraham Lincoln Capital Airport:

- *Project 1*. Repair the Centralized Repair Facility (CRF), Building 17. Reinforce the concrete foundation and floor slab with concrete masonry unit (CMU) walls, install metal standing seam roof, and modify as needed to meet Anti-Terrorism Force Protection (AT/FP) criteria. Renovate the existing facility and reconfigure interior walls to accommodate Centralized Intermediate Repair Facility (CIRF) mission. Modify building systems to accommodate the reconfiguration
  and install interior finishes. Upgrade plumbing, electrical, fire protection, and communications systems;
- *Project 2*. Replace the existing 125,000-gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. Repair existing landscaping and vegetation areas as necessary to accommodate the new tank and pump house facility;
- *Project 3*. Reconfigure the interior administrative space, bathrooms, and vehicle work bays in the Repair Vehicle Maintenance Facility (Building 19). Upgrade the electrical, HVAC, and fire suppression equipment, and install door entrance canopies;
- *Project 4*. Replace the existing fire alarm systems with primary receiving and dispatching system with redundancy. Replace non-compliant, non-addressable fire alarm control panels

(FACPs) with addressable wireless control panels and transceivers with the capability to report to the centralized system. Upgrade buildings with non-addressable components;

- *Project 5*. Demolish Buildings 12 and 13, and all supporting utilities and excess pavements. All sidewalks will be extended as necessary to ensure safe pedestrian flow through the site once demolition is complete;
- *Project 6* - Repair Access to Building 15. Re-grade and construct a 3,000 square-yard asphalt driving lane and a depressed concrete slab for a loading dock. Repair the north side of Building 15;
- *Project 7*. Re-grade and construct a 6,000 square-yard asphalt parking lot with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Repair existing landscaping and vegetation areas, as necessary;
- *Project 8*. Repair the Dining Facility (DFAC) in Building 48 to address functional layout issues;
- *Project 9*. Demolish Buildings 2, 3, 28, 30, 44, 45, and 27, and construct a new 23,000 square-foot Base Civil Engineer (BCE) Complex on the existing central base parking lot;
- *Project 10*. Repair the roof on Building 46;
- *Project 11*. Repair and renovate the interior of the Deployment Processing Building (Building 23);
- *Project 12*. Repair bridge cranes in the CRF Operations Building (Building 26);
- *Project 13*. Construct a permanent restroom and breakroom for personnel assigned to Hush House operations;
- *Project 14.* Construct a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment out at the CRF;
- *Project 15* – Repair and renovate the Petroleum, Oils, and Lubricants (POL) Facility;
- *Project 16* – Construct a modular shooting range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a Combat Arms Training and Maintenance (CATM) Facility (12,300 SF);
- *Project 17* – Repair or renovate all pavement on base;
- *Project 18*. Repair POL pumphouse and control room;
- *Project 19*. Construct a new CRF Parking Lot on the locations of the to-be-demolished BCE Buildings (Buildings 2, 3, 28, 30, 44, 45, and 27);
- *Project 20*. Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. Exterior lighting system upgrades will include all building wall packs, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded; and:
- *Project 21*. Replace all obsolete high voltage primary and secondary distribution systems, including transformers, cabling, switch gear and any damaged pathways and/or manholes.

Based on the information provided in the scoping document and our review of NEPAssist[1] and EJSCREEN,[2] we have comments relating to water quality, wetlands, air quality strategies, energy efficiency, demolition debris and contamination, stormwater management and transportation resiliency, pollinators and native plant species, and consultation records, as stated below.

[1] See: https://nepassisttool.epa.gov/nepassist/nepamap.aspx
[2] See: https://ejscreen.epa.gov/mapper/

Water Quality

The forthcoming Draft Environmental Assessment (EA) should describe how the proposed actions may affect water bodies listed as impaired under Section 303(d) of the Clean Water Act and their listing status as impaired. We recommend this section of the document discuss current impairments, and how the proposed actions may affect, either positively or detrimentally, any impairments.

Wetlands

The EA should explain how the Clean Water Act Section 404(b)(1) guidelines have been applied to both stream and wetland impacts. The Section 404 (b)(1) guidelines call for the Least Environmentally Damaging Practicable Alternative to be selected to address impacts to wetlands, streams, and other waters of the United States. The guidelines also require the sequence of first avoiding, then minimizing, and finally mitigating for any impacts to aquatic resources. Please discuss proposed mitigation for unavoidable, minimized stream and wetland impacts (if applicable).

Air Quality Strategies

Temporary fugitive dust and diesel exhaust emissions from construction activities, such as use of heavy machinery and material hauling, would occur during the construction phase of this project. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Diesel exhaust can also lead to other serious health conditions and can worsen heart and lung disease. We recommend NGB consider implementing air quality best management practices (BMPs) for these projects and commit to doing so in the EA. Several recommendations are included in an enclosure entitled, *U.S. Environmental Protection Agency Construction Emission Control Checklist*.

Energy Efficiency

For new and renovated structures, we encourage the use of energy-efficient and/or sustainable building materials, such as south-facing skylights and windows, motion-sensored lighting, and Energy Star certified windows and doors, and the installation of renewable energy sources. Section 438 of the Energy Independence and Security Act provides examples of how to integrate energy efficiency into Federal projects.

Demolition Debris and Contamination

We recommend NGB test structures to be renovated or demolished for lead paint, asbestos, polychlorinated biphenyl compounds (PCB) and organic petroleum compounds. We also recommend testing the soil beneath those buildings, and remediate, if necessary. Any contaminated material that cannot be remediated should be disposed of in accordance with federal and state regulations.

Stormwater Management and Transportation Resiliency

The National Climate Assessment finds that in the Midwest extreme heat, heavy downpours, and flooding will affect infrastructure, health, air and water quality, and more. Major storm events are occurring with increasing frequency and intensity. We recommend that NGB account for increased storm frequency and intensity in the design of these proposed projects to help ensure the health and safety of the public by using appropriate stormwater management designs that are

compliant with Department of Defense and Federal Aviation Administration stormwater management guidelines for airports. See EPA's Adaptation Resource Center[3] for information on resiliency and adaptation measures.

Pollinators and Native Plant Species
Pollinators are critical contributors to our nation's economy, food system, and environmental health. Vegetation within the project area can provide vital habitat for pollinators, providing food, shelter, and connections to other patches of habitat. Where feasible, we recommend NGB consider planting native species and pollinator-friendly plants that are appropriate for airports.

Consultation Records
EPA recommends attaching to the EA inter-agency consultation documents regarding historic resources (Illinois State Historic Preservation Office), wetlands and streams (U.S. Army Corps of Engineers), and Federal and state threatened and endangered species (U.S. Fish and Wildlife Service and Illinois Department of Natural Resources).

Please send us the EA when it becomes available. We are available to discuss these comments at your convenience. Please feel free to contact Mike Sedlacek of my staff at 312-886-1765, or by email at sedlacek.michael@epa.gov.

Sincerely,

Kenneth A. Westlake
Deputy Director, Tribal and Multimedia Programs Office
Office of the Regional Administrator

Encl: U.S. Environmental Protection Agency Construction Emission Control Checklist

[3] See: https://www.epa.gov/arc-x/planning-climate-change-adaptation

U.S. Environmental Protection Agency
Construction Emission Control Checklist

Diesel emissions and fugitive dust from project construction may pose environmental and human health risks and should be minimized. In 2002, EPA classified diesel emissions as a likely human carcinogen, and in 2012 the International Agency for Research on Cancer concluded that diesel exhaust is carcinogenic to humans. Acute exposures can lead to other health problems, such as eye and nose irritation, headaches, nausea, asthma, and other respiratory system issues. Longer term exposure may worsen heart and lung disease.[4] We recommend NGB consider the following protective measures and commit to applicable measures in the EA.

Mobile and Stationary Source Diesel Controls

Purchase or solicit bids that require the use of vehicles that are equipped with zero-emission technologies or the most advanced emission control systems available. Commit to the best available emissions control technologies for project equipment in order to meet the following standards.

- On-Highway Vehicles: On-highway vehicles should meet, or exceed, the EPA exhaust emissions standards for model year 2010 and newer heavy-duty, on-highway compression-ignition engines (e.g., long-haul trucks, refuse haulers, shuttle buses, etc.).[5]
- Non-road Vehicles and Equipment: Non-road vehicles and equipment should meet, or exceed, the EPA Tier 4 exhaust emissions standards for heavy-duty, non-road compression-ignition engines (e.g., construction equipment, non-road trucks, etc.).[6]
- Locomotives: Locomotives servicing infrastructure sites should meet, or exceed, the EPA Tier 4 exhaust emissions standards for line-haul and switch locomotive engines where possible.
- Marine Vessels: Marine vessels hauling materials for infrastructure projects should meet, or exceed, the latest EPA exhaust emissions standards for marine compression-ignition engines (e.g., Tier 4 for Category 1 & 2 vessels, and Tier 3 for Category 3 vessels).[7]
- Low Emission Equipment Exemptions: The equipment specifications outlined above should be met unless: 1) a piece of specialized equipment is not available for purchase or lease within the United States; or 2) the relevant project contractor has been awarded funds to retrofit existing equipment, or purchase/lease new equipment, but the funds are not yet available.

Consider requiring the following best practices through the construction contracting or oversight process:

- Establish and enforce a clear anti-idling policy for the construction site.
- Use onsite renewable electricity generation and/or grid-based electricity rather than diesel-powered generators or other equipment.
- Use electric starting aids such as block heaters with older vehicles to warm the engine.
- Regularly maintain diesel engines to keep exhaust emissions low. Follow the manufacturer's recommended maintenance schedule and procedures. Smoke color can signal the need for maintenance (e.g., blue/black smoke indicates that an engine requires servicing or tuning).
- Where possible, retrofit older-tier or Tier 0 nonroad engines with an exhaust filtration device before it enters the construction site to capture diesel particulate matter.
- Replace the engines of older vehicles and/or equipment with diesel- or alternatively-fueled engines certified to meet newer, more stringent emissions standards (e.g., plug-in hybrid-electric vehicles, battery-electric vehicles, fuel cell electric vehicles, advanced technology locomotives, etc.), or with zero emissions electric systems. Retire older vehicles, given the significant contribution of vehicle emissions to the poor air quality conditions. Implement programs to

[4] Carcinogenicity of diesel-engine and gasoline-engine exhausts and some nitroarenes. *The Lancet.* June 15, 2012
[5] http://www.epa.gov/otaq/standards/heavy-duty/hdci-exhaust.htm
[6] http://www.epa.gov/otaq/standards/nonroad/nonroadci.htm
[7] http://www.epa.gov/otaq/standards/nonroad/marineci.htm

encourage the voluntary removal from use and the marketplace of pre-2010 model year on-highway vehicles (e.g., scrappage rebates) and replace them with newer vehicles that meet or exceed the latest EPA exhaust emissions standards, or with zero emissions electric vehicles and/or equipment.

Fugitive Dust Source Controls

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative, where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Occupational Health

- Reduce exposure through work practices and training, such as maintaining filtration devices and training diesel-equipment operators to perform routine inspections.
- Position the exhaust pipe so that diesel fumes are directed away from the operator and nearby workers, reducing the fume concentration to which personnel are exposed.
- Use enclosed, climate-controlled cabs pressurized and equipped with high-efficiency particulate air (HEPA) filters to reduce the operators' exposure to diesel fumes. Pressurization ensures that air moves from inside to outside. HEPA filters ensure that any incoming air is filtered first.
- Use respirators, which are only an interim measure to control exposure to diesel emissions. In most cases, an N95 respirator is adequate. Workers must be trained and fit-tested before they wear respirators. Depending on the type of work being conducted, and if oil is present, concentrations of particulates present will determine the efficiency and type of mask and respirator. Personnel familiar with the selection, care, and use of respirators must perform the fit testing. Respirators must bear a NIOSH approval number.

NEPA Documentation

- Per Executive Order 13045 on Children's Health[8], EPA recommends the lead agency and project proponent pay particular attention to worksite proximity to places where children live, learn, and play, such as homes, schools, and playgrounds. Construction emission reduction measures should be strictly implemented near these locations in order to be protective of children's health.
- Specify how impacts to sensitive receptors, such as children, elderly, and the infirm will be minimized. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.

[8] Children may be more highly exposed to contaminants because they generally eat more food, drink more water, and have higher inhalation rates relative to their size. Also, children's normal activities, such as putting their hands in their mouths or playing on the ground, can result in higher exposures to contaminants as compared with adults. Children may be more vulnerable to the toxic effects of contaminants because their bodies and systems are not fully developed and their growing organs are more easily harmed. EPA views childhood as a sequence of life stages, from conception through fetal development, infancy, and adolescence.

DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
PO BOX 2004 CLOCK TOWER BUILDING
ROCK ISLAND, ILLINOIS 61204-2004

January 11, 2021

Regional Planning and Environmental
Division North (RPEDN)

Ms. Christine J. Yott
NEPA Program Manager
Air National Guard Readiness Center, NGB/A4AM
3501 Fetcher Avenue
Joint Base Andrews, MD 20762-5157

Dear: Ms. Yott:

I received your letter dated December 17, 2021, concerning the feasibility of implementing short-range construction, demolition, repair, and renovation projects at the Air National Guard (ANG) 183d Wing (183 WG) located at the Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL. The US Army Corps of Engineers, Rock Island District (District) staff reviewed the information you provided and have the following comments:

Your proposal does not involve District administered land; therefore, no further District real estate coordination is necessary.

Your project, as proposed, does not require a Department of the Army Section 404 permit. We made this determination because the proposed project does not indicate discharge of dredged or fill material into waters of the United States (including jurisdictional wetlands).

The Responsible Federal Agency should coordinate with Ms. Rachel Leibowitz, Ph.D. Illinois State Historic Preservation Officer, 1 Old State Capitol Plaza, Springfield, IL, 62701 to determine impacts to historic properties.

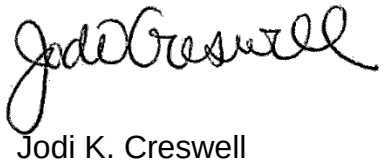
The U.S. Fish and Wildlife Service's Illinois Iowa Field Office should be contacted to determine if any federally listed endangered species are being impacted and, if so, how to avoid or minimize impacts. The Illinois Iowa Field Office address is: 1511 47th Avenue, Moline, IL 61265. Mr. Kraig McPeek is the Filed Office Supervisor. You can reach him by calling (309)-757-5800.

The Illinois Emergency Management Agency should be contacted to determine if the proposed project may impact areas designated as floodway. Sam M. Al-Basha is the Illinois State Hazard Mitigation Officer. The address is: 1035 Outer Park Drive, Springfield, IL, 62704. You can reach him by calling (217)-785-9942.

No other concerns surfaced during our review. Thank you for the opportunity to comment on your proposal. If you need more information, please call Ms. Kelsey Hoffmann of our Environmental Compliance Branch, telephone (309)-794-5319.

You may find additional information about the Corps' Rock Island District on our website at **http://www.mvr.usace.army.mil**. To find out about other Districts within the Corps, you may visit: **http://www.usace.army.mil/Locations.aspx**.

Sincerely,



Jodi K. Creswell
Chief, Environmental Planning Branch

OSTER, GWEN E CTR USAF ANG NGB/A4

From: McPeek, Kraig <kraig_mcpeek@fws.gov>
Sent: Monday, December 20, 2021 10:22 AM
To: NGB A4/A4A NEPA COMMENTS Org
Subject: [Non-DoD Source] Re: [EXTERNAL] Scoping Letter for Abraham Lincoln Capital ANG Base

Good Morning - the USFWS has no comments or concerns related to this project. Thank you for your coordination

Kraig McPeek
Field Office Supervisor

US Fish and Wildlife Service
Illinois & Iowa ES Field Office
1511 47th Avenue
Moline, IL 61265

office - 309-757-5800 x202
cell - 309-429-0362

Do the best you can until you know better. Then when you know better, do better - Maya Angelou
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From: NGB A4/A4A NEPA COMMENTS Org <NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil>
Sent: Monday, December 20, 2021 9:12 AM
To: McPeek, Kraig <kraig_mcpeek@fws.gov>
Subject: [EXTERNAL] Scoping Letter for Abraham Lincoln Capital ANG Base

U.S. Department
of Transportation
**Federal Aviation
Administration**

Chicago Airports District Office
2300 Devon Avenue
Des Plaines, Illinois 60018

January 27, 2022

Mark Hanna
Airport Executive Director
Abraham Lincoln Capital Airport
1200 Capital Airport Drive
Springfield, Illinois 62707

Dear Mr. Hanna:

Re: FAA Approval Authority Review – Abraham Lincoln Capital Airport (SPI), Springfield, IL – Illinois Air National Guard Master Plan development projects (21)

The Illinois Air National Guard (IANG) has prepared a master plan for capital development projects at its 183rd Wing installation at SPI. The IANG proposes 21 building and site work projects at the SPI base. The National Guard Bureau (NGB) is investigating the feasibility of these short term projects at the 183rd Wing base. Because the entire base is on leased airport property, the projects may be subject to FAA review.

Recent changes in federal law have required the FAA to revisit whether FAA approval is needed for certain types of airport projects throughout the nation. On October 5, 2018, HR 302, the "FAA Reauthorization Act of 2018" (the Act) was signed into law (P.L. 115-254). In general, Section 163(a) limits the FAA's authority to directly or indirectly regulate an airport operator's transfer or disposal of certain types of airport land. However, Section 163(b) identifies exceptions to this general rule. The FAA retains authority:

1. To ensure the safe and efficient operation of aircraft or safety of people and property on the ground related to aircraft operations;
2. To regulate land or a facility acquired or modified using federal funding;
3. To ensure an airport owner or operator receives not less than fair market value (FMV) in the context of a commercial transaction for the use, lease, encumbrance, transfer, or disposal of land, any facilities on such land, or any portion of such land or facilities;
4. To ensure that that airport owner or operator pays not more than fair market value in the context of a commercial transaction for the acquisition of land or facilities on such land;
5. To enforce any terms contained in a Surplus Property Act instrument of transfer; and
6. To exercise any authority contained in 49 U.S.C. § 40117, dealing with Passenger Facility Charges.

In addition, Section 163(c) preserves the statutory revenue use restrictions regarding the use of revenues generated by the use, lease, encumbrance, transfer, or disposal of the land, as set forth in 49 U.S.C. §§ 47107(b) and 47133.

Section 163(d) of the Act limits the FAA's review and approval authority for Airport Layout Plans (ALPs) to those portions of ALPs or ALP revisions that:

1. Materially impact the safe and efficient operation of aircraft at, to, or from the airport;
2. Adversely affect the safety of people or property on the ground adjacent to the airport as a result of aircraft operations; or
3. Adversely affect the value of prior Federal investments to a significant extent.

