
FINAL

ENVIRONMENTAL ASSESSMENT

FOR THE

HILLTOP COMMUNITY SERVICES DISTRICT

WRIGHT-PATTERSON AIR FORCE BASE, OHIO

MARCH 2012



88TH AIR BASE WING
ASSET MANAGEMENT DIVISION
PLANNING AND REAL ESTATE SECTION

Report Documentation Page		Form Approved OMB No. 0704-0188
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.		
1. REPORT DATE MAR 2012	2. REPORT TYPE	3. DATES COVERED 00-00-2012 to 00-00-2012
4. TITLE AND SUBTITLE Environmental Assessment for the Hilltop Community Services District Wight&#8208;Patterson Air Force Base, Ohio		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)	5d. PROJECT NUMBER	
	5e. TASK NUMBER	
	5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Labat Environmental, Inc,1406 Fort Crook Road South, Suite 101,Bellevue,NE,68005		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT WPAFB identified a need to serve the growing military and civilian community with convenient access to modern, consolidated facilities in Area B of the Base. The Proposed Action would meet that need by constructing a new Wright&#8208;Patt Credit Union branch, an Army&#8208;Air Force Exchange Service Exchange Express (convenience store, gas station, and fast food), a food service establishment (restaurant and pub), an undefined community facility, and parking. The site for the Proposed Action is the Hilltop area bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street. This environmental assessment evaluates and compares the potential for significant adverse impacts of implementing the Proposed Action, an alternative short&#8208;range plan that provides only for the Exchange Express and Credit Union, and from taking no action. The Proposed Action would have no impact to biological resources, cultural resources, environmental justice/protection of children, geology, land use, water resources, infrastructure, and visual resources. Temporary impacts that are not significant would occur to air quality, soils, noise, and transportation. Adherence to regulations and best management practices would ensure no significant impacts related to hazardous materials and waste management and to health and safety. There would be beneficial, yet negligible effects to the local economy and employment. The alternative short&#8208;range plan would have impacts similar to but generally less than the Proposed Action. The No Action alternative would have no impact. In accordance with Section 7 of the Endangered Species Act, WPAFB received concurrence from the U.S. Fish and Wildlife Service with the determination of no effect to listed species. WPAFB requested concurrence from the State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act with the determination of no adverse effect to historic properties. The SHPO concurred that the Exchange Express and Credit Union would have no adverse effect.		
15. SUBJECT TERMS		

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 105	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

**FINDING OF NO SIGNIFICANT IMPACT
FOR IMPLEMENTATION OF THE DEVELOPMENT PLAN FOR THE
HILLTOP COMMUNITY SERVICES DISTRICT
WRIGHT-PATTERSON AIR FORCE BASE, OHIO**

Pursuant to the Council on Environmental Quality regulations implementing the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] 1500-1508), Department of Defense Directive 6050.1, and Air Force regulation 32 CFR Part 989, the 88th Air Base Wing (ABW) Civil Engineer Directorate, Asset Management Division prepared an Environmental Assessment (EA) for the implementation of the development plan and construction of facilities for the Hilltop Community Service District at Wright-Patterson Air Force Base (WPAFB), Ohio. The EA is incorporated by reference into this finding.

Purpose and Need

The Base Realignment and Closure Act of 2005 (BRAC) selected WPAFB to host new missions resulting in the relocation of approximately 1,200 new military and civilian personnel positions to WPAFB in support of these missions. The Air Force Institute of Technology (AFIT) recently expanded its campus and the first of five phases of the Information Technology Complex (ITC) for the Aeronautical Systems Center (ASC) is near completion. The expansion of these organizations brought additional permanent and temporary personnel to WPAFB with the majority of the new personnel assignments near the "Hilltop" area in Area B of the base. Wright-Patterson AFB plans to create the Hilltop Community Services District (HCSD) and construct community service facilities to meet the needs of the personnel in this area.

Description of Proposed Action/Preferred Alternative

The Proposed Action would implement the long-range Hilltop Community Development Plan and construct community service facilities in Area B. The HCSD site is bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street, is approximately 13 acres, and is adequate space to develop the community service concept. Infrastructure and existing and planned access to the site are adequate to accommodate the facilities.