Proposed Project

The IANG base is located on the east side of the airport, north of the terminal area. It consists of a number of buildings and structures on approximately 78 acres leased from the airport sponsor. The mission of the base has changed over time and no longer requires regular access to the airfield. The primary function of the base is the maintenance of engines for military aircraft. A gated fence now separates the airfield from the base, including a large paved area formerly used as a ramp for aircraft. The aircraft maintenance, testing and base administrative functions are performed in the various buildings on the IANG installation.

The master plan includes a variety of facility maintenance and development projects that could be pursued over the next decade. Several of the projects will rely on future appropriations of military funding and expansion of the mission for the base. The following master plan projects are proposed for the base, and are further explained in the attached Agency Letter to the FAA:

1. Repair CRF Facility, Building 17.
2. Repair Base Fire Suppression System.
3. Repair Vehicle Maintenance Facility, Building 19.
4. Repair Base Fire Alarm Systems.
5. Demolish Buildings 12 & 13.
6. Repair Access, Building 15.
7. Construct AOG Parking.
8. Repair DFAC in existing Building 48.
9. Construct BCE Complex (MILCON).
10. Repair Roof, Building 46.
11. Repair Deployment Processing, Building 23.
12. Repair Bridge Cranes / CRF Operations.
13. Construct Hush House Admin Facility.
14. Construct CRF Engine Storage.
15. Repair POL Facility.
16. Construct Modular Shooting Range.
17. Repair Base Pavements.
18. Repair POL Pump house and control room.

19. Construct CRF Parking Lot.
20. Repair Base Interior Lighting.
21. Repair Base High Voltage Distribution Infrastructure.

Based on the descriptions provided by the NGB and IANG, many of the projects are interior building improvements or normal maintenance. Only the following projects would or might typically be shown on an ALP: 2, 5, 6, 7, 9, 12, 13, 14, 16, and 19.

The entire leased base property is located outside the airfield, protected surfaces, and the line of sight from the air traffic control tower to the airfield. Construction traffic to the base does not require airfield access. Based on the approved ALP for SPI, the sponsor has no foreseeable need for the IANG base land for other aeronautical uses.

Determination Regarding the Airport Layout Plan

For the purpose of determining whether the proposed projects require FAA ALP approval, we have determined that the proposed projects identified would not have a material impact on aircraft operations, at, to, or from the airport; would not affect the safety of people and property on the ground; and would not have an adverse effect on the value of prior Federal investments to a significant extent. Therefore, the FAA lacks the legal authority to approve or disapprove changes to the SPI ALP for the proposed projects.

FAA's Authority to Regulate Land Use

The developments proposed upon the IANG-leased area are located on parcels identified in the SPI Exhibit A property map as follows:

Tract Number	Acquisition Date
1	1/29/1946
2	1/24/1946
4	1/23/1946
5	1/28/1946
14	1/31/1946

None of the tracts were acquired using federal funds. No change in land use or land disposition is proposed by the IANG.

The parcels subject to the proposed projects were acquired with local funding, without federal assistance, and the proposed project will not impact the safe and efficient operation of aircraft or safety of people and property on the ground related to aircraft operations. Therefore, the FAA lacks the authority to regulate the use of the land associated with these projects.

Applicability of the National Environmental Policy Act (NEPA)

Because the FAA lacks the legal authority to approve or disapprove changes to the ALP, and lacks the authority to regulate the use of the land associated with this project, the agency does not have an action subject to NEPA. The National Guard Bureau is currently preparing a NEPA document related to the proposed projects.

Sponsor Obligations Still In Effect

This determination only addresses FAA's approval authority for this project. It is not a determination that the project complies with the sponsor's federal grant assurances. The sponsor must continue to comply with all of its Federal grant obligations, including but not limited to Grant Assurance #5, Preserving Rights and Powers; Grant Assurance #19, Operation and Maintenance; Grant Assurance #20, Hazard Removal and Mitigation; Grant Assurance #21, Compatible Land Use; and Grant Assurance #25 Airport Revenue.

Section 163 and Grant Assurance 25 require the airport sponsor to receive not less than fair market value for the use, lease, encumbrance, transfer, or disposal of land, any facilities on such land, or any portion of such land or facilities**.** The sponsor must ensure that all revenues generated as a result of this project may only be expended for the capital or operating costs of the airport; the local airport system; or other local facilities which are owned or operated by the owner or operator of the airport and which are directly and substantially related to the actual air transportation of passengers or property; or for noise mitigation purposes on or off the airport**.**

The sponsor also has the responsibility to comply with all federal, state, and local environmental laws and regulations.

Additionally, any development on this parcel is still subject to airspace review under the requirements of 14 CFR part 77, and, Grant Assurance 29 still requires the airport to update and maintain a current ALP. An updated ALP should be submitted to the CHI ADO if the project is completed.

If you have further questions or need for clarification, please feel free to contact Michael Brown at 847-294-7195.

Sincerely,

Debra Bartell
Manager, Chicago ADO

cc: Christine Yott, NGB
Lt. Col. Robert Mitchell, 183rd Wing, IANG

From: Fowler, Michelle S on behalf of Myers, Jeffrey P
To: NGB A4/A4A NEPA COMMENTS Org
Cc: Myers, Jeffrey P
Subject: [Non-DoD Source] ATTN: 183 WG EA
Date: Thursday, January 13, 2022 10:22:40 AM

The Illinois Department of Transportation, District 6, has no comments.

Thank you,

Michelle Fowler
Executive Secretary III for
Jeffrey P. Myers, P.E., Region 4 Engineer
Illinois Department of Transportation
District 6 - 126 E. Ash St.
Springfield, IL 62704
(217) 782-5593
Alternate # (217) 782-7314
Email: Michelle.Fowler@illinois.gov

OSTER, GWEN E CTR USAF ANG NGB/A4

From: Burkwald, Kyle <Kyle.Burkwald@Illinois.gov>
Sent: Monday, December 20, 2021 12:01 PM
To: NGB A4/A4A NEPA COMMENTS Org
Cc: Hayes, Bradley
Subject: [Non-DoD Source] 183d WG Abraham Lincoln Capital Airport Improvements
Attachments: EcoCAT_2207995.pdf

Ms. Yott,

Attached is the IDNR EcoCAT review regarding the proposed upgrades and improvements to the 183rd IL Air Nat'l Guard wing station, located in the Abraham Lincoln Capital Airport, Springfield, IL. The EcoCAT system did not identify any protected species or lands within the immediate vicinity of the project. Therefore, the Department has no outstanding concerns regarding this project at this time. Please contact me with any questions or concerns you have regarding this letter or its contents.

Sincerely,
Kyle Burkwald
Resource Planner
Illinois Department of Natural Resources
Impact Assesment Section
Mobile: (217) 299-7324
Desk: (217) 785-4984

CICADA
Conservation Industry Construction and Development Advisor

Visit the CICADA website at cicada-idnr (cicada-idnr.org) for helpful information and guidance on voluntary wildlife friendly construction and development practices and much more!

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: National Guard Bureau
Contact: Christine Yott
Address: 3501 Fetchet Avenue
Joint Base Andrews, MD 20762

IDNR Project Number: 2207995
Date: 12/20/2021

Project: Abraham Lincoln Capital Airport Improvements
Address: 1200 Capital Airport Dr, Springfield

Description: Repairs and upgrades to the Abraham Lincoln Capital Airport to support the IL ANG 183rd Airwing.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location

The applicant is responsible for the accuracy of the location submitted for the project.

County: Sangamon

Township, Range, Section:
16N, 5W, 9
16N, 5W, 16

IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Government Jurisdiction
Other

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

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1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

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ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397
JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

(217) 782-5544

Via Email and U.S. Mail

January 28, 2022

Christine Yott, NEPA Program Manager
ATTN: 183 WG EA
3501 Fetchet Avenue
Joint Base Andrews MD 20762-5157

Re: 183 WG EA Project-NEPA Review

Dear Ms. Yott:

The Illinois Environmental Protection Agency ("Illinois EPA") is in receipt of your December 17, 2021 letter seeking information in preparation of an Environmental Assessment ("EA") related to the above-noted project.

Illinois EPA's Bureau of Water ("BOW") reviewed the project as proposed in your letter and has the following comments:

- This project was submitted into EcoCAT: There were no Threatened or Endangered Species identified. However, wetlands were identified in or near the project location. If the wetlands will be impacted they will need to survey the wetlands and if appropriate apply for and receive a 404 permit and a 401 certification.
- There are no evaluated streams in the project area. If they are impacting streams that have not been evaluated, they will need to characterize the stream and if appropriate apply for and receive a 404 permit and a 401 certification.
- The only TMDL that was done for the area is for fecal coliform. This project should not be impacted by the TMDL.
- Any construction which would disturb one or more acres, would require coverage under the General NPDES permit for Stormwater Associated with Construction Activities.
- Any new connections to the sanitary sewer system would require a construction permit if serving more than one building, OR discharging 1500 gpd or more of domestic sewage, OR discharging any volume of "industrial" or non-domestic wastewaters.

The Illinois EPA's Bureau of Land ("BOL") comments on the proposed project are as follows:

Please be informed that Illinois EPA's FSRS is aware of the following ongoing environmental activities at Capital ANG that could be affected by or are located on the property with planned infrastructure improvements:

Installation Restoration Program (IRP) Site SS004 appears to be located in the vicinity of Proposed Projects 8, 10, and 11 shown in Scoping Letter, Attachment 3 – Proposed Project Locations Map. Long-term groundwater monitoring for volatile organic compounds (VOCs) is ongoing at Site SS004. Any below-grade work could compromise the integrity of the groundwater monitoring wells in this area.

- Investigations into per- and polyfluoroalkyl substances (PFAS) at the Base are ongoing. These, and any future investigations, could potentially be impacted by the planned improvements outlined in your letter. As stated above, any below-grade work could compromise the integrity of existing and future groundwater monitoring wells in the areas of interest.

FSRS focuses on sites subject to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), including sites listed on the National Priorities List (NPL) and properties for which the Department of Defense is subject to CERCLA, including those on the NPL, Formerly Used Defense Sites (FUDS), or base realignment and closure (BRAC) facilities.

FSRS also queried the Bureau of Land (BOL) Site Remediation Program (SRP) and Leaking Underground Storage Tank (LUST) program to determine if they had any additional information regarding the environmental condition of the property in question. Several LUST incidents were reported at the Capitol Airport under different names such as: 1) IL Air National Guard, 2) IDOT Division of Aeronautics, 3) NOAA, 4) Springfield Airport Authority, and 5) IL NG Capitol Airport; however, all of these sites received either No Further Remediation (NFR) letters and/or were closed in compliance with applicable LUST regulations.

If you have further questions regarding the BOW comments above, please contact Scott Twait, Illinois EPA BOW Standards Unit or Darin LeCrone, Manager, Illinois EPA BOW-DWPC Permits Section, at the address above. If you have questions related to the BOL response above, please contact Chris Peters, Bureau of Land, Remedial Projects Section, Federal Sites Unit, at the address above.

Sincerely,

Charles W. Gunnarson
Chief Legal Counsel

NATIONAL GUARD BUREAU
3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

17 December 2021

Ms. Jennifer Harty
Cultural Resources Program Manager
Air National Guard Readiness Center, NGB/A4VN
3501 Fetchet Ave
Joint Base Andrews MD 20762-5157

Colleen Callahan
Director, SHPO
Illinois Department of Natural Resources
1 Natural Resources Way
Springfield IL 62702-1271

Dear Ms. Callahan

The National Guard Bureau (NGB) is currently investigating the feasibility of short-term construction, demolition, and renovation infrastructure improvement projects at the Air National Guard (ANG) 183d Wing (183 WG) located at the Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL (Attachment 1). The purpose of the Proposed Action is to implement these projects from the Installation Development Plan (IDP) to provide the 183 WG with properly sized and configured facilities needed to effectively accomplish their mission. The Proposed Action provides a planning, programming, and development strategy that would address current mission deficiencies and opportunities for the 183 WG. As directed by the National Environmental Policy Act (NEPA), the NGB, with support from Tetra Tech, is preparing an Environmental Assessment (EA) in order to evaluate the potential environmental effects associated with the Proposed Action. The purpose of this letter is to initiate consultation under Section 106 of the National Historic Preservation Act (54 USC §§ 306108) for the proposed actions.

The undertaking is composed of 21 repair, renovation, replacement, and demolition projects. The 183 WG would implement all proposed short-term infrastructure projects as summarized in the 183 WG Project List (Attachment 2). The EA will provide analysis for the mid- to long-range projects (within the next 6–20 years). These analyses will provide sufficient data to implement future projects identified in the IDP based on available information. As projects change or more information becomes available, future NEPA analyses can effectively tier from this EA to address those changes. The Area of Potential Effects (APE) (Attachment 3) for the Proposed Action is defined as any area where ground disturbance will occur; this includes the staging areas for equipment and materials.

In 2002, MWH Americas, Inc. (MWH) conducted a Phase I archaeological survey for the entire 91-acre base. During the survey, MWH recorded two historic archaeological sites, both of which NGB determined to be not eligible for inclusion in the National Register of Historic Places (NRHP). The Illinois State Historic Preservation Office (SHPO) concurred

with NGB's determination. No additional studies are required for the areas included in the survey.

In 2011, the NGB conducted an architectural survey of the base to assess NRHP eligibility for seven buildings that were 50 years old and to assess Cold War eligibility under Criterion Consideration G for 18 of the buildings. At the conclusion of the survey, NGB determined that none of the buildings was eligible for inclusion in the NRHP, but that the 18 evaluated under Criterion Consideration G should be reevaluated upon reaching 50 years of age. SHPO concurred with NGB's determinations. Only one of the buildings, P-2, which was not 50 years old at the time of the survey, may be affected by the proposed undertaking. Because it was not yet 50 years old at the time of the survey, P-2 requires evaluation under NRHP eligibility criteria A-D.

In accordance with § 800.3(c)4, 183 WG and NGB are providing your office the opportunity to comment on the proposed undertakings. In addition to your office, NGB is consulting with federally recognized tribes who may have current or historical interests in the area.

Please provide comments to Jennifer Harty, Cultural Resources Program Manager (A4), 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject line ATTN: 183 WG EA. Thank you for your assistance.

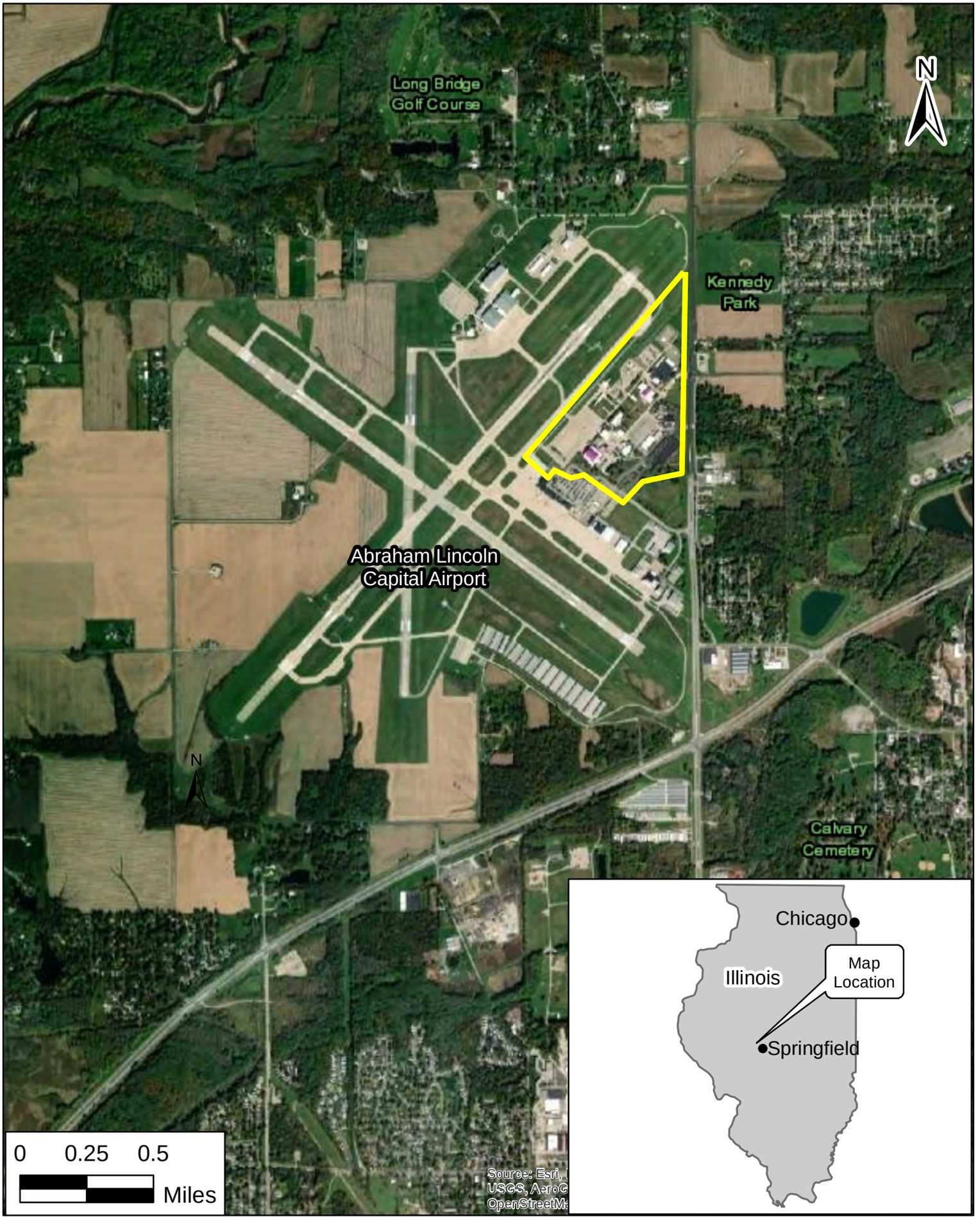
Sincerely

JENNIFER L. HARTY, GS-13, DAF
Cultural Resources Program Manager

5 Attachments:
1. 183 WG Location Map, July 2021
2. 183 WG Project List and Descriptions, July 2021
3. 183 WG Proposed Project Locations Map, July 2021
4. 183 WG Previously Recorded Archaeological Sites Map, September 2021
5. 183 WG Previous Cultural Resource Surveys, September 2021

Available upon request
1. Phase I Archaeological Reconnaissance Survey Final Report, Volume 1, 2002
2. Architectural Resources Survey 183 Fighter Wing Illinois Air National Guard Abraham Lincoln Capital Airport Air National Guard Base Springfield, Sangamon County, Illinois, 2011

Attachment 1: 183d WG Abraham Lincoln Capital Airport AGS Location Map



LEGEND

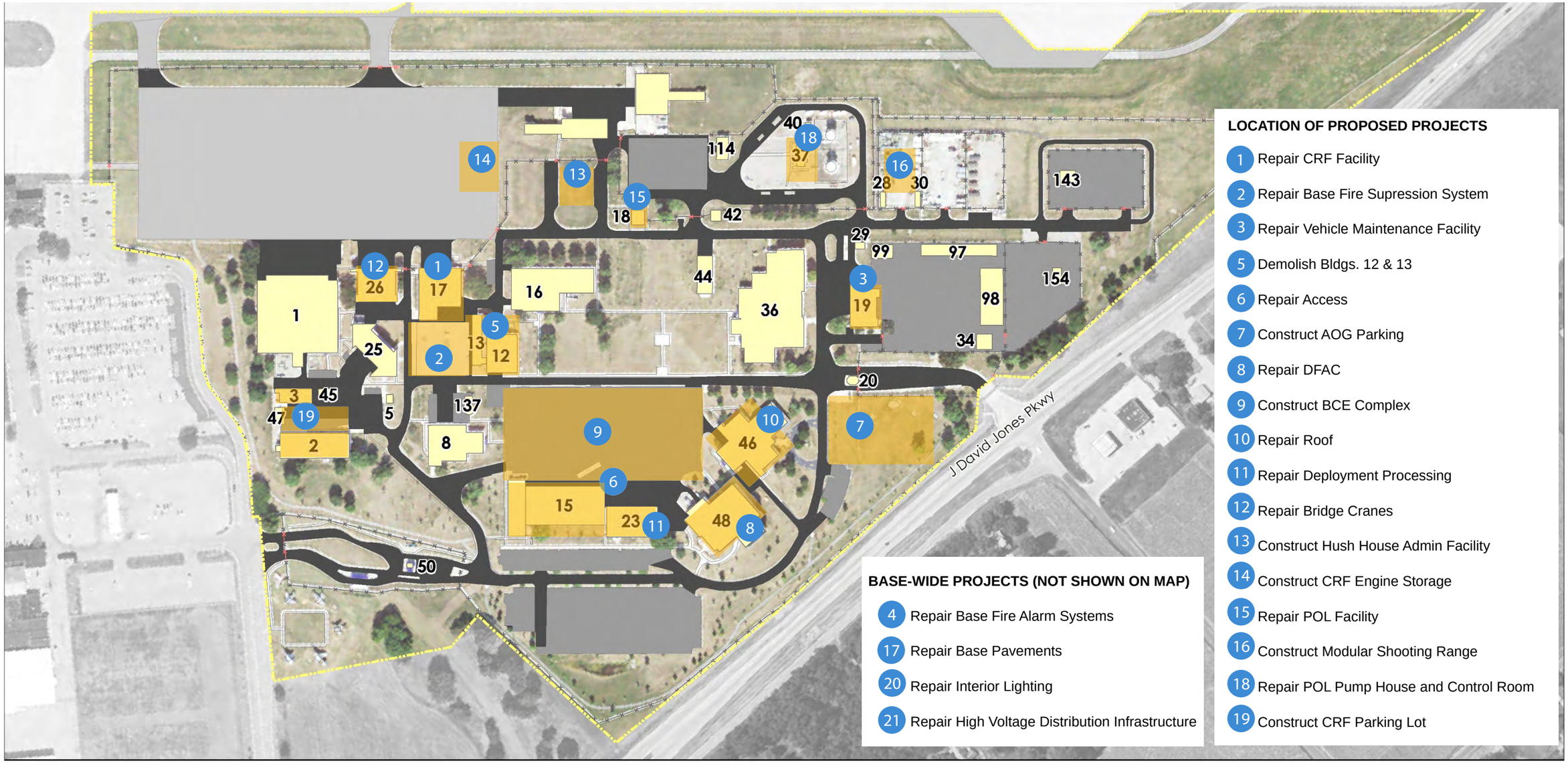
Installation Boundary

Attachment 2: 183 WG Project List and Descriptions

Project #	Project Title and Description	Project ID Number	Estimated Year
1	**Repair CRF Facility, Building 17.** Reinforce concrete foundation and floor slab with concrete masonry unit (CMU) walls, install metal standing seam roof, and modify as needed to meet AT/FP criteria. Renovate the existing facility and reconfigure interior walls to accommodate CIRF mission. Modify building systems to accommodate the reconfiguration and install interior finishes. Upgrade plumbing, electrical, fire protection, and communications systems.	DCFT102008	2020
2	**Repair Base Fire Suppression System.** Replace the existing 125,000 gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. Repair existing landscaping and vegetation areas as necessary to accommodate new tank and pump house facility.	DCFT142001	2022
3	**Repair Vehicle Maintenance Facility, Building 19.** Reconfigure interior administrative space, bathrooms, and vehicle work bays. Upgrade electrical, HVAC, and fire suppression. Add door entrance canopies.	DCFT152010	2022
4	**Repair Base Fire Alarm Systems.** Base-wide project to replace fire alarm systems with primary receiving and dispatching system with redundancy. Replace non-compliant, non-addressable fire alarm control panels (FACPs) with addressable wireless control panels and transceivers with capability to report to the centralized system. Upgrade buildings with non-addressable components.	DCFT172008	2022
5	**Demolish Buildings 12 & 13.** Buildings 12 and 13 (11,827 square feet) and all supporting utilities and excess pavements (650 square feet) will be demolished and the entire site will be returned back to a sodded lawn. All sidewalks will be extended as necessary to ensure safe pedestrian flow through the site once demolition is complete.	DCFT162900	2023
6	**Repair Access, Building 15.** Re-grade and construct an asphalt driving lane (3,000 square yards) and depressed concrete slab for loading dock including repairs to the north side of Building 15 (500 square yards).	DCFT192011	2023
7	**Construct AOG Parking.** Re-grade and construct an asphalt parking lot (6,000 square yards) with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Repair existing landscaping and vegetation areas as necessary.	DCFT192010	2023
8	**Repair DFAC in existing Building 48.** Repair building to address functional layout issues.	DCFT162002	2024
9	**Construct BCE Complex (MILCON).** Construction of a new 23,000 square foot BCE Complex west of existing Buildings 15 and 23 on the existing central base parking lot. The existing BCE buildings (2, 3, 28, 30, 44, 45, and 27) will be demolished.	DCFT059018	2024
10	**Repair Roof, Building 46.** Repair roof.	DCFT162014	2025

Project #	Project Title and Description	Project ID Number	Estimated Year
11	**Repair Deployment Processing, Building 23.** Interior repair/renovation.	DCFT202001	2024-2025
12	**Repair Bridge Cranes / CRF Operations.** Proposed project to add bridge cranes in Building 26. Can only be completed if the space authorization variance is approved and additional storage space is authorized (Project 14).	DCFT182004	2025
13	**Construct Hush House Admin Facility.** Proposed project to construct a permanent restroom and breakroom for personnel assigned to hush house operations. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192001	2025
14	**Construct CRF Engine Storage.** Proposed project to construct a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment out. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192002	2026
15	**Repair POL Facility.** Existing facility requires repair and modernization as the building has remained largely untouched since the early 1980's.Interior updates and renovations to the facility.	DCFT192006	2026
16	**Construct Modular Shooting Range.** The installation requires an adequately sized, properly configured, and correctly sited small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226. Construct small arms firing range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a combat arms training and maintenance (CATM) facility (12,300 SF).	DCFT219001	2031
17	**Repair Base Pavements.** Base-wide project to renovate or repair pavement on the installation.	DCFT062001	2026
18	**Repair POL Pump house and control room.** Repair of dilapidated buildings. Currently there are two facilities constructed of CMU that house both the electrical control equipment and the fuel pumping equipment in the POL area. Both structures are showing signs of joint and block failure and need to be replaced. Equipment inside can't be moved, so the project will require demolition and construction of a new building envelope to maintain operation of the equipment located inside.	DCFTXXXXX	2031
19	**Construct CRF Parking Lot.** New parking lot will be constructed on the location of the existing BCE Building (after buildings are demolished). Buildings 2, 3, 28, 30, 44, 45, and 27 will be demolished.	DCFT202008	2022
20	**Repair Interior Lighting.** Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. Exterior lighting system upgrades will include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded.	DCFT202002	2026

Project #	Project Title and Description	Project ID Number	Estimated Year
21	**Repair High Voltage Distribution Infrastructure.** Base-wide project through the base's energy program to replace all obsolete high voltage primary and secondary distribution systems to include transformers, cabling, switch gear and any damage pathways or manholes.	DCFT202003	2026



LOCATION OF PROPOSED PROJECTS

1. Repair CRF Facility
2. Repair Base Fire Supression System
3. Repair Vehicle Maintenance Facility
5. Demolish Bldgs. 12 & 13
6. Repair Access
7. Construct AOG Parking
8. Repair DFAC
9. Construct BCE Complex
10. Repair Roof
11. Repair Deployment Processing
12. Repair Bridge Cranes
13. Construct Hush House Admin Facility
14. Construct CRF Engine Storage
15. Repair POL Facility
16. Construct Modular Shooting Range
18. Repair POL Pump House and Control Room
19. Construct CRF Parking Lot

BASE-WIDE PROJECTS (NOT SHOWN ON MAP)

4. Repair Base Fire Alarm Systems
17. Repair Base Pavements
20. Repair Interior Lighting
21. Repair High Voltage Distribution Infrastructure

Installation Boundary
Access Control
Fence
Building
Area of Potential Effect
Road
Vehicle Parking
Airfield Surface

1	Main Hangar	18	Petrol Ops Building	37	Jet Fuel Pump House	99	Wash Rack
2	BE Maintenance Shop (CE)	19	Vehicle Maintenance Shop	40	Fuel Storage Control Bldg	114	Liquid Oxygen
3	BE MX Shop/SFS	20	Traffic Check House	42	Hydrazine Facility	137	Pump House
5	Services Storage	23	Weapons Release	44	Conventional Munitions Shop	143	Munition Storage
8	Communications Facility	25	SFS	45	HazMat Pharmacy	154	Munitions Inspection
12	AGE (A/SE) Storage Facility	26	Shelter A/W CALBR	46	EIS/MPF		
13	A/C General Purpose Shop	28	Shed Supply/Equipment BSE	47	CE Cold Storage		
15	Supply Warehouse	29	Hazardous Storage	48	Composite Support Facility		
15	Supply Warehouse	30	BE Storage Shed (Mobility)	50	Traffic Check House		
16	AOG/Squadron Ops Building	34	Vehicle Ops Parking Shed	97	Vehicle MX Shed		
17	Fuels Sys Maintenance Dock	36	CNAF	98	Vehicle MX Shed		

Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984

0 500 1,000 Feet

183d WG Capital Airport ANGB Proposed Project Locations Map

Attachment 3

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

Lincoln ANGB
Previously Recorded Sites and Surveys

- 1 Mile Search Radius
- Project Area
- Previously Recorded Archaeological Site
- Previous Archaeological Survey

0 0.5 1 Miles
0 0.5 1 1.5 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

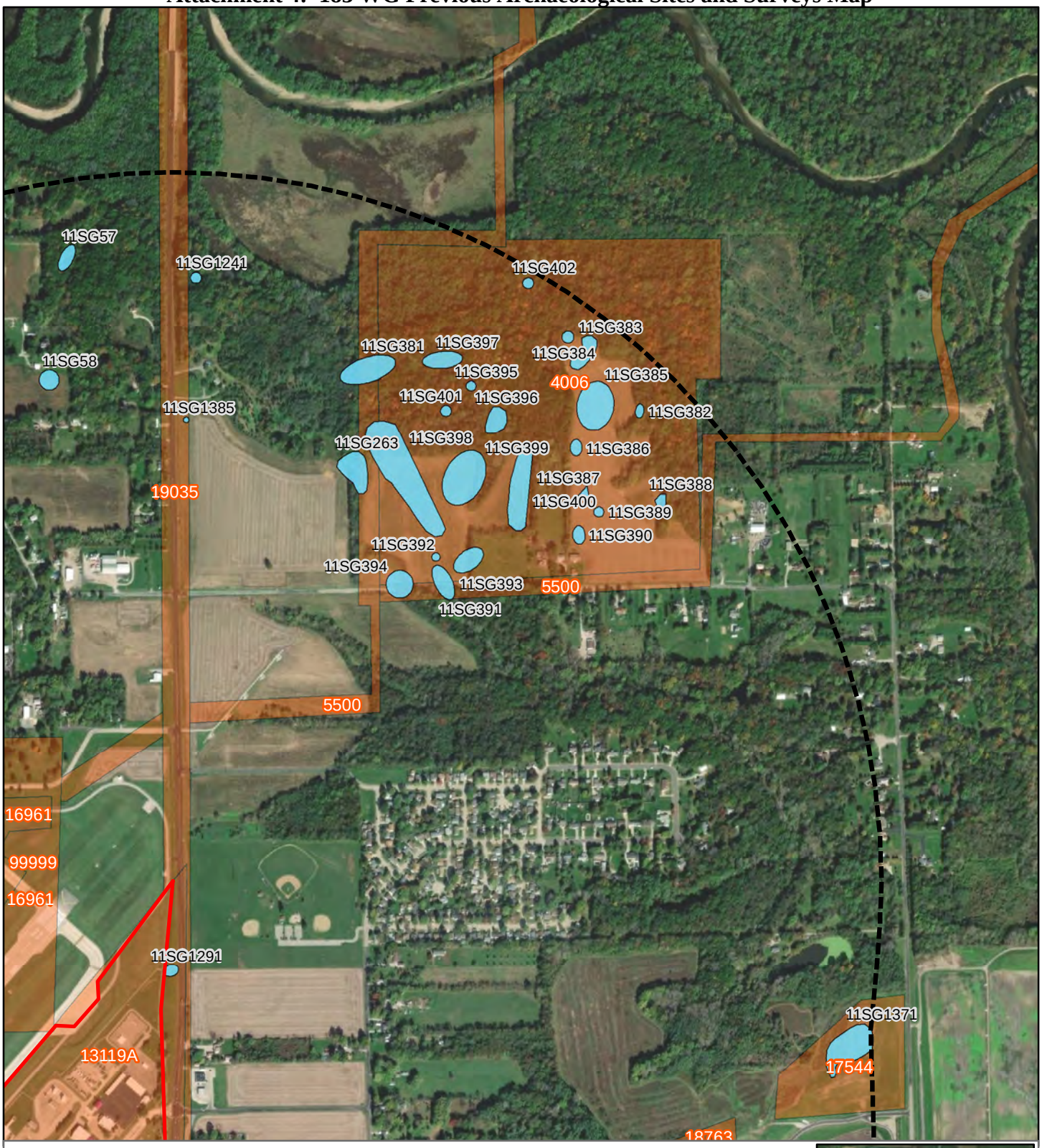
Lincoln ANGB
Previously Recorded Sites and Surveys - Map 1 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

0 0.25 0.5 Miles
0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map



Lincoln ANGB
Previously Recorded Sites and Surveys - Map 2 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

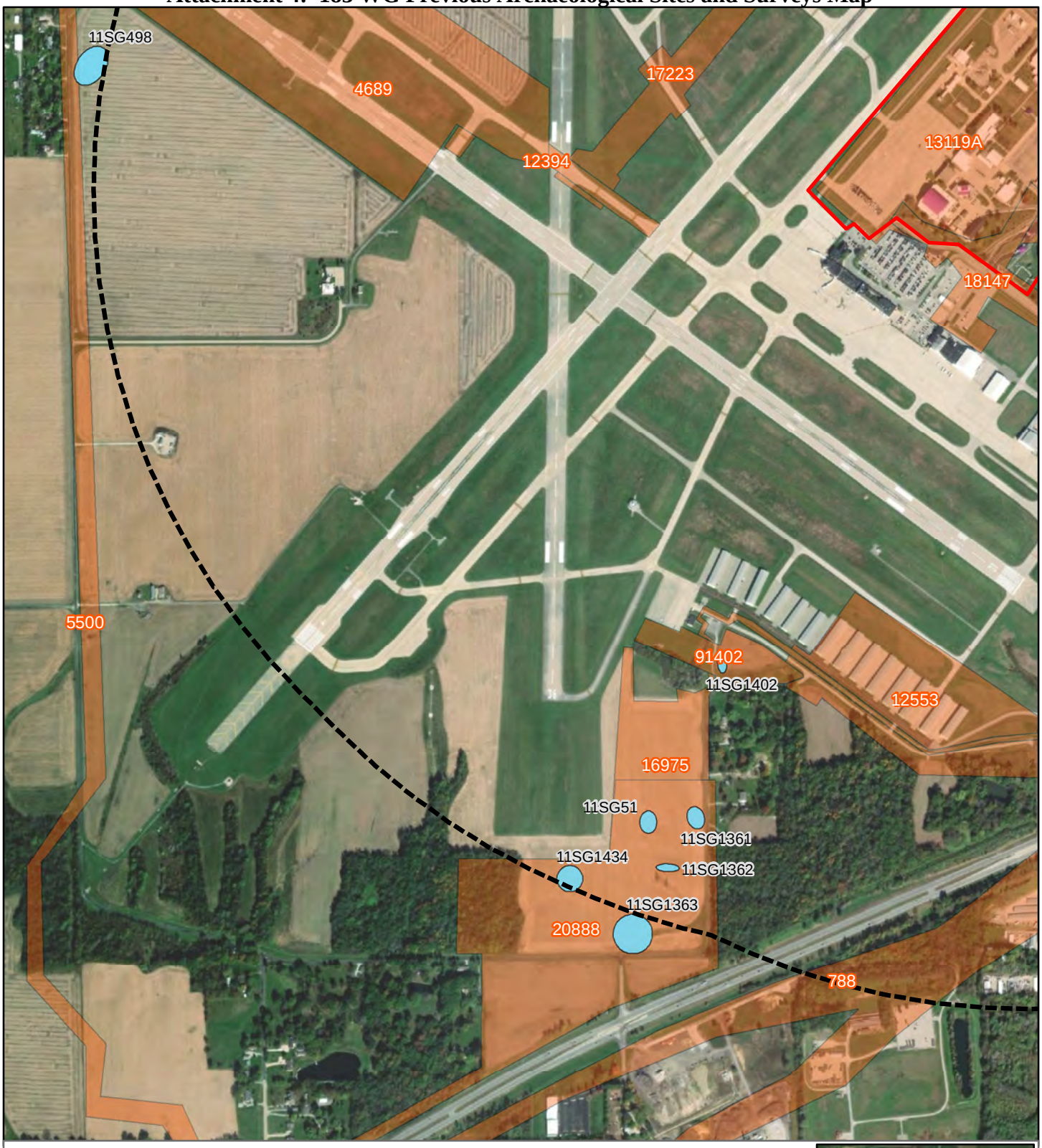
0 0.25 0.5 Miles
0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map



Lincoln ANGB
Previously Recorded Sites and Surveys - Map 4 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

0 0.25 0.5 Miles

0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

5966B Lincoln - Sites and Surveys within ANGB and within One-Mile Search Radius

WITHIN ANGB BOUNDARY					
SITES	**Site Number (11SGXXX)**	**Name**	**Period**	**Type**	**Eligiblity**
	1290		General Historic	Artifact Scatter	Not Eligible
	1291		General Historic	Artifact Scatter	Not Eligible
SURVEYS		**Author**	**Title**	**Year**	
	13119A	Andrew Schneider, Erica Cameron	Phase I Archaeological Reconnaissance Survey Final Report	2002	
	18147	James M. Pisell, Robert N. Hickson	FAP 658/IL 29 Airport Road Airport Entrance Improvement	2009	