The HCSD includes construction and operation of separate facilities and demolition of an existing facility, F/20167. The planned facilities include an Army-Air Force Exchange Service (AAFES) Exchange Express convenience store/gas station with a Burger King restaurant, a full-service branch of the Wright-Patt Credit Union (WPCU), an 88th Force Support Squadron (88 FSS) food service establishment, a parking lot, and an undefined community facility or green space or a park where F/20167 currently stands.

Short-range Alternative

Although the HCSD site is of adequate size to accommodate four different facilities, the alternative short-range plan includes only construction of the AAFES Exchange Express and WPCU. Under this alternative, planning a larger food service establishment in the Hilltop area would be delayed to minimize competition with the Fly-Wright Club in F/20189 (Mojitos Burritos) and future planning for a community facility, open space or park, would not occur until F/20167 is demolished.

No Action Alternative

The community service facilities would not be constructed under this alternative. The site will remain as it is or be occupied in the future by other units. There will be no community facilities to provide convenient services for the increased concentration of personnel working in the Hilltop area of Area B.

Environmental Consequences of Proposed Action

Air Quality (EA Section 4.1): There would be short-term increases in fugitive dust and construction equipment emissions during construction. The construction and operation of the HCSD facilities would conform to the PM2.5 State Implementation Plan and there would be no impact on the ozone maintenance status.

Biological Resources (EA Section 4.2): There are no federally protected species known to occur in the project area; therefore, the action would not affect listed species. Improved or landscaped grounds would be disturbed with no impact to suitable wildlife habitat.

Cultural Resources (EA Section 4.3): There would be no disturbance to properties listed or eligible for listing on the National Register of Historic Places. The new facilities would not impact any building with contributing characteristics to Wright Field Historic District or Cold War significance because of distance and visibility.

Environmental Justice, Protection of Children (EA Section 3.0): Construction of the HCSD would not cause any adverse effects; therefore, any low income or minority populations or children that may reside in the vicinity of WPAFB would not be disproportionately or adversely affected by the action.

Geology and Soils (EA Section 4.4): There would be no excess fill excavated during site preparation and construction. Proper construction techniques will minimize soil erosion from wind and runoff.

Hazardous Materials and Waste Management (Section 4.5): Asbestos-containing materials and lead-based paint will require appropriate abatement prior to the demolition of F/20167. Minor amounts of hazardous waste generated during construction and hazardous materials used during operation will be handled in accordance with WPAFB specifications. Prior to construction, WPAFB will consult with Ohio Environmental Protection Agency to identify any mitigation actions necessary to maintain integrity of the adjacent earthfill disposal zone.

Land Use (EA Section 3.0): The planned land use is compatible with existing and future uses in the Hilltop area of Area B. The site is approved for use for community facilities in the WPAFB General Plan.

Noise (EA Section 4.6): There will be temporary construction noise and additional traffic (delivery trucks and customers) will generate negligible increases in noise during facility operations.

Health and Safety (EA Section 4.7): The action will not expose the public or Base population to any health or safety risks. Adherence to safety standards will prevent risks to safety or health of construction workers.

Socioeconomics (EA Section 4.8): Construction dollars and opportunities for additional employment will provide negligible, yet beneficial gains to the local economy.

Transportation and Infrastructure (EA Section 4.9): There will be temporary increases in construction traffic. Level of service at intersections will not be impacted. Recent upgrades to the utility infrastructure are adequate for the action.

Water Resources (EA Section 4.10): The action is not in the floodplain. Excavation will not intercept or disturb groundwater sources or surface water protection areas. Facility design will meet low impact development and storm water runoff requirements of Section 438 of the Energy Independence and Security Act (EISA).

Cumulative Impacts (EA Section 4.11): The action would not have cumulative impacts on biological resources, cultural resources, soils, hazardous materials, and safety and health beyond the boundaries of the area planned for the HCSD and the adjacent area. Construction emissions are short-term and with adequate dust control measures during and after construction, cumulative increases in PM2.5 emissions will not exceed National Ambient Air Quality Standards or affect the attainment designation in the area. The small amounts of hazardous waste generated by the action would be adequately managed by WPAFB in conjunction with other ongoing and future projects. Additional construction dollars and employment would be a beneficial cumulative impact on the local economy. The overlap of construction projects in the area would have temporary cumulative impacts on construction traffic and noise, but the extent of impact will depend on timing of the construction projects. The recent upgrades to expand utilities, widen roads, and add turning lanes to accommodate increased traffic for the BRAC expansion also considered future uses of the HCSD site. Compliance with storm water regulations and EISA requirements will ensure no cumulative impacts to water quality.