WITHIN ONE MILE RADIUS					
SITES	**Site Number (11SGXXX)**	**Name**	**Period**	**Type**	**Eligibility**
	51		General Precontact	Lithic Scatter	Not Eligible
	57	FOFI Site #1	General Precontact	Artifact Scatter	Unknown
	58	FOFI Site #2	General Precontact	Artifact Scatter	Unknown
	167	Springfield Airport Site #1	Late Archaic, Early Woodland	Archaic burial; artifact scatter	Unknown
	202	Springfield AA Site	General Precontact	Artifact Scatter	Not Eligible
	203	Springfield AA Site #2	General Precontact	Artifact Scatter	Not Eligible
	204	Springfield AA Site #3	General Precontact	Artifact Scatter	Not Eligible
	245		General Precontact	Artifact Scatter	Not Eligible
	246		General Precontact	Artifact Scatter	Not Eligible
	247		General Precontact	Artifact Scatter	Not Eligible
	262	McGill Site	General Precontact and Historic	Artifact Scatter	Not Eligible
	263		General Precontact	Artifact Scatter	Unknown
	381		General Precontact	Artifact Scatter	Not Eligible
	382		General Precontact	Lithic Scatter	Not Eligible
	383		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	384		General Precontact	Lithic Scatter	Not Eligible
	385		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	386		General Precontact and Historic	Lithic and historic artifact scatter	Not Eligible
	387		General Precontact	Lithic scatter	Not Eligible
	388		General Precontact	Lithic Scatter	Not Eligible
	389		General Precontact	Lithic Scatter	Not Eligible
	390		Archaic	Lithic Scatter	Not Eligible
	391		General Precontact	Lithic Scatter	Not Eligible
	392		General Precontact and Historic	Lithic and Historic Artifact Scatter	Not Eligible
	393		General Precontact	Lithic Scatter	Not Eligible
	394		Early Archaic	Lithic Scatter	Not Eligible
	395		General Precontact	Lithic Scatter	Not Eligible
	396		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	397		General Precontact	Lithic Scatter	Unknown
	398		General Precontact	Lithic Scatter	Not eligible
	399		General Precontact	Lithic Scatter	Unknown
	400		General Precontact	Lithic Scatter	Unknown
	401		General Precontact	Lithic Scatter	Not eligible
	402		General Precontact and Historic	Artifact Scatter	Not Eligible
	498		General Precontact	Lithic Scatter	Not Eligible
	499				
	500		Late Archaic; Early Mississippian	Lithic Scatter	Not Eligible
	501		Early Archaic	Lithic Scatter	Unknown

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

WITHIN ONE MILE RADIUS					
	1241		Late Woodland	Artifact Scatter and Feature	Not Eligible
	1296		Early Archaic	Lithic Scatter	Not Eligible
	1371	Converse Farmstead	19th-20th century historic	Historic Surface Feature	Not Eligible
	1361		20th Century Historic	Historic Artifact Scatter	Unknown
	1362		General Precontact	Lithic Scatter	Not Eligible
	1363		19th-20th Century Historic	Historic Artifact Scatter	Not Eligible
	1385		General Precontact	Artifact Scatter	Not Eligible
	1402		General Precontact; 19th-20th Centuries Historic	Artifact Scatter	Unknown
	1434		General Precontact; 19th-20th Centuries Historic	Lithic and Historic Artifact Scatter	Not Eligible
SURVEYS		**Author**	**Title**	**Year**	
	340		An Archaeological Survey of the Proposed Springfield Sanitary District Sewer	1977	
	380	Mary L. Simon	Dekalb Taylor Municipal Airport Project No. 90A-16-1421	1991	
	788		Report of Archaeological Excavation at Nine Sites on FAP Route 662, Near Springfield, Sangamon	1980	
	1121		The Airport Site: A Multicomponent Site in the Sangamon River Drainage	1978	
	4006	Frances R. Knight, Michael D. Wiant	Cultural Resources Assessment of a land parcel to be developed as a golf course by the Capital Airport Authority	1991	
	4689	Sarah J. Studenmund	Springfield Capital Airport, Environmental Assessment, Sangamon County	1992	
	5500		Phase I Cultural Resources Survey of the Springfield to Cilco Gas Storage Area Pipeline Corridor, Sangamon and Logan Counties	1992	
	7373	Joseph M. Galloy	Proposed Construction of Paint Hanger, Capitol Airport, Springfield	1996	
	9303		FAP 658, IL 29, Section 102(X, BR, B-3, B-4, B-5), Sangamon County, Borrow 7 of 7 (CAA Project #682)	1998	
	11359	Steven R. Ahler	Phase I Survey and Inventory of Archaeological Resources at Camp Lincoln, Illinois Army National Guard Headquarters, Springfield, Illinois	2000	
	12394	Ryan Gifford, David J. Nolan, Amy K. Graham	Capital Airport Taxiway Relocation	2002	
	12553	Ryan Gifford, David J. Nolan, Amy K. Graham	Capital Airport, Springfield Authority Access Road to Charlie Ramp	2002	
	13946	Robert N. Hickson, Robert W. Monroe	Capital Airport, Springfield Radar Installation	2003	
	16479	James M. Pisell, David J. Nolan	Abraham Lincoln Capital Airport (Land Acquisition and Improvements)	2006	
	16961	Robert N. Hickson, David J. Nolan	Abraham Lincoln Capital Airport Improvements	2008	
	17223	Robert N. Hickson	Abraham Lincoln Capital Airport Taxiway G	2008	

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

WITHIN ONE MILE RADIUS					
	17544	Floyd R. Mansberger	Archaeological Survey Short Report: Phase I Archaeological Survey of a Proposed Improvements to the Springfield Metro Sanitary District's Waste Water Treatment Plant Borrow Pit, Sangamon County, Illinois	2009	
	18763	Floyd R. Mansberger	Archaeological Survey Short Report (ASSR): Phase I Archaeological Survey of Proposed Improvements to the Springfield Metro Sanitary District's Waste Water Treatment Plant, Sangamon County, Illinois	2010	
	19035	James M. Pisell, David J. Nolan	FAP 658/IL 29 Menard County Line to Capital Airport Entrance	2010	
	20888	James M. Pisell, David J. Nolan	SPI Non-Aeronautical Improvements AERONAUTICS: Section 106 ESR Request Non-IDOT	2015	
	91402	N/A	Ab Lincoln Airport	2012	

NATIONAL GUARD BUREAU
3501 FETCHET AVENUE
JOINT BASE ANDREWS 20762-5157

18 January 2022

Ms. Jennifer Harty
Cultural Resources Program Manager
Air National Guard Readiness Center, NGB/A4VN
3501 Fetchet Ave
Joint Base Andrews MD 20762-5157

Colleen Callahan
Director, SHPO
Illinois Department of Natural Resources
1 Natural Resources Way
Springfield IL 62702-1271

Dear Ms. Callahan,

The National Guard Bureau (NGB) is currently investigating the feasibility of short-term construction, demolition, and renovation infrastructure improvement projects at the Air National Guard (ANG) 183d Wing (183 WG) located at the Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL (Attachment 1). The purpose of the Proposed Action is to implement projects from the Installation Development Plan (IDP) to provide the 183 WG with properly sized and configured facilities needed to effectively accomplish their mission. The proposed action provides a planning, programming, and development strategy that would address current mission deficiencies and opportunities for the 183 WG. As directed by the National Environmental Policy Act (NEPA), the NGB (with support from Tetra Tech) is preparing an Environmental Assessment (EA) in order to evaluate the potential environmental effects associated with the Proposed Action. The National Guard Bureau submitted notification of our efforts to establish an area of potential effects (APE) and to identify cultural resources within the project area in a letter dated December 17th, 2021. The purpose of this letter and its accompanying attachments is to continue consultation for the proposed actions under Section 106 of the National Historic Preservation Act (54 USC §§ 306108).

Introduction

The proposed undertaking includes 21 repair, renovation, replacement, and demolition projects. The 183 WG would implement all proposed short-term infrastructure projects as summarized in the 183 WG Project List (Attachment 2). The EA will provide analysis for the mid- to long-range projects (within the next 6–20 years). These analyses will provide sufficient data to implement future projects identified in the IDP based on available information. As projects change or more information becomes available, future NEPA analyses can effectively tier from this EA to address those changes. The Area of Potential Effects (APE) (Attachment 3) for the Proposed Action is defined as any area where ground disturbance will occur; this includes the staging areas for equipment and materials.

Efforts to Identify Historic-Age Resources

In 2011, the NGB conducted an architectural survey of the base to assess NRHP eligibility for seven buildings that were 50 years old or older and to assess Cold War Era eligibility under Criterion Consideration G for eighteen of the buildings. At the conclusion of the survey, NGB

determined that none of the buildings were eligible for inclusion in the NRHP, but that the eighteen evaluated under Criterion Consideration G should be reevaluated upon reaching 50 years of age. SHPO concurred with NGB's determinations in a letter dated February 2, 2012 (Attachment 4).

According to the Draft Preliminary Environmental Assessment (DPEA), only Building P-2 will be impacted by implementation of the proposed 21 projects at Air National Guard (ANG) 183d Wing (183 WG). Two projects would result in the demolition of Building P-2, while another would impact the view shed of the resource (if not demolished by the other two projects).

Building P-2 is one of the eighteen resources evaluated under Criterion G in the 2011 architectural survey and determined not eligible for inclusion in the NRHP. Because Building P-2 is now historic-age, NGB is re-evaluating the resource for NHRP eligibility under Criteria A-D.

Determination of Eligibility

The National Guard Bureau has determined Building P-2 to be **not eligible** for inclusion in the NRHP under Criteria A, B, C, or D.

Built in 1965, the resource is located on the southeast side of the Air National Guard base and faces northwest towards the airport's runway. The setting is a civil-military airport located approximately three miles outside of Springfield, Illinois. In keeping with its airport function, there is minimal vegetation and the overall setting is best characterized as light industrial with warehouses, storage facilities, and hangers in close physical proximity to the resource. Originally built as a warehouse in 1965, ANG converted the building to avionics (electrical systems) in 1974. As of 2022, the building houses avionics, storage space, and offices.

The building has a rectangular form, two end gables and sits upon a concrete foundation. The primary exterior element of the resource is concrete block covered in a stucco finish. All of the exterior doors are non-historic-age replacements. According to the base's facility records, ANG filled-in the original window openings in 1992. The building's interior was completely renovated in 1974 during its transition from a warehouse to avionics. In its current form, the interior consists of avionics offices, storage spaces, and a carpenter's shop. Drop ceilings and interior walls now fill the once open floor plan of the warehouse building (see images in Attachment 6).

Based on the resource's construction date of 1965, Building P-2 is recognized as falling within the period of significance for Cold War Era resources (defined as 1945-1991). In order to evaluate the building's potential to convey historical significance as a Cold War Era resource under Criterion A, historians at NGB drew from the historic context section established in the 2011 architectural survey, *Coming in from the Cold: Military Heritage in the Cold War* (Report on the Department of Defense Legacy Cold War Project, 1993), and Michelle Michael, Adam Smith, and Jennifer Sin's *The Architecture of the Department of Defense: A Military Style Guide* (Department of Defense Legacy Resource Management Program, 2011). Building P-2 is determined not to rise to a level of significance needed to be eligible under Criterion A as outlined in the noted context study and legacy projects. The resource did not play a significant role in the history and development of the ANG 183d Wing and was not a crucial element in the base's ability to fulfill its mission during the Cold War Era. As a warehouse, the building was not vital to national defense and has no association with a significant technological or scientific development. Additionally, the building has lost its association with its historic function/use as a warehouse, as it is currently the avionics office and carpenter's shop.

Based on research conducted for the 2011 architectural survey, there is no association between a prominent historical figure at a local, state, or national level and Building P-2 or the Air National Guard (ANG) 183d Wing. The resource is determined not eligible under Criterion B.

As evaluated under Criterion C, using Michelle Michael, Adam Smith, and Jennifer Sin's *The Architecture of the Department of Defense: A Military Style Guide* (Department of Defense Legacy Resource Management Program, 2011) and the established historic context from the 2011 architectural survey as reference points, Building P-2 lacks design and architectural merit. The resource is utilitarian in its design and its construction technique is unexceptional. Its rectangular form, concrete foundation, and gable ends are common elements seen among airport resources dating to the 1960s and it lacks architectural and design distinction at a local, state, or national level. The removal of the building's historic windows and alterations to the exterior doors have negatively affected its historic integrity of materials and have rendered the building unable to evoke the feeling of a 1960's era resource. The resource is determined not eligible under Criterion C.

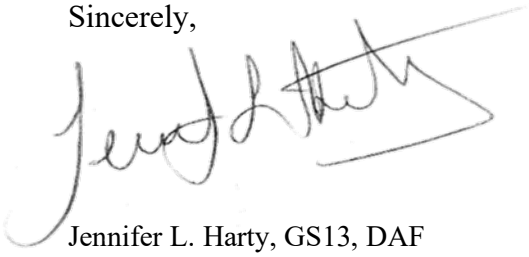
Building P-2 has not yielded and is unlikely to yield information that adds to our understanding of local, regional, or national history and is therefore not eligible for inclusion in the NRHP under Criterion D.

The National Guard Bureau also evaluated Building P-2 for its possible inclusion into a defined historic district. The 2011 architectural survey found no discernable historic district at Abraham Lincoln Capital Airport Air National Guard Base (ANGB) and NGB determines that no historic district exists in 2022. As noted in the 2011 survey, no historic-age building or resource evaluated under Criterion Consideration G is eligible for inclusion in the NRHP. Most of the buildings have seen moderate to extensive alterations to their historic materials and design and have subsequently lost integrity of workmanship and feeling. The base, and the area near Building P-2, is also infilled with numerous buildings dating to the 1970s and 1980s. For these reasons, NGB determines no historic district to present on the base.

Conclusion

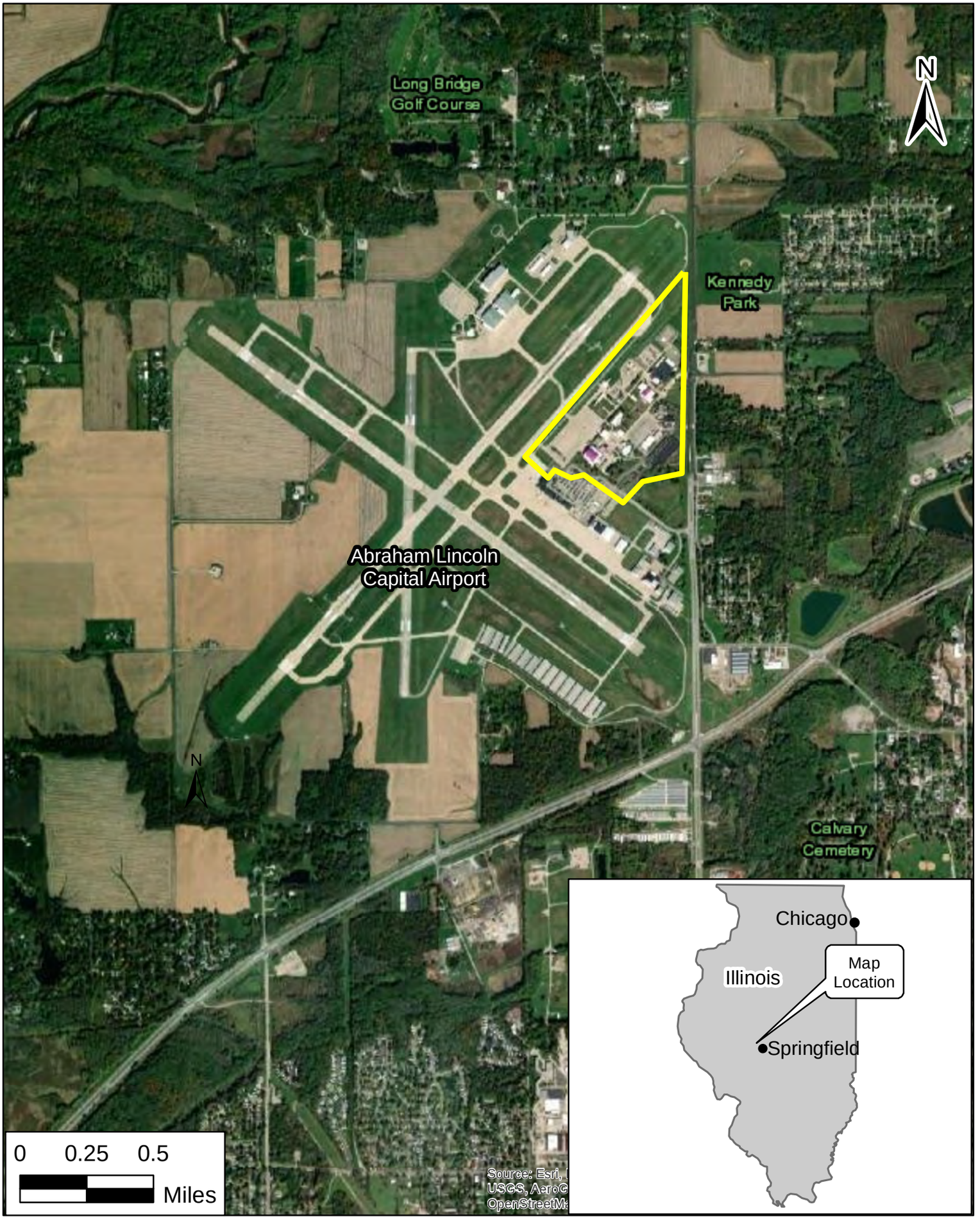
In fulfillment of Section 106 under 36 CFR § 800.4, NGB determines that Building P-2 is not eligible for inclusion on the NRHP. Since no historic properties are identified within the APE of the proposed project action, this letter concludes our Section 106 responsibilities. Please provide any comments you may have within 30 days of receipt of this letter to Jennifer Harty, 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or jennifer.harty@us.af.mil with the subject line ATTN: 183 WGEA. Thank you for your assistance.