Mitigation Measures and Best Management Practices

The action will not cause any adverse impacts that must be mitigated. The adverse impacts associated with the action will occur during construction. Construction-related impacts are temporary, short-term, and cease after construction is complete. Such impacts are addressed by best management practices or permits required by federal, state, or local regulations to minimize or control the adverse effects of construction.

Agency Consultation

In accordance with NEPA, 42 U.S.C §4321 et seq. (1969), consultation was solicited with applicable Federal, state, and local agencies and Native American tribes were contacted for their input on potential environmental impacts likely to occur because of the proposed action. The correspondence from the agency consultation is included as Appendix A to the EA.

Public Notice

A public notice was posted in the *Dayton Daily News* on February 14, 2012 initiating the 30-day public review period. The public notice also appeared in *The Skywriter* (WPAFB newspaper) on February 17, 2012. The comment period was held from February 14, 2012 until March 14, 2012. The Draft Final EA and Draft FONSI were made available in the Fairborn Public Library. No comments were received during the public review period.

Finding of No Significant Impact (FONSI)

Based on my review of the facts and analysis contained in the EA, which is hereby incorporated by reference, I conclude that the Proposed Action will not have a significant impact on the natural or human environment. An environmental impact statement is not required for this action. This analysis fulfills the requirements of NEPA, 40 CFR 1500-1508, and 32 CFR 989.



DAVID A. PERKINS, P.E.

Director

Civil Engineer Directorate

Date: 16 Apr 12

THIS PAGE INTENTIONALLY LEFT BLANK

FINAL

ENVIRONMENTAL ASSESSMENT

FOR THE

HILLTOP COMMUNITY SERVICES DISTRICT

WRIGHT-PATTERSON AIR FORCE BASE, OHIO

Prepared for:

88th Air Base Wing
Asset Management Division
Planning and Real Estate Section

Prepared by:

Labat Environmental, Inc.
1406 Fort Crook Road South, Suite 101
Bellevue, NE 68005

Contract No. FA8601-11-F-0003
Task Order 0006

March 2012

COVER SHEET

Responsible Agency: U.S. Air Force, 88th Air Base Wing, Wight-Patterson Air Force Base (WPAFB), Ohio

Proposed Action: Implementation of the Hilltop Community Development Plan for construction of the Hilltop Community Services District at WPAFB

Point of Contact: Ms. Karen Beason, EIAP Program Manager
88 ABW/CEAOR, 1450 Littrell Road, WPAFB, OH 45433-5209
937-257-5899; karen.beason@wpafb.af.mil

Report Designation: Final Environmental Assessment

Abstract: WPAFB identified a need to serve the growing military and civilian community with convenient access to modern, consolidated facilities in Area B of the Base. The Proposed Action would meet that need by constructing a new Wright-Patt Credit Union branch, an Army-Air Force Exchange Service Exchange Express (convenience store, gas station, and fast food), a food service establishment (restaurant and pub), an undefined community facility, and parking. The site for the Proposed Action is the Hilltop area bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street. This environmental assessment evaluates and compares the potential for significant adverse impacts of implementing the Proposed Action, an alternative short-range plan that provides only for the Exchange Express and Credit Union, and from taking no action.

The Proposed Action would have no impact to biological resources, cultural resources, environmental justice/protection of children, geology, land use, water resources, infrastructure, and visual resources. Temporary impacts that are not significant would occur to air quality, soils, noise, and transportation. Adherence to regulations and best management practices would ensure no significant impacts related to hazardous materials and waste management and to health and safety. There would be beneficial, yet negligible effects to the local economy and employment.

The alternative short-range plan would have impacts similar to but generally less than the Proposed Action. The No Action alternative would have no impact.

In accordance with Section 7 of the Endangered Species Act, WPAFB received concurrence from the U.S. Fish and Wildlife Service with the determination of no effect to listed species. WPAFB requested concurrence from the State Historic Preservation Officer (SHPO) under Section 106 of the National Historic Preservation Act with the determination of no adverse effect to historic properties. The SHPO concurred that the Exchange Express and Credit Union would have no adverse effect.

TABLE OF CONTENTS

THIS PAGE INTENTIONALLY LEFT BLANK

CONTENTS

1.0	INTRODUCTION	1-1
1.1	Purpose and Need	1-1
1.2	Location	1-2
1.3	Summary of Environmental Study Requirements	1-2
1.3.1	National Environmental Policy Act	1-2
1.3.2	Interagency and Intergovernmental Coordination for Environmental Planning ..	1-5
1.3.3	Other Regulatory Requirements	1-5
1.4	Scope of Environmental Analysis	1-6
2.0	DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES	2-1
2.1	Proposed Action.....	2-1
2.2	Short-range Hilltop Community Development Plan Alternative	2-5
2.3	No Action Alternative	2-5
2.4	Alternatives Eliminated from Analysis.....	2-5
2.5	Summary of Impacts by Alternative	2-6
3.0	AFFECTED ENVIRONMENT	3-1
3.1	Air Quality	3-1
3.1.1	Definition of Resource	3-1
3.1.2	Existing Conditions.....	3-2
3.2	Biological Resources	3-2
3.2.1	Definition of Resource	3-2
3.2.2	Existing Conditions.....	3-2
3.3	Cultural Resources	3-4
3.3.1	Definition of Resource	3-4
3.3.2	Existing Conditions.....	3-4
3.4	Geology and Soils	3-6
3.4.1	Definition of Resource	3-6
3.4.2	Existing Conditions.....	3-6
3.5	Hazardous Materials and Waste Management	3-6
3.5.1	Definition of Resource	3-6
3.5.2	Existing Conditions.....	3-6
3.6	Noise	3-8
3.6.1	Definition of Resource	3-8
3.6.2	Existing Conditions.....	3-8

3.7	Health and Safety	3-9
3.7.1	Definition of Resource	3-9
3.7.2	Existing Conditions.....	3-9
3.8	Socioeconomics.....	3-10
3.8.1	Definition of Resource	3-10
3.8.2	Existing Conditions.....	3-10
3.9	Transportation and Infrastructure	3-10
3.9.1	Definition of Resource	3-10
3.9.2	Existing Conditions.....	3-10
3.10	Water Resources.....	3-11
3.10.1	Definition of Resource	3-11
3.10.2	Existing Conditions.....	3-12
4.0	ENVIRONMENTAL CONSEQUENCES	4-1
4.1	Air Quality	4-1
4.1.1	Evaluation Criteria.....	4-1
4.1.2	Proposed Action	4-1
4.1.3	Short-range Alternative	4-3
4.1.4	No Action Alternative	4-3
4.1.5	Mitigation and Best Management Practices.....	4-3
4.2	Biological Resources	4-3
4.2.1	Evaluation Criteria.....	4-3
4.2.2	Proposed Action	4-3
4.2.3	Short-range Alternative	4-4
4.2.4	No Action Alternative	4-4
4.2.5	Mitigation or Best Management Practices.....	4-4
4.3	Cultural Resources	4-4
4.3.1	Evaluation Criteria.....	4-4
4.3.2	Proposed Action	4-5
4.3.3	Short-range Alternative	4-6
4.3.4	No Action Alternative	4-7
4.3.5	Mitigation or Best Management Practices.....	4-7
4.4	Geology and Soils	4-7
4.4.1	Evaluation Criteria.....	4-7
4.4.2	Proposed Action	4-7