Sincerely,



Jennifer L. Harty, GS13, DAF
Cultural Resources Program Manager

Attachment 1: 183d WG Abraham Lincoln Capital Airport AGS Location Map



LEGEND

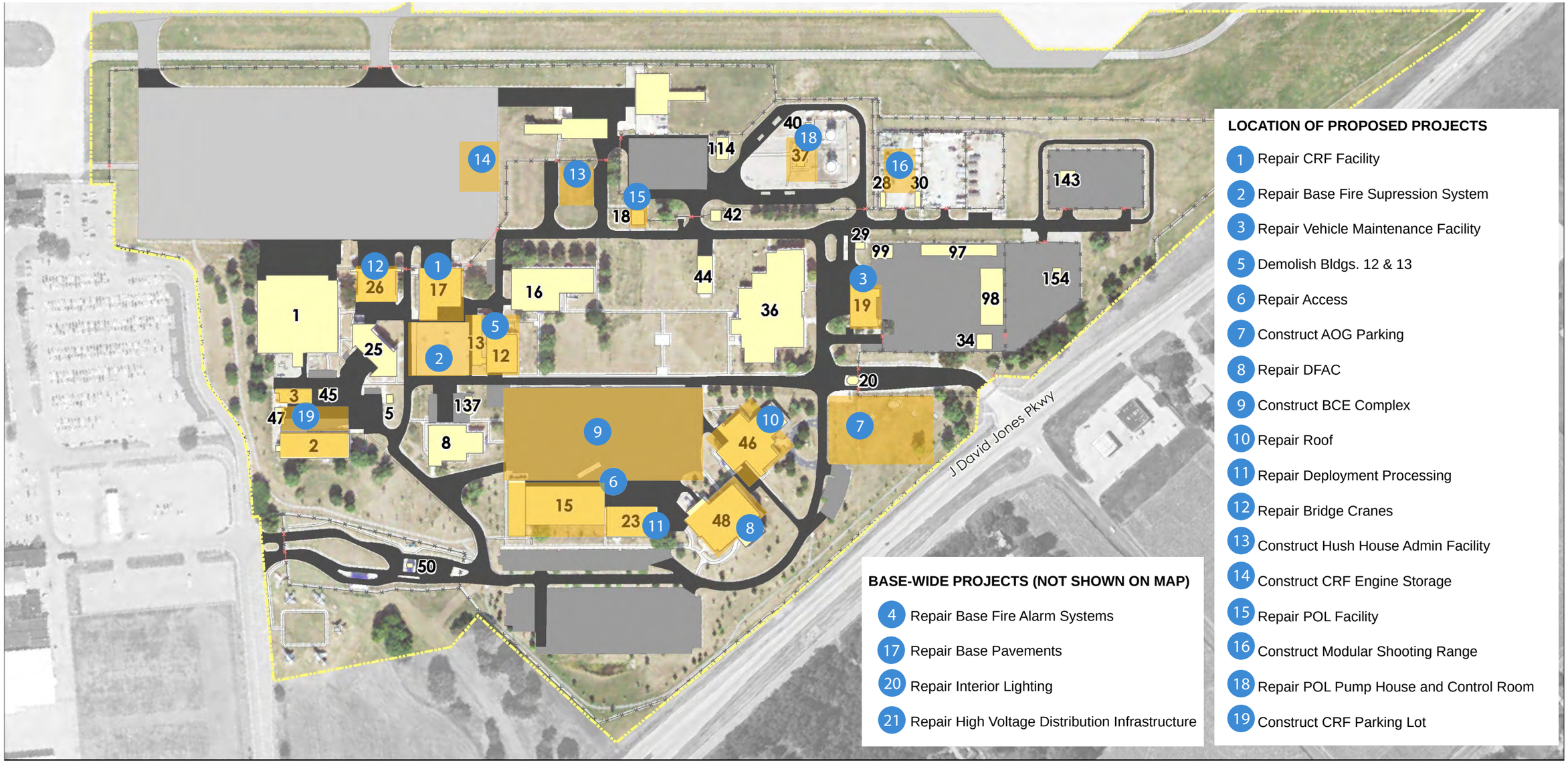
Installation Boundary

Attachment 2: 183 WG Project List and Descriptions

Project #	Project Title and Description	Project ID Number	Estimated Year
1	**Repair CRF Facility, Building 17.** Reinforce concrete foundation and floor slab with concrete masonry unit (CMU) walls, install metal standing seam roof, and modify as needed to meet AT/FP criteria. Renovate the existing facility and reconfigure interior walls to accommodate CIRF mission. Modify building systems to accommodate the reconfiguration and install interior finishes. Upgrade plumbing, electrical, fire protection, and communications systems.	DCFT102008	2020
2	**Repair Base Fire Suppression System.** Replace the existing 125,000 gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. Repair existing landscaping and vegetation areas as necessary to accommodate new tank and pump house facility.	DCFT142001	2022
3	**Repair Vehicle Maintenance Facility, Building 19.** Reconfigure interior administrative space, bathrooms, and vehicle work bays. Upgrade electrical, HVAC, and fire suppression. Add door entrance canopies.	DCFT152010	2022
4	**Repair Base Fire Alarm Systems.** Base-wide project to replace fire alarm systems with primary receiving and dispatching system with redundancy. Replace non-compliant, non-addressable fire alarm control panels (FACPs) with addressable wireless control panels and transceivers with capability to report to the centralized system. Upgrade buildings with non-addressable components.	DCFT172008	2022
5	**Demolish Buildings 12 & 13.** Buildings 12 and 13 (11,827 square feet) and all supporting utilities and excess pavements (650 square feet) will be demolished and the entire site will be returned back to a sodded lawn. All sidewalks will be extended as necessary to ensure safe pedestrian flow through the site once demolition is complete.	DCFT162900	2023
6	**Repair Access, Building 15.** Re-grade and construct an asphalt driving lane (3,000 square yards) and depressed concrete slab for loading dock including repairs to the north side of Building 15 (500 square yards).	DCFT192011	2023
7	**Construct AOG Parking.** Re-grade and construct an asphalt parking lot (6,000 square yards) with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Repair existing landscaping and vegetation areas as necessary.	DCFT192010	2023
8	**Repair DFAC in existing Building 48.** Repair building to address functional layout issues.	DCFT162002	2024
9	**Construct BCE Complex (MILCON).** Construction of a new 23,000 square foot BCE Complex west of existing Buildings 15 and 23 on the existing central base parking lot. The existing BCE buildings (2, 3, 28, 30, 44, 45, and 27) will be demolished.	DCFT059018	2024
10	**Repair Roof, Building 46.** Repair roof.	DCFT162014	2025

Project #	Project Title and Description	Project ID Number	Estimated Year
11	**Repair Deployment Processing, Building 23.** Interior repair/renovation.	DCFT202001	2024-2025
12	**Repair Bridge Cranes / CRF Operations.** Proposed project to add bridge cranes in Building 26. Can only be completed if the space authorization variance is approved and additional storage space is authorized (Project 14).	DCFT182004	2025
13	**Construct Hush House Admin Facility.** Proposed project to construct a permanent restroom and breakroom for personnel assigned to hush house operations. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192001	2025
14	**Construct CRF Engine Storage.** Proposed project to construct a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment out. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192002	2026
15	**Repair POL Facility.** Existing facility requires repair and modernization as the building has remained largely untouched since the early 1980's.Interior updates and renovations to the facility.	DCFT192006	2026
16	**Construct Modular Shooting Range.** The installation requires an adequately sized, properly configured, and correctly sited small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226. Construct small arms firing range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a combat arms training and maintenance (CATM) facility (12,300 SF).	DCFT219001	2031
17	**Repair Base Pavements.** Base-wide project to renovate or repair pavement on the installation.	DCFT062001	2026
18	**Repair POL Pump house and control room.** Repair of dilapidated buildings. Currently there are two facilities constructed of CMU that house both the electrical control equipment and the fuel pumping equipment in the POL area. Both structures are showing signs of joint and block failure and need to be replaced. Equipment inside can't be moved, so the project will require demolition and construction of a new building envelope to maintain operation of the equipment located inside.	DCFTXXXXX	2031
19	**Construct CRF Parking Lot.** New parking lot will be constructed on the location of the existing BCE Building (after buildings are demolished). Buildings 2, 3, 28, 30, 44, 45, and 27 will be demolished.	DCFT202008	2022
20	**Repair Interior Lighting.** Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. Exterior lighting system upgrades will include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded.	DCFT202002	2026

Project #	Project Title and Description	Project ID Number	Estimated Year
21	**Repair High Voltage Distribution Infrastructure.** Base-wide project through the base's energy program to replace all obsolete high voltage primary and secondary distribution systems to include transformers, cabling, switch gear and any damage pathways or manholes.	DCFT202003	2026



LOCATION OF PROPOSED PROJECTS

1. Repair CRF Facility
2. Repair Base Fire Supression System
3. Repair Vehicle Maintenance Facility
5. Demolish Bldgs. 12 & 13
6. Repair Access
7. Construct AOG Parking
8. Repair DFAC
9. Construct BCE Complex
10. Repair Roof
11. Repair Deployment Processing
12. Repair Bridge Cranes
13. Construct Hush House Admin Facility
14. Construct CRF Engine Storage
15. Repair POL Facility
16. Construct Modular Shooting Range
18. Repair POL Pump House and Control Room
19. Construct CRF Parking Lot

BASE-WIDE PROJECTS (NOT SHOWN ON MAP)

4. Repair Base Fire Alarm Systems
17. Repair Base Pavements
20. Repair Interior Lighting
21. Repair High Voltage Distribution Infrastructure

Installation Boundary
Access Control
Fence
Building
Area of Potential Effect
Road
Vehicle Parking
Airfield Surface

1	Main Hangar	18	Petrol Ops Building	37	Jet Fuel Pump House	99	Wash Rack
2	BE Maintenance Shop (CE)	19	Vehicle Maintenance Shop	40	Fuel Storage Control Bldg	114	Liquid Oxygen
3	BE MX Shop/SFS	20	Traffic Check House	42	Hydrazine Facility	137	Pump House
5	Services Storage	23	Weapons Release	44	Conventional Munitions Shop	143	Munition Storage
8	Communications Facility	25	SFS	45	HazMat Pharmacy	154	Munitions Inspection
12	AGE (A/SE) Storage Facility	26	Shelter A/W CALBR	46	EIS/MPF		
13	A/C General Purpose Shop	28	Shed Supply/Equipment BSE	47	CE Cold Storage		
15	Supply Warehouse	29	Hazardous Storage	48	Composite Support Facility		
15	Supply Warehouse	30	BE Storage Shed (Mobility)	50	Traffic Check House		
16	AOG/Squadron Ops Building	34	Vehicle Ops Parking Shed	97	Vehicle MX Shed		
17	Fuels Sys Maintenance Dock	36	CNAF	98	Vehicle MX Shed		

Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984

0 500 1,000 Feet

183d WG Capital Airport ANGB Proposed Project Locations Map

Attachment 3

Attachment 4: ILSHPO Concurrence letter, 2 Feb 2012

009122711

ILLINOIS AIR NATIONAL GUARD
HEADQUARTERS 183D FIGHTER WING (ACC)
SPRINGFIELD ILLINOIS

2 February 2012

MEMORANDUM FOR PRESERVATION SERVICES
MS. ANNE HAAKER

FROM: 183RD FW/CEV

SUBJECT: Architectural Resources Survey 183rd Fighter Wing at Abraham Lincoln Capital Airport, Air National Guard Base, Springfield, Sangamon County, Illinois
Contract No.: DAHA92-01-D-0006
Delivery Order No.: DO 0127
ANG Project No.: ANG105331

1. AMEC Earth & Infrastructure (AMEC) was contracted by the National Guard Bureau to perform an architectural resources survey for 25 buildings and three static displays for the 183rd Fighter Wing at Abraham Lincoln Capital Airport Air National Guard Base. None of the resources documented were recommended as eligible for listing on the National Register of Historic Places by AMEC. The Illinois Air National Guard 183rd Fighter Wing concurs with these recommendataions and requests your comments on the above-refereneed report.

2. Thank you for reviewing this report. If you have any questions, or wish to discuss the report in more detail, please feel free to contact me at 217-757-1329.

DEBORAH S. HAMRICK, Lt Col, ILANG
Environmental Manager

CONCUR
By: Jane E. Haaker
Deputy State Historic Preservation Officer
Date: 2/3/12

Attachment 6: Images for Building P-2, Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL

Figure 1: View looking Southeast

Figure 2: View Looking Northeast.

Figure 3: View Looking North.

Figure 4: View Looking Southwest.

Figure 5: Oblique View Looking Southwest.

ILLINOIS
DEPARTMENT OF NATURAL RESOURCES

Illinois Department of
Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271
www.dnr.illinois.gov

JB Pritzker, Governor
Colleen Callahan, Director

Sangamon County
Springfield
Repair, Renovation, Replacement, New Construction or Demolition, Air National Guard 183d Wing
3101 J. David Jones Parkway
SHPO Log #020122021

February 25, 2022

Jennifer Harty
National Guard Bureau
3501 Fetchet Ave.
Joint Base Andrews, MD 20762-5157

Dear Ms. Harty:

We have reviewed the documentation submitted for the referenced project(s) in accordance with 36 CFR Part 800.4. Based upon the information provided, no historic properties are affected. We, therefore, have no objection to the undertaking proceeding as planned.

Please retain this letter in your files as evidence of compliance with section 106 of the National Historic Preservation Act of 1966, as amended. This clearance remains in effect for two years from date of issuance. It does not pertain to any discovery during construction, nor is it a clearance for purposes of the Illinois Human Skeletal Remains Protection Act (20 ILCS 3440).

If you have any further questions, please contact Rita Baker, Cultural Resources Manager, at 217/785-4998 or at Rita.E.Baker@illinois.gov.

Sincerely,

Carey L. Mayer

Carey L. Mayer , AIA
Deputy State Historic
Preservation Officer

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 183D WING (ANG)
SPRINGFIELD ILLINOIS

03 January 2022

Colonel Robert C. Gellner, ANG
Commander, 183d Wing
3101 J David Jones Parkway
Springfield IL 62707

Chief Douglas Lankford
Miami Tribe of Oklahoma
3410 P St.
P.O. Box 1326
Miami OK 74354

Dear Chief Lankford,

The National Guard Bureau (NGB) is currently investigating the feasibility of short-term construction, demolition, and renovation infrastructure improvement projects at the Air National Guard (ANG) 183d Wing (183 WG) located at the Abraham Lincoln Capital Airport Air National Guard Base (ANGB), Springfield, IL (Attachment 1). The purpose of the Proposed Action is to implement these projects from the Installation Development Plan (IDP) to provide the 183 WG with properly sized and configured facilities needed to effectively accomplish their mission. The Proposed Action provides a planning, programming, and development strategy that would address current mission deficiencies and opportunities for the 183 WG. As directed by the National Environmental Policy Act (NEPA), the NGB, with support from Tetra Tech, is preparing an Environmental Assessment (EA) in order to evaluate the potential environmental effects associated with the Proposed Action. The purpose of this letter is to conduct consultation under Section 106 of the National Historic Preservation Act for the proposed actions.

The undertaking is composed of 21 repair, renovation, replacement, and demolition projects. The 183 WG would implement the proposed short-term infrastructure projects as summarized in the 183 WG Project List (Attachment 2). The EA will provide analysis for the mid- to long-range projects (within the next 6–20 years). These analyses will provide sufficient data to implement future projects identified in the IDP based on available information. As projects change or more information becomes available, future NEPA analyses can effectively tier from this EA to address those changes. The NGB has determined that the Area of Potential Effects (APE) (Attachment 3) for the Proposed Action is any area where effects to NRHP eligible properties may occur. This includes areas of ground disturbance, visual effects, and staging areas for equipment and materials.

In 2002, MWH Americas, Inc. conducted a Phase I archaeological reconnaissance survey of the entire 91-acre base. During the survey, MWH recorded two historic archaeological sites, both of which NGB determined were not eligible for inclusion in the National Register of Historic Places (NRHP). The Illinois State Historic Preservation Office

(SHPO) concurred with NGB's determination, and concurred that no further archaeological studies would be required.

In 2011, the NGB conducted an architectural survey of the base to assess NRHP eligibility for seven buildings that were 50 years old and to assess Cold War eligibility under Criterion Consideration G for 18 of the buildings. At the conclusion of the survey, NGB determined that none of the buildings was eligible for inclusion in the NRHP, but that the 18 evaluated under Criterion Consideration G should be reevaluated upon reaching 50 years of age. SHPO concurred with NGB's determinations. Only one of the buildings, P-2, which was not 50 years old at the time of the survey, may be affected by the proposed undertaking. Because it was not yet 50 years old at the time of the survey, P-2 requires evaluation under NRHP eligibility criteria A-D.

In accordance with Executive Order (EO) 13175, Consultation and Coordination with Indian Tribal Governments; EO 12372, Intergovernmental Review of Federal Programs; and Section 106 of the National Historic Preservation Act (36 Code of Federal Regulations [CFR] Parts 800.2, 800.3, and 800.4), the 183 WG and NGB invite you to consult on the proposed undertakings.

As part of our consultation efforts, we respectfully request your assistance in identifying the following:

- traditional resources that may be located within the current APE;
- historic properties in the APE of which we may not be aware; and/or
- your tribe's interest in participating in additional consultation.

If you request additional consultation, the NGB and 183 WG will work with your office to adopt procedures that will meet your tribe's needs and requirements for continued consultation.

In order for the NGB to address your concerns in a timely manner for both the tribe and the proposed undertaking, please respond to this letter within 30 days of receipt. Please provide comments to Jennifer Harty, Cultural Resources Program Manager (A4), 3501 Fetchet Avenue, Joint Base Andrews MD 20762-5157 or by email at NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject line ATTN: 183 WG EA. Thank you for your assistance.