4.4.3	Short-range Alternative	4-8
4.4.4	No Action Alternative	4-8
4.4.5	Mitigation and Best Management Practices.....	4-8
4.5	Hazardous Materials and Waste	4-8
4.5.1	Evaluation Criteria.....	4-8
4.5.2	Proposed Action	4-8
4.5.3	Short-range Alternative	4-9
4.5.4	No Action Alternative	4-9
4.5.5	Mitigation and Best Management Practices.....	4-9
4.6	Noise.....	4-10
4.6.1	Evaluation Criteria.....	4-10
4.6.2	Proposed Action	4-10
4.6.3	Short-range Alternative	4-10
4.6.4	No Action Alternative	4-10
4.6.5	Mitigation and Best Management Practices.....	4-11
4.7	Health and Safety	4-11
4.7.1	Evaluation Criteria.....	4-11
4.7.2	Proposed Action	4-11
4.7.3	Short-range Alternative	4-11
4.7.4	No Action Alternative	4-12
4.7.5	Mitigation and Best Management Practices.....	4-12
4.8	Socioeconomics.....	4-12
4.8.1	Evaluation Criteria.....	4-12
4.8.2	Proposed Action	4-12
4.8.3	Short-range Alternative	4-12
4.8.4	No Action Alternative	4-13
4.8.5	Mitigation and Best Management Practices.....	4-13
4.9	Transportation and Infrastructure	4-13
4.9.1	Evaluation Criteria.....	4-13
4.9.2	Proposed Action	4-13
4.9.3	Short-range Alternative	4-14
4.9.4	No Action Alternative	4-14
4.9.5	Mitigation and Best Management Practices.....	4-14
4.10	Water Resources.....	4-14

4.10.1 Evaluation Criteria	4-14
4.10.2 Proposed Action	4-14
4.10.3 Short-range Alternative	4-15
4.10.4 No Action Alternative	4-15
4.10.5 Mitigation and Best Management Practices	4-15
4.11 Cumulative Impacts	4-15
4.12 Irreversible or Irretrievable Commitments of Resources	4-17
4.13 Relationship between Short-term Uses of the Environment and the Maintenance and Enhancement of Long-term Productivity	4-17
5.0 LIST OF PREPARERS	5-1
6.0 PERSONS CONTACTED	6-1
7.0 REFERENCES	7-1

FIGURES

Figure 1-1: Location Map	1-3
Figure 1-2: Hilltop Community Development Location and Adjacent Complexes	1-4
Figure 2-1: Hilltop Community Development Plan Facilities	2-2
Figure 3-1: Biological Resources Near Hilltop Community Area	3-3
Figure 3-2: Cultural Resources Near Hilltop Community Area	3-5
Figure 3-3: OU9 Sites Near Hilltop Community Facilities	3-7
Figure 3-4: Location of Hilltop Community Facilities within Noise Contours	3-9
Figure 4-1: South End of Facility 20167 from Q Street	4-6

TABLES

Table 1-1: Relevant Federal Environmental Statutes, Regulations, and Executive Orders	1-5
Table 2-1: Summary of Impacts by Alternative	2-6
Table 3-1: Resources Not Analyzed in Detail	3-1
Table 3-2: Level of Service at Intersections BRAC Infrastructure Improvements	3-11
Table 4-1: Estimated Emissions of Particulate Matter	4-2

APPENDICES

Appendix A Interagency and Intergovernmental Coordination for Environmental Planning

ACRONYMS AND ABBREVIATIONS

AAFES	Army-Air Force Exchange Service
ABW	Air Base Wing
AFIT	Air Force Institute of Technology
AFRL	Air Force Research Laboratory
AICUZ	Air Installation Compatible Use Zone
APE	Area of Potential Effect
Base	Wright-Patterson Air Force Base
BRAC	Base Realignment and Closure
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	carbon monoxide
dB	decibel
dBA	A-weighted decibel
DNL	day-night average sound level
DoD	Department of Defense
DoDI	Department of Defense Instruction
EA	environmental assessment
EFDZ	earthfill disposal zone
EIAP	Environmental Impact Analysis Process
EIS	environmental impact statement
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	U.S. Environmental Protection Agency
F	Facility
°F	degrees Fahrenheit
FONSI	finding of no significant impact
FSS	Force Support Squadron
GHG	greenhouse gas
HCSD	Hilltop Community Services District
HPW	Human Performance Wing
IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
ITC	Information Technology Complex
LBP	lead-based paint

LEED	Leadership in Energy and Environmental Design
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places (also, National Register)
O ₃	ozone
ODNR	Ohio Department of Natural Resources
OSHA	Occupational Safety and Health Act
OU	operable unit
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
SCS	Soil Conservation Service
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
tpy	tons per year
US	United States
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
VOC	volatile organic compound
WPAFB	Wright-Patterson Air Force Base
WPCU	Wright-Patt Credit Union