Sincerely

ROBERT C. GELLNER, Colonel, ANG
Commander, 183d Wing

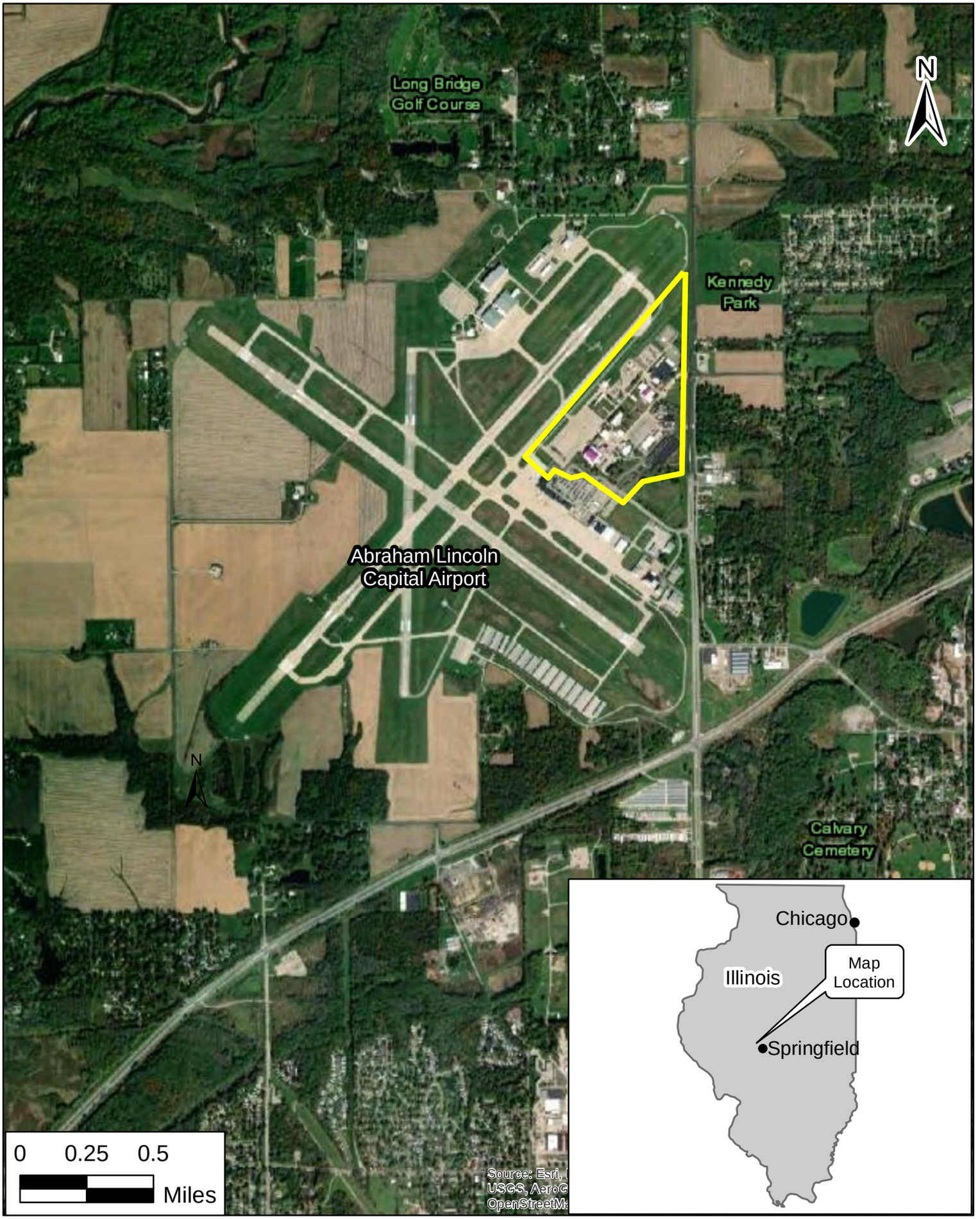
5 Attachments:

1. 183 WG Location Map, July 2021
2. 183 WG Project List and Descriptions, July 2021
3. 183 WG Proposed Project Locations Map, July 2021
4. 183 WG Previous Archaeological Sites and Surveys Map, September 2021
5. 183 WG Previous Archaeological Sites and Surveys Table, September 2021

Available upon request:

1. Phase I Archaeological Reconnaissance Survey Final Report, Volume 1, 2002
2. Architectural Resources Survey 183 Fighter Wing Illinois Air National Guard Abraham Lincoln Capital Airport Air National Guard Base Springfield, Sangamon County, Illinois, 2011

Attachment 1: 183d WG Abraham Lincoln Capital Airport AGS Location Map



LEGEND

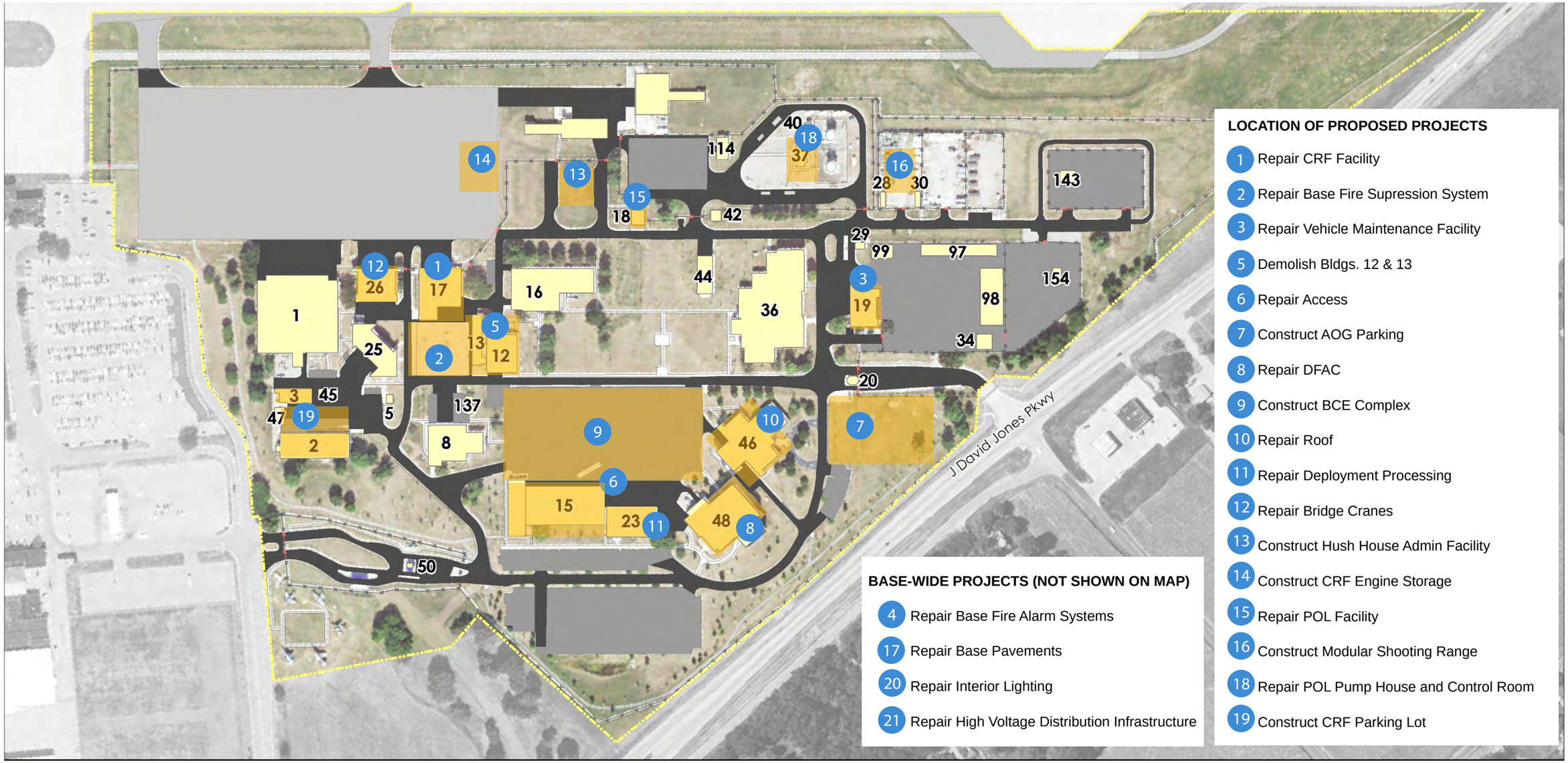
Installation Boundary

Attachment 2: 183 WG Project List and Descriptions

Project #	Project Title and Description	Project ID Number	Estimated Year
1	**Repair CRF Facility, Building 17.** Reinforce concrete foundation and floor slab with concrete masonry unit (CMU) walls, install metal standing seam roof, and modify as needed to meet AT/FP criteria. Renovate the existing facility and reconfigure interior walls to accommodate CIRF mission. Modify building systems to accommodate the reconfiguration and install interior finishes. Upgrade plumbing, electrical, fire protection, and communications systems.	DCFT102008	2020
2	**Repair Base Fire Suppression System.** Replace the existing 125,000 gallon fire suppression water tank, associated piping, pumps, generators, boilers, and controls. Replace and reconfigure all piping, pavements, and supporting utility infrastructure as necessary. Repair existing landscaping and vegetation areas as necessary to accommodate new tank and pump house facility.	DCFT142001	2022
3	**Repair Vehicle Maintenance Facility, Building 19.** Reconfigure interior administrative space, bathrooms, and vehicle work bays. Upgrade electrical, HVAC, and fire suppression. Add door entrance canopies.	DCFT152010	2022
4	**Repair Base Fire Alarm Systems.** Base-wide project to replace fire alarm systems with primary receiving and dispatching system with redundancy. Replace non-compliant, non-addressable fire alarm control panels (FACPs) with addressable wireless control panels and transceivers with capability to report to the centralized system. Upgrade buildings with non-addressable components.	DCFT172008	2022
5	**Demolish Buildings 12 & 13.** Buildings 12 and 13 (11,827 square feet) and all supporting utilities and excess pavements (650 square feet) will be demolished and the entire site will be returned back to a sodded lawn. All sidewalks will be extended as necessary to ensure safe pedestrian flow through the site once demolition is complete.	DCFT162900	2023
6	**Repair Access, Building 15.** Re-grade and construct an asphalt driving lane (3,000 square yards) and depressed concrete slab for loading dock including repairs to the north side of Building 15 (500 square yards).	DCFT192011	2023
7	**Construct AOG Parking.** Re-grade and construct an asphalt parking lot (6,000 square yards) with concrete curbs, new storm drainage, and lighting to accommodate facility usage at the north end of the installation. Repair existing landscaping and vegetation areas as necessary.	DCFT192010	2023
8	**Repair DFAC in existing Building 48.** Repair building to address functional layout issues.	DCFT162002	2024
9	**Construct BCE Complex (MILCON).** Construction of a new 23,000 square foot BCE Complex west of existing Buildings 15 and 23 on the existing central base parking lot. The existing BCE buildings (2, 3, 28, 30, 44, 45, and 27) will be demolished.	DCFT059018	2024
10	**Repair Roof, Building 46.** Repair roof.	DCFT162014	2025

Project #	Project Title and Description	Project ID Number	Estimated Year
11	**Repair Deployment Processing, Building 23.** Interior repair/renovation.	DCFT202001	2024-2025
12	**Repair Bridge Cranes / CRF Operations.** Proposed project to add bridge cranes in Building 26. Can only be completed if the space authorization variance is approved and additional storage space is authorized (Project 14).	DCFT182004	2025
13	**Construct Hush House Admin Facility.** Proposed project to construct a permanent restroom and breakroom for personnel assigned to hush house operations. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192001	2025
14	**Construct CRF Engine Storage.** Proposed project to construct a storage facility for engines that are awaiting work, awaiting parts, or awaiting shipment out. Can only be completed if the space authorization variance is approved. Physical size of the facility will be determined by variance determination.	DCFT192002	2026
15	**Repair POL Facility.** Existing facility requires repair and modernization as the building has remained largely untouched since the early 1980's.Interior updates and renovations to the facility.	DCFT192006	2026
16	**Construct Modular Shooting Range.** The installation requires an adequately sized, properly configured, and correctly sited small arms range to train and certify security forces, battlefield airmen, and mobility personnel in accordance with AFI 36-2226. Construct small arms firing range that will house a Modular Containerized Small Arms Training Set (MCSATS) and a combat arms training and maintenance (CATM) facility (12,300 SF).	DCFT219001	2031
17	**Repair Base Pavements.** Base-wide project to renovate or repair pavement on the installation.	DCFT062001	2026
18	**Repair POL Pump house and control room.** Repair of dilapidated buildings. Currently there are two facilities constructed of CMU that house both the electrical control equipment and the fuel pumping equipment in the POL area. Both structures are showing signs of joint and block failure and need to be replaced. Equipment inside can't be moved, so the project will require demolition and construction of a new building envelope to maintain operation of the equipment located inside.	DCFTXXXXX	2031
19	**Construct CRF Parking Lot.** New parking lot will be constructed on the location of the existing BCE Building (after buildings are demolished). Buildings 2, 3, 28, 30, 44, 45, and 27 will be demolished.	DCFT202008	2022
20	**Repair Interior Lighting.** Upgrade lighting base-wide to more energy efficient lighting with higher color rendering index to provide better work environments and safe outdoor conditions. Exterior lighting system upgrades will include all building wallpacks, parking lot lights, and other area lighting. Interior lighting of select high and low bay facilities will also be upgraded.	DCFT202002	2026

Project #	Project Title and Description	Project ID Number	Estimated Year
21	**Repair High Voltage Distribution Infrastructure.** Base-wide project through the base's energy program to replace all obsolete high voltage primary and secondary distribution systems to include transformers, cabling, switch gear and any damage pathways or manholes.	DCFT202003	2026



LOCATION OF PROPOSED PROJECTS

1. Repair CRF Facility
2. Repair Base Fire Supression System
3. Repair Vehicle Maintenance Facility
5. Demolish Bldgs. 12 & 13
6. Repair Access
7. Construct AOG Parking
8. Repair DFAC
9. Construct BCE Complex
10. Repair Roof
11. Repair Deployment Processing
12. Repair Bridge Cranes
13. Construct Hush House Admin Facility
14. Construct CRF Engine Storage
15. Repair POL Facility
16. Construct Modular Shooting Range
18. Repair POL Pump House and Control Room
19. Construct CRF Parking Lot

BASE-WIDE PROJECTS (NOT SHOWN ON MAP)

4. Repair Base Fire Alarm Systems
17. Repair Base Pavements
20. Repair Interior Lighting
21. Repair High Voltage Distribution Infrastructure

Installation Boundary
Access Control
Fence
Building
Area of Potential Effect
Road
Vehicle Parking
Airfield Surface

1	Main Hangar	18	Petrol Ops Building	37	Jet Fuel Pump House	99	Wash Rack
2	BE Maintenance Shop (CE)	19	Vehicle Maintenance Shop	40	Fuel Storage Control Bldg	114	Liquid Oxygen
3	BE MX Shop/SFS	20	Traffic Check House	42	Hydrazine Facility	137	Pump House
5	Services Storage	23	Weapons Release	44	Conventional Munitions Shop	143	Munition Storage
8	Communications Facility	25	SFS	45	HazMat Pharmacy	154	Munitions Inspection
12	AGE (A/SE) Storage Facility	26	Shelter A/W CALBR	46	EIS/MPF		
13	A/C General Purpose Shop	28	Shed Supply/Equipment BSE	47	CE Cold Storage		
15	Supply Warehouse	29	Hazardous Storage	48	Composite Support Facility		
15	Supply Warehouse	30	BE Storage Shed (Mobility)	50	Traffic Check House		
16	AOG/Squadron Ops Building	34	Vehicle Ops Parking Shed	97	Vehicle MX Shed		
17	Fuels Sys Maintenance Dock	36	CNAF	98	Vehicle MX Shed		

Coordinate System: WGS 1984 UTM Zone 16N
Projection: Transverse Mercator
Datum: WGS 1984

0 500 1,000 Feet

183d WG Capital Airport ANGB Proposed Project Locations Map

Attachment 3

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

Lincoln ANGB
Previously Recorded Sites and Surveys

- 1 Mile Search Radius
- Project Area
- Previously Recorded Archaeological Site
- Previous Archaeological Survey

0 0.5 1 Miles
0 0.5 1 1.5 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

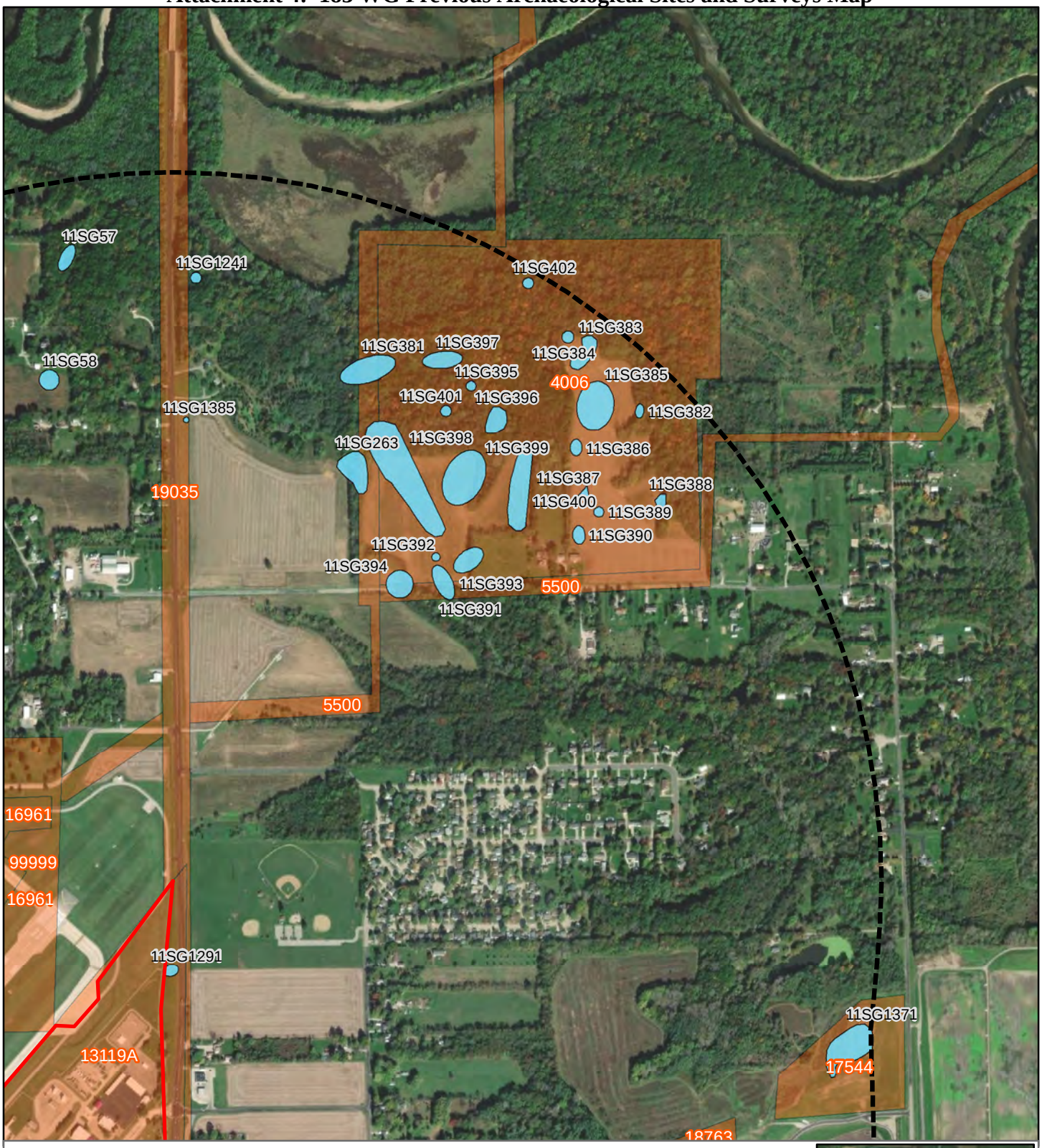
Lincoln ANGB
Previously Recorded Sites and Surveys - Map 1 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

0 0.25 0.5 Miles
0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map



Lincoln ANGB
Previously Recorded Sites and Surveys - Map 2 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

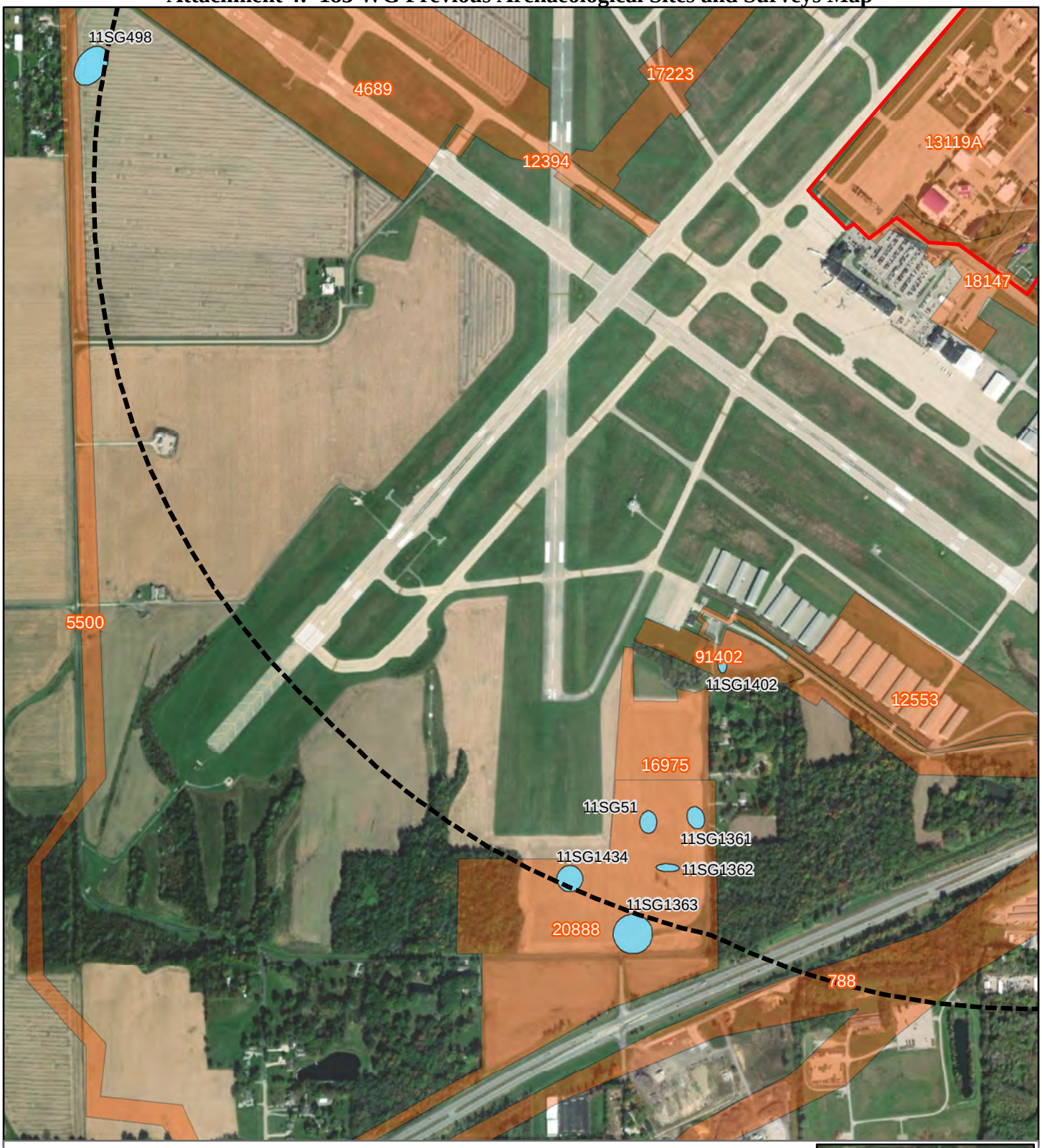
0 0.25 0.5 Miles
0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 4: 183 WG Previous Archaeological Sites and Surveys Map



Lincoln ANGB
Previously Recorded Sites and Surveys - Map 4 of 4

- 1 Mile Search Radius
- Project Area
- Archaeological Site
- Archaeological Survey

0 0.25 0.5 Miles

0 0.25 0.5 0.75 Kilometers

Source: ESRI World Imagery; maps.dnr.illinois.gov/portal/apps/webappviewer

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

5966B Lincoln - Sites and Surveys within ANGB and within One-Mile Search Radius

WITHIN ANGB BOUNDARY					
SITES	**Site Number (11SGXXX)**	**Name**	**Period**	**Type**	**Eligiblity**
	1290		General Historic	Artifact Scatter	Not Eligible
	1291		General Historic	Artifact Scatter	Not Eligible
SURVEYS		**Author**	**Title**	**Year**	
	13119A	Andrew Schneider, Erica Cameron	Phase I Archaeological Reconnaissance Survey Final Report	2002	
	18147	James M. Pisell, Robert N. Hickson	FAP 658/IL 29 Airport Road Airport Entrance Improvement	2009	

WITHIN ONE MILE RADIUS					
SITES	**Site Number (11SGXXX)**	**Name**	**Period**	**Type**	**Eligibility**
	51		General Precontact	Lithic Scatter	Not Eligible
	57	FOFI Site #1	General Precontact	Artifact Scatter	Unknown
	58	FOFI Site #2	General Precontact	Artifact Scatter	Unknown
	167	Springfield Airport Site #1	Late Archaic, Early Woodland	Archaic burial; artifact scatter	Unknown
	202	Springfield AA Site	General Precontact	Artifact Scatter	Not Eligible
	203	Springfield AA Site #2	General Precontact	Artifact Scatter	Not Eligible
	204	Springfield AA Site #3	General Precontact	Artifact Scatter	Not Eligible
	245		General Precontact	Artifact Scatter	Not Eligible
	246		General Precontact	Artifact Scatter	Not Eligible
	247		General Precontact	Artifact Scatter	Not Eligible
	262	McGill Site	General Precontact and Historic	Artifact Scatter	Not Eligible
	263		General Precontact	Artifact Scatter	Unknown
	381		General Precontact	Artifact Scatter	Not Eligible
	382		General Precontact	Lithic Scatter	Not Eligible
	383		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	384		General Precontact	Lithic Scatter	Not Eligible
	385		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	386		General Precontact and Historic	Lithic and historic artifact scatter	Not Eligible
	387		General Precontact	Lithic scatter	Not Eligible
	388		General Precontact	Lithic Scatter	Not Eligible
	389		General Precontact	Lithic Scatter	Not Eligible
	390		Archaic	Lithic Scatter	Not Eligible
	391		General Precontact	Lithic Scatter	Not Eligible
	392		General Precontact and Historic	Lithic and Historic Artifact Scatter	Not Eligible
	393		General Precontact	Lithic Scatter	Not Eligible
	394		Early Archaic	Lithic Scatter	Not Eligible
	395		General Precontact	Lithic Scatter	Not Eligible
	396		General Precontact and Historic	Lithic and historic artifact scatter	Unknown
	397		General Precontact	Lithic Scatter	Unknown
	398		General Precontact	Lithic Scatter	Not eligible
	399		General Precontact	Lithic Scatter	Unknown
	400		General Precontact	Lithic Scatter	Unknown
	401		General Precontact	Lithic Scatter	Not eligible
	402		General Precontact and Historic	Artifact Scatter	Not Eligible
	498		General Precontact	Lithic Scatter	Not Eligible
	499				
	500		Late Archaic; Early Mississippian	Lithic Scatter	Not Eligible
	501		Early Archaic	Lithic Scatter	Unknown

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

WITHIN ONE MILE RADIUS					
	1241		Late Woodland	Artifact Scatter and Feature	Not Eligible
	1296		Early Archaic	Lithic Scatter	Not Eligible
	1371	Converse Farmstead	19th-20th century historic	Historic Surface Feature	Not Eligible
	1361		20th Century Historic	Historic Artifact Scatter	Unknown
	1362		General Precontact	Lithic Scatter	Not Eligible
	1363		19th-20th Century Historic	Historic Artifact Scatter	Not Eligible
	1385		General Precontact	Artifact Scatter	Not Eligible
	1402		General Precontact; 19th-20th Centuries Historic	Artifact Scatter	Unknown
	1434		General Precontact; 19th-20th Centuries Historic	Lithic and Historic Artifact Scatter	Not Eligible
SURVEYS		**Author**	**Title**	**Year**	
	340		An Archaeological Survey of the Proposed Springfield Sanitary District Sewer	1977	
	380	Mary L. Simon	Dekalb Taylor Municipal Airport Project No. 90A-16-1421	1991	
	788		Report of Archaeological Excavation at Nine Sites on FAP Route 662, Near Springfield, Sangamon	1980	
	1121		The Airport Site: A Multicomponent Site in the Sangamon River Drainage	1978	
	4006	Frances R. Knight, Michael D. Wiant	Cultural Resources Assessment of a land parcel to be developed as a golf course by the Capital Airport Authority	1991	
	4689	Sarah J. Studenmund	Springfield Capital Airport, Environmental Assessment, Sangamon County	1992	
	5500		Phase I Cultural Resources Survey of the Springfield to Cilco Gas Storage Area Pipeline Corridor, Sangamon and Logan Counties	1992	
	7373	Joseph M. Galloy	Proposed Construction of Paint Hanger, Capitol Airport, Springfield	1996	
	9303		FAP 658, IL 29, Section 102(X, BR, B-3, B-4, B-5), Sangamon County, Borrow 7 of 7 (CAA Project #682)	1998	
	11359	Steven R. Ahler	Phase I Survey and Inventory of Archaeological Resources at Camp Lincoln, Illinois Army National Guard Headquarters, Springfield, Illinois	2000	
	12394	Ryan Gifford, David J. Nolan, Amy K. Graham	Capital Airport Taxiway Relocation	2002	
	12553	Ryan Gifford, David J. Nolan, Amy K. Graham	Capital Airport, Springfield Authority Access Road to Charlie Ramp	2002	
	13946	Robert N. Hickson, Robert W. Monroe	Capital Airport, Springfield Radar Installation	2003	
	16479	James M. Pisell, David J. Nolan	Abraham Lincoln Capital Airport (Land Acquisition and Improvements)	2006	
	16961	Robert N. Hickson, David J. Nolan	Abraham Lincoln Capital Airport Improvements	2008	
	17223	Robert N. Hickson	Abraham Lincoln Capital Airport Taxiway G	2008	

Attachment 5: 183 WG Previous Archaeological Sites and Surveys
Tables

WITHIN ONE MILE RADIUS					
	17544	Floyd R. Mansberger	Archaeological Survey Short Report: Phase I Archaeological Survey of a Proposed Improvements to the Springfield Metro Sanitary District's Waste Water Treatment Plant Borrow Pit, Sangamon County, Illinois	2009	
	18763	Floyd R. Mansberger	Archaeological Survey Short Report (ASSR): Phase I Archaeological Survey of Proposed Improvements to the Springfield Metro Sanitary District's Waste Water Treatment Plant, Sangamon County, Illinois	2010	
	19035	James M. Pisell, David J. Nolan	FAP 658/IL 29 Menard County Line to Capital Airport Entrance	2010	
	20888	James M. Pisell, David J. Nolan	SPI Non-Aeronautical Improvements AERONAUTICS: Section 106 ESR Request Non-IDOT	2015	
	91402	N/A	Ab Lincoln Airport	2012	

Miami Tribe of Oklahoma
3410 P St. NW, Miami, OK 74354 ● P.O. Box 1326, Miami, OK 74355
Ph: (918) 541-1300 ● Fax: (918) 542-7260
www.miamination.com

Via email: NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil

January 12, 2022

Jennifer L. Harty, GS-13, DAF
Cultural Resources Program Manager
ATTN: 183 WG EA
3501 Fetchet Ave
Joint Base Andrews 20762-5157

Re: Abraham Lincoln Capital Airport ANG Construction, Demolition & Renovation, Sangamon County, Illinois – Comments of the Miami Tribe of Oklahoma

Dear. Ms. Harty:

Aya, kikwehsitoole – I show you respect. The Miami Tribe of Oklahoma, a federally recognized Indian tribe with a Constitution ratified in 1939 under the Oklahoma Indian Welfare Act of 1936, respectfully submits the following comments regarding Abraham Lincoln Capital Airport ANG Construction, Demolition & Renovation in Sangamon County, Illinois.

The Miami Tribe offers no objection to the above-referenced project at this time, as we are not currently aware of existing documentation directly linking a specific Miami cultural or historic site to the project site. However, given the Miami Tribe's deep and enduring relationship to its historic lands and cultural property within present-day Illinois, if any human remains or Native American cultural items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) or archaeological evidence is discovered during any phase of this project, the Miami Tribe requests immediate consultation with the entity of jurisdiction for the location of discovery. In such a case, please contact me at 918-541-8966 or by email at dhunter@miamination.com to initiate consultation.

The Miami Tribe accepts the invitation to serve as a consulting party to the proposed project. In my capacity as Tribal Historic Preservation Officer I am the point of contact for consultation.

Respectfully,

Diane Hunter

Diane Hunter
Tribal Historic Preservation Officer

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Appendix B

Notice of Availability

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NOTICE OF AVAILABILITY
Environmental Assessment for Implementing the
Installation Development Plan at the
183d Wing of the Illinois Air National Guard
Abraham Lincoln Capital Airport Air National Guard Base
Springfield, Illinois

The National Guard Bureau (NGB) invites the public to review and comment on the Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) for this Proposed Action. The NGB prepared a Draft EA to analyze the potential impacts of Installation Development Plan (IDP) construction, demolition, and renovation projects at the 183d Wing (183 WG) at Abraham Lincoln Capital Airport, Springfield, Illinois. The Proposed Action would include 21 IDP facility improvement projects to support the current mission. A Draft FONSI was prepared based on the analysis in the Draft EA. The Draft EA and FONSI are available for public review at the Lincoln Library, 326 S. 7th Street, Springfield, IL. The Draft EA and FONSI are also available for review beginning June 30, 2022 by downloading from https://www.183wg.ang.af.mil.

To request a paper copy by mail or to submit your written comments, please contact Ms. Christine Yott, NEPA Program Manager, ATTN: 183 WG EA, NGB/A4AM, Shepperd Hall, 3501 Fetchet Ave., Joint Base Andrews, MD 20762-5157, or email to NGB.A4.A4A.NEPA.COMMENTS.Org@us.af.mil with the subject line ATTN: 183 WG EA. Comments are requested by July 30, 2022.

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Appendix C

Air Conformity Applicability Model Results

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AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF AIR ANALYSIS (ROAA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: Capital Airport ANGB
State: Illinois
County(s): Sangamon
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Capital Airport ANGB IDP

c. Project Number/s (if applicable):

d. Projected Action Start Date: 1 / 2023

e. Action Description:

Activity Square Feet
Construction 38,000
Grading 50,667
Trenching 7,600
Architectural Coatings 38,000
Paving 38,000
Demolition 37,000
Heating 1,000

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are: not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are "Clearly Attainment" (i.e., not within 5% of any NAAQS) and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are "Near Nonattainment" (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below. None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQSs.No further air assessment is needed.

Construction Emissions

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	1.119	250	No
NOx	3.961	250	No
CO	5.104	250	No
SOx	0.011	250	No
PM 10	3.506	250	No
PM 2.5	0.162	250	No
Pb	0.000	25	No
NH3	0.003	250	No
CO2e	1092.1		

Operational Emissions

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.029	250	No
NOx	0.122	250	No
CO	0.082	250	No
SOx	0.024	250	No
PM 10	0.026	250	No
PM 2.5	0.026	250	No
Pb	0.000	25	No
NH3	0.000	250	No
CO2e	19.7		

1. General Information

- Action Location
Base: Capital Airport ANGB
State: Illinois
County(s): Sangamon
Regulatory Area(s): NOT IN A REGULATORY AREA

- Action Title: Capitail Airport ANGB IDP

- Project Number/s (if applicable):

- Projected Action Start Date: 1 / 2023

- Action Purpose and Need:
Capitail Airport ANGB IDP

- Action Description:
Activity Square Feet
Construction 38,000
Grading 50,667
Trenching 7,600
Architectural Coatings 38,000
Paving 38,000
Demolition 37,000
Heating 1,000

- Activity List:

Activity Type		Activity Title
2.	Construction / Demolition	Construction
3.	Heating	Heating of Buildings
4.	Emergency Generator	Potential Back-Up Generators

Emission factors and air emission estimating methods come from the United States Air Force's Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and Air Emissions Guide for Air Force Transitory Sources.

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location
County: Sangamon
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Construction

- Activity Description:
Construction
Construction 38,000
Grading 50,667
Trenching 7,600
Architectural Coatings 38,000
Paving 67000

Demolition 37,000

- Activity Start Date
Start Month: 1
Start Month: 2023

- Activity End Date
Indefinite: False
End Month: 12
End Month: 2023

- Activity Emissions:

Pollutant	Total Emissions (TONs)
VOC	1.118997
SO_x	0.011204
NO_x	3.960593
CO	5.104442
PM 10	3.506135

Pollutant	Total Emissions (TONs)
PM 2.5	0.161570
Pb	0.000000
NH_3	0.003212
CO_2e	1092.1

2.1 Demolition Phase

2.1.1 Demolition Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 12
Number of Days: 0

2.1.2 Demolition Phase Assumptions

- General Demolition Information
Area of Building to be demolished (ft^2): 37000
Height of Building to be demolished (ft): 12

- Default Settings Used: Yes

- Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Concrete/Industrial Saws Composite	1	8
Rubber Tired Dozers Composite	1	1
Tractors/Loaders/Backhoes Composite	2	6

- Vehicle Exhaust
Average Hauling Truck Capacity (yd^3): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC

POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.1.3 Demolition Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Concrete/Industrial Saws Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0382	0.0006	0.2766	0.3728	0.0127	0.0127	0.0034	58.549
Rubber Tired Dozers Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655
MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.1.4 Demolition Phase Formula(s)

- Fugitive Dust Emissions per Phase

$PM10_{FD} = (0.00042 * BA * BH) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
0.00042: Emission Factor (lb/ft^3)
BA: Area of Building to be demolished (ft^2)
BH: Height of Building to be demolished (ft)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = BA * BH * (1 / 27) * 0.25 * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building being demolish (ft^2)
BH: Height of Building being demolish (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd^3 / 27 ft^3)
0.25: Volume reduction factor (material reduced by 75% to account for air space)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.2 Site Grading Phase

2.2.1 Site Grading Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 6
Number of Days: 0

2.2.2 Site Grading Phase Assumptions

- General Site Grading Information
Area of Site to be Graded (ft^2): 50667
Amount of Material to be Hauled On-Site (yd^3): 0

Amount of Material to be Hauled Off-Site (yd^3): 0

- Site Grading Default Settings

Default Settings Used: Yes

Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Graders Composite	1	6
Other Construction Equipment Composite	1	8
Rubber Tired Dozers Composite	1	6
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust

Average Hauling Truck Capacity (yd^3): 20 (default)

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.2.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Graders Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0757	0.0014	0.4155	0.5717	0.0191	0.0191	0.0068	132.91
Other Construction Equipment Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0483	0.0012	0.2497	0.3481	0.0091	0.0091	0.0043	122.61
Rubber Tired Dozers Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655

MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.2.4 Site Grading Phase Formula(s)

- Fugitive Dust Emissions per Phase
$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds

EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.3 Trenching/Excavating Phase

2.3.1 Trenching / Excavating Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 3
Number of Days: 0

2.3.2 Trenching / Excavating Phase Assumptions

- General Trenching/Excavating Information
Area of Site to be Trenched/Excavated (ft^2): 7600
Amount of Material to be Hauled On-Site (yd^3): 0
Amount of Material to be Hauled Off-Site (yd^3): 0

- Trenching Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Excavators Composite	2	8
Other General Industrial Equipmen Composite	1	8
Tractors/Loaders/Backhoes Composite	1	8

- Vehicle Exhaust
Average Hauling Truck Capacity (yd^3): 20 (default)
Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.3.3 Trenching / Excavating Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Graders Composite

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	CH_4	CO_2e
Emission Factors	0.0757	0.0014	0.4155	0.5717	0.0191	0.0191	0.0068	132.91
Other Construction Equipment Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0483	0.0012	0.2497	0.3481	0.0091	0.0091	0.0043	122.61
Rubber Tired Dozers Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655
MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.3.4 Trenching / Excavating Phase Formula(s)

- Fugitive Dust Emissions per Phase

$PM10_{FD} = (20 * ACRE * WD) / 2000$

$PM10_{FD}$: Fugitive Dust PM 10 Emissions (TONs)
20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
ACRE: Total acres (acres)
WD: Number of Total Work Days (days)
2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

$VMT_{VE} = (HA_{OnSite} + HA_{OffSite}) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
HA_{OnSite}: Amount of Material to be Hauled On-Site (yd^3)
$HA_{OffSite}$: Amount of Material to be Hauled Off-Site (yd^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.4 Building Construction Phase

2.4.1 Building Construction Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 12
Number of Days: 0

2.4.2 Building Construction Phase Assumptions

- General Building Construction Information
Building Category: Office or Industrial
Area of Building (ft^2): 39000
Height of Building (ft): 12
Number of Units: N/A

- Building Construction Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cranes Composite	1	6
Forklifts Composite	2	6

Generator Sets Composite	1	8
Tractors/Loaders/Backhoes Composite	1	8
Welders Composite	3	8

- Vehicle Exhaust

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

- Vendor Trips

Average Vendor Round Trip Commute (mile): 40 (default)

- Vendor Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

2.4.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Cranes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0754	0.0013	0.5027	0.3786	0.0181	0.0181	0.0068	128.79
Forklifts Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0258	0.0006	0.1108	0.2145	0.0034	0.0034	0.0023	54.454
Generator Sets Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0320	0.0006	0.2612	0.2683	0.0103	0.0103	0.0028	61.065
Tractors/Loaders/Backhoes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879
Welders Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0242	0.0003	0.1487	0.1761	0.0067	0.0067	0.0021	25.657

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655
MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.4.4 Building Construction Phase Formula(s)

- Construction Exhaust Emissions per Phase
$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)
H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = BA * BH * (0.42 / 1000) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.42 / 1000): Conversion Factor ft^3 to trips (0.42 trip / 1000 ft^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase
$VMT_{VT} = BA * BH * (0.38 / 1000) * HT$

VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
BA: Area of Building (ft^2)
BH: Height of Building (ft)
(0.38 / 1000): Conversion Factor ft^3 to trips (0.38 trip / 1000 ft^3)

HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VT}: Vender Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.5 Architectural Coatings Phase

2.5.1 Architectural Coatings Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 3
Number of Days: 0

2.5.2 Architectural Coatings Phase Assumptions

- General Architectural Coatings Information
Building Category: Non-Residential
Total Square Footage (ft^2): 38000
Number of Units: N/A

- Architectural Coatings Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Worker Trips
Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.5.3 Architectural Coatings Phase Emission Factor(s)

- Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655
MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.5.4 Architectural Coatings Phase Formula(s)

- Worker Trips Emissions per Phase
$VMT_{WT} = (1 * WT * PA) / 800$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
1: Conversion Factor man days to trips (1 trip / 1 man * day)
WT: Average Worker Round Trip Commute (mile)
PA: Paint Area (ft^2)
800: Conversion Factor square feet to man days (1 ft^2 / 1 man * day)

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
$VOC_{AC} = (AB * 2.0 * 0.0116) / 2000.0$

VOC_{AC}: Architectural Coating VOC Emissions (TONs)
BA: Area of Building (ft^2)
2.0: Conversion Factor total area to coated area (2.0 ft^2 coated area / total area)
0.0116: Emission Factor (lb/ft^2)
2000: Conversion Factor pounds to tons

2.6 Paving Phase

2.6.1 Paving Phase Timeline Assumptions

- Phase Start Date
Start Month: 1
Start Quarter: 1
Start Year: 2023

- Phase Duration
Number of Month: 3
Number of Days: 0

2.6.2 Paving Phase Assumptions

- General Paving Information
Paving Area (ft^2): 63000

- Paving Default Settings
Default Settings Used: Yes
Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

Equipment Name	Number Of Equipment	Hours Per Day
Cement and Mortar Mixers Composite	4	6

Pavers Composite	1	7
Paving Equipment Composite	1	8
Rollers Composite	1	7
Tractors/Loaders/Backhoes Composite	1	7

- Vehicle Exhaust

Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	0	0	0	0	0	100.00	0

- Worker Trips

Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

	LDGV	LDGT	HDGV	LDDV	LDDT	HDDV	MC
POVs	50.00	50.00	0	0	0	0	0

2.6.3 Paving Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

Graders Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0757	0.0014	0.4155	0.5717	0.0191	0.0191	0.0068	132.91
Other Construction Equipment Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0483	0.0012	0.2497	0.3481	0.0091	0.0091	0.0043	122.61
Rubber Tired Dozers Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.1830	0.0024	1.2623	0.7077	0.0494	0.0494	0.0165	239.49
Tractors/Loaders/Backhoes Composite								
	VOC	**SO_x**	**NO_x**	**CO**	**PM 10**	**PM 2.5**	**CH_4**	**CO_2e**
Emission Factors	0.0364	0.0007	0.2127	0.3593	0.0080	0.0080	0.0032	66.879

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

	VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
LDGV	000.284	000.002	000.210	003.297	000.008	000.007		000.023	00334.752
LDGT	000.373	000.003	000.376	004.605	000.010	000.009		000.024	00432.145
HDGV	000.759	000.005	001.058	016.595	000.024	000.021		000.046	00793.273
LDDV	000.119	000.003	000.128	002.465	000.004	000.004		000.008	00323.662
LDDT	000.269	000.004	000.373	004.281	000.007	000.006		000.008	00460.243
HDDV	000.349	000.013	004.048	001.427	000.172	000.158		000.026	01481.655
MC	002.458	000.003	000.737	012.849	000.026	000.023		000.052	00398.228

2.6.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase

$CEE_{POL} = (NE * WD * H * EF_{POL}) / 2000$

CEE_{POL}: Construction Exhaust Emissions (TONs)
NE: Number of Equipment
WD: Number of Total Work Days (days)

H: Hours Worked per Day (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hour)
2000: Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase
$VMT_{VE} = PA * 0.25 * (1 / 27) * (1 / HC) * HT$

VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
PA: Paving Area (ft^2)
0.25: Thickness of Paving Area (ft)
(1 / 27): Conversion Factor cubic feet to cubic yards (1 yd^3 / 27 ft^3)
HC: Average Hauling Truck Capacity (yd^3)
(1 / HC): Conversion Factor cubic yards to trips (1 trip / HC yd^3)
HT: Average Hauling Truck Round Trip Commute (mile/trip)

$V_{POL} = (VMT_{VE} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Vehicle Exhaust On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Worker Trips Emissions per Phase
$VMT_{WT} = WD * WT * 1.25 * NE$

VMT_{WT}: Worker Trips Vehicle Miles Travel (miles)
WD: Number of Total Work Days (days)
WT: Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
NE: Number of Construction Equipment

$V_{POL} = (VMT_{WT} * 0.002205 * EF_{POL} * VM) / 2000$

V_{POL}: Vehicle Emissions (TONs)
VMT_{VE}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF_{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase
$VOC_P = (2.62 * PA) / 43560$

VOC_P: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft^2)
43560: Conversion Factor square feet to acre (43560 ft2 / $acre)^2$ / acre)

3. Heating

3.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Sangamon
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Heating of Buildings

- Activity Description:
Heating of Buildings - Net Chang in Area

- Activity Start Date
Start Month: 1
Start Year: 2024

- Activity End Date
Indefinite: Yes
End Month: N/A
End Year: N/A

- Activity Emissions:

Pollutant	Emissions Per Year (TONs)
VOC	0.000284
SO_x	0.000031
NO_x	0.005167
CO	0.004340
PM 10	0.000393

Pollutant	Emissions Per Year (TONs)
PM 2.5	0.000393
Pb	0.000000
NH_3	0.000000
CO_2e	6.2

3.2 Heating Assumptions

- Heating
Heating Calculation Type: Heat Energy Requirement Method

- Heat Energy Requirement Method
Area of floorspace to be heated (ft^2): 1000
Type of fuel: Natural Gas
Type of boiler/furnace: Industrial (10 - 250 MMBtu/hr)
Heat Value ($MMBtu/ft^3$): 0.00105
Energy Intensity ($MMBtu/ft^2$): 0.1085

- Default Settings Used: Yes

- Boiler/Furnace Usage
Operating Time Per Year (hours): 900 (default)

3.3 Heating Emission Factor(s)

- Heating Emission Factors (lb/1000000 scf)

VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
5.5	0.6	100	84	7.6	7.6			120390

3.4 Heating Formula(s)

- Heating Fuel Consumption ft^3 per Year
FC_{HER}= HA * EI / HV / 1000000

FC_{HER}: Fuel Consumption for Heat Energy Requirement Method
HA: Area of floorspace to be heated (ft^2)
EI: Energy Intensity Requirement ($MMBtu/ft^2$)
HV: Heat Value ($MMBTU/ft^3$)
1000000: Conversion Factor

- Heating Emissions per Year

$HE_{POL} = FC * EF_{POL} / 2000$

HE_{POL}: Heating Emission Emissions (TONs)
FC: Fuel Consumption
EF_{POL}: Emission Factor for Pollutant
2000: Conversion Factor pounds to tons

4. Emergency Generator

4.1 General Information & Timeline Assumptions

- Add or Remove Activity from Baseline? Add

- Activity Location
County: Sangamon
Regulatory Area(s): NOT IN A REGULATORY AREA

- Activity Title: Potential Back-Up Generators

- Activity Description:
Potential Back-Up Generators

- Activity Start Date
Start Month: 1
Start Year: 2024

- Activity End Date
Indefinite: Yes
End Month: N/A
End Year: N/A

- Activity Emissions:

Pollutant	Emissions Per Year (TONs)
VOC	0.028249
SO_x	0.023794
NO_x	0.116438
CO	0.077760
PM 10	0.025414

Pollutant	Emissions Per Year (TONs)
PM 2.5	0.025414
Pb	0.000000
NH_3	0.000000
CO_2e	13.5

4.2 Emergency Generator Assumptions

- Emergency Generator
Type of Fuel used in Emergency Generator: Diesel
Number of Emergency Generators: 5

- Default Settings Used: Yes

- Emergency Generators Consumption

Emergency Generator's Horsepower: 135 (default)
Average Operating Hours Per Year (hours): 30 (default)

4.3 Emergency Generator Emission Factor(s)

- Emergency Generators Emission Factor (lb/hp-hr)

VOC	SO_x	NO_x	CO	PM 10	PM 2.5	Pb	NH_3	CO_2e
0.00279	0.00235	0.0115	0.00768	0.00251	0.00251			1.33

4.4 Emergency Generator Formula(s)

- Emergency Generator Emissions per Year

$AE_{POL} = (NGEN * HP * OT * EF_{POL}) / 2000$

AE_{POL}: Activity Emissions (TONs per Year)
NGEN: Number of Emergency Generators
HP: Emergency Generator's Horsepower (hp)
OT: Average Operating Hours Per Year (hours)
EF_{POL}: Emission Factor for Pollutant (lb/hp-hr)

Appendix D

Species Observed During the 183 WG Flora and Fauna Surveys

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Table D-1. Plant Species Observed during the Flora Survey

Scientific Name	Common Name	Habitat Unit 1	Habitat Unit 2	Invasive	T&E
Acer platanoides	Norway Maple	X			
Acer rubrum	Red Maple	X	X		
Acer saccharinum	Silver Maple	X	X		
Acer saccharum	Sugar Maple	X			
Ambrosia artemisiifolia	Annual Ragweed	X			
Ampelopsis brevipedunculata	Amur Peppervine		X		
Andropogon sp.	Bluestem		X		
Arenaria serpyllifolia	Thyme-leaved Sandwort	X			
Betula nigra	River Birch	X			
Capsella bursa-pastoris	Shepard's Purse	X			
Carex pensylvanica	Pennsylvania Sedge	X			
Cerastium fontanum	Common Mouse-ear Chickweed	X			
Cercis canadensis	Eastern Redbud	X			
Chloris verticillata	Tumble Windmill Grass	X			
Cirsium sp.	Thistle		X		
Crataegus monogyna	Common Hawthorn		X		
Elaeagnus angustifolia	Russian Olive		X	X	
Eleocharis sp.	Spikerush		X		
Equisetum palustre	Marsh Horsetail		X		
Erysimum cheiranthoides	Wormseed Wallflower	X			
Euonymus fortunei	Winter Creeper	X		X	
Festuca trachyphylla	Hard Fescue	X	X		
Fraxinus americana	White Ash	X			
Fraxinus pennsylvanica	Green Ash	X			
Galium aparine	Stickywilly		X		
Geranium carolinianum	Carolina Geranium	X			
Geranium maculatum	Spotted Geranium		X		
Glechoma hederacea	Ground Ivy	X			
Hydrangea sp.	Hydrangea	X			
Lactuca serriola	Prickly Lettuce	X			
Lamium amplexicaule	Henbit Deadnettle	X			
Liquidambar styraciflua	Sweetgum	X			
Lonicera sp.	Honeysuckle	X			
Lonicera tatarica	Tatarian Honeysuckle		X	X	
Malus sp.	Apple	X			
Medicago lupulina	Black Medick	X			
Morus alba	White Mulberry	X			
Nepeta cataria	Catnip	X			

Scientific Name	Common Name	Habitat Unit 1	Habitat Unit 2	Invasive	T&E
Oxalis sp.	Woodsorrel	X			
Parthenocissus quinquefolia	Virginia Creeper	X			
Phalaris arundinacea	Reed Canarygrass		X	X	
Picea abies	Norway Spruce	X			
Pinus nigra	Austrian Pine	X			
Pinus strobus	Eastern White Pine	X			
Plantago lanceolata	Narrowleaf Plantain	X			
Plantago major	Common Plantain	X			
Poa pratensis	Kentucky bluegrass	X			
Prunus angustifolia	Chickasaw Plum	X			
Prunus serotina	Black Cherry		X		
Prunus sp.	Plum	X			
Prunus virginiana	Chokecherry		X		
Quercus imbricaria	Shingle Oak	X			
Quercus muehlenbergii	Chinquapin Oak	X			
Quercus palustris	Pin Oak	X			
Quercus rubra	Northern Red Oak	X			
Ranunculus abortivus	Littleleaf Buttercup	X			
Robinia pseudoacacia	Black Locust	X			
Salix nigra	Black Willow		X		
Senecio aureus	Golden Ragwort	X			
Setaria sp.	Bristlegrass		X		
Sisymbrium sp.	Hedgemustard	X			
Solidago sp.	Goldenrod	X	X		
Spirea japonica	Japanese Meadowsweet	X			
Stellaria media	Common Chickweed	X			
Taraxacum officinale	Common Dandelion	X			
Taxus sp.	Yew	X			
Toxicodendron radicans	Eastern Poison Ivy		X		
Trifolium pratense	Red Clover	X			
Trifolium repens	White Clover	X	X		
Typha angustifolia	Narrowleaf Cattail		X	X	
Ulmus pumila	Siberian Elm		X		
Veronica arvensis	Corn Speedwell	X			
Viburnum recognitum	Southern Arrowwood		X		
Vitis riparia	Riverbank Grape		X		

Table D-2. Wildlife Species Observed during the Fauna Survey

Group	Scientific Name	Common Name	Habitat Unit 1	Habitat Unit 2	Invasive	T&E
Amphibian	*Anaxyrus americanus*	American toad	X			
Bird	*Agelaius phoeniceus*	Red-winged blackbird	X	X		
Bird	*Branta canadensis*	Canada goose	X			
Bird	*Buteo jamaicensis*	Red-tailed hawk	X			
Bird	*Cardinalis*	Northern cardinal	X			
Bird	*Cathartes aura*	Turkey vulture	X			
Bird	*Chaetura pelagica*	Chimney swift	X			
Bird	*Charadruis coviferus*	Killdeer	X			
Bird	*Columba livia*	Rock pigeon	X			
Bird	*Contopus virens*	Eastern wood-pewee	X			
Bird	*Corvus brachyrhynchos*	American crow	X			
Bird	*Dumetella carolinensis*	Gray catbird	X			
Bird	*Falco sparverius*	American kestrel	X			
Bird	*Haemorhous mexicanus*	House finch	X			
Bird	*Hirundo rustica*	Barn swallow	X			
Bird	*Leiothlypis peregrina*	Tennessee warbler	X			
Bird	*Passer domesticus*	House sparrow	X			
Bird	*Quiscalus quiscula*	Common grackle	X			
Bird	*Setophaga castanea*	Bay-breasted warbler	X			
Bird	*Setophaga palmarum*	Palm warbler	X			
Bird	*Setophaga ruticilla*	American redstart	X			
Bird	*Setophaga striata*	Blackpoll warbler	X			
Bird	*Spinus tristis*	American goldfinch	X			
Bird	*Spizella passerina*	Chipping sparrow	X			
Bird	*Sturnella magna*	Eastern meadowlark	X			
Bird	*Sturnus vulgaris*	European starling	X			
Bird	*Troglodytes aedon*	House wren	X			
Bird	*Turdus migratorius*	American robin	X			
Bird	*Vireo gilvus*	Warbling vireo	X			
Bird	*Zenaida macoura*	Mourning dove	X			
Invertebrate	*Colias sp.*	Sulphur butterfly	X			
Invertebrate	*Vanessa atalanta*	Red admiral	X			
Mammal	*Sciurus sp.*	Ground squirrel	X			

Invasive Species Observed during the Flora and Fauna Surveys

Scientific Name	Common Name	Habitat Unit 1	Habitat Unit 2
Euonymus fortunei	Winter Creeper	X	
Typha angustifolia	Narrowleaf Cattail		X
Elaeagnus angustifolia	Russian Olive		X
Lonicera tatarica	Tatarian Honeysuckle		X
Phalaris arundinacea	Reed Canarygrass		X