INTRODUCTION

THIS PAGE INTENTIONALLY LEFT BLANK

1.0 INTRODUCTION

Wright-Patterson Air Force Base (WPAFB or Base), Ohio was selected to host new missions in aerospace, medicine research, human performance, and sensors research as directed by the Base Realignment and Closure Act of 2005 (BRAC). Approximately 1,200 new military and civilian personnel positions have been or will be relocated to WPAFB to support these missions. The Air Force Institute of Technology (AFIT) recently expanded the campus and the first of five phases of the Information Technology Complex (ITC) for the Aeronautical Systems Center is scheduled for completion in April 2012. The expansion of these organizations brought additional permanent and temporary personnel to WPAFB with the majority of the new personnel assignments near the “Hilltop” area in Area B of the Base.

WPAFB is proposing to implement the community development plan for the Hilltop Community Services District (HCSD) to expand community service facilities in Area B of the Base. The HCSD would accommodate increases in units and personnel due to BRAC, the recent expansion at the AFIT campus, and the construction of the ITC. The long-range HCSD plan would include a new Wright-Patt Credit Union (WPCU) branch, an Army-Air Force Exchange Service (AAFES) Exchange Express (convenience store, gas station, and fast food), a food service establishment (restaurant and pub), an undefined community facility, and parking.

This environmental assessment (EA) evaluates the potential for environmental impacts related to the construction and operation of facilities proposed for the Hilltop community area. In addition, this EA identifies regulatory requirements and mitigation measures to minimize the potential environmental consequences associated with the proposal.

1.1 Purpose and Need

An important function of the 88th Air Base Wing (88 ABW) is the morale, welfare, and recreation of the personnel stationed at WPAFB, and fostering a sense of community among the personnel that live and work on the Base. The purpose of the Hilltop Community Development Plan and the construction of the HCSD are to expand and improve shopping, dining, banking, and other services on WPAFB. The proposed location for the HCSD is central to the new construction in Area B for the relocated BRAC missions and to existing large complexes of buildings with many employees.

An existing WPCU branch is located inside Facility 20016 (F/20016) near the north perimeter of Area B. This location is a congested area of the Base with limited and inconvenient parking for credit union customers, no drive-through banking service, and no options to expand banking services. Partial demolition of F/20016 proposed for the near future requires relocation of some tenants, including the WPCU.

AAFES provides fuel dispensing services, food and dining, and retail shopping at the Kittyhawk Center, which is located in Area A. There is no Exchange Express convenience store or gas station in Area B for convenient access to buy gas, food, or other incidentals. Personnel from Area B have to travel to Area A to the Kittyhawk Center or off Base to acquire similar services, which increases traffic during peak hours and creates inefficiencies during the workday.

Food service in Area B is limited to the Fly-Wright Club in F/20189 (Mojitos Burritos), small canteens and mobile vendors near the AFIT campus and Air Force Research Laboratory (AFRL) complex, and other small vendors located west of the Hilltop area. Personnel must travel outside the secure perimeter of

Area B or off Base to access a variety of food services, which also increases traffic during peak hours and creates inefficiencies during the workday.

The purpose and need for the HCSD is to serve the growing military community of WPAFB with modern, consolidated facilities with convenient access to desired community services. Authorized customers could obtain multiple services at the consolidated Hilltop location. The proximity to the AFIT campus and AFRL complexes would improve access to food and banking services and would encourage walking to these services rather than driving, thereby supporting a healthier lifestyle for WPAFB employees. This location and consolidated facilities would reduce the need to travel off Base, allow customers to make a single stop for multiple services, and provide a desirable convenience not currently available to Area B personnel and military families living nearby.

1.2 Location

WPAFB is located in Greene and Montgomery counties in the State of Ohio. The cities of Fairborn, Beavercreek, Riverside, and Dayton border the Base (Figure 1-1). The Base includes both Wright and Patterson Fields, which were originally Wilbur Wright Field and Fairfield Aviation General Supply Depot. Ohio State Route 444 divides WPAFB into Area A (Patterson Field) to the north and Area B (Wright Field) to the south.

The proposed location of the HCSD is within the developed part of Area B. The facilities would be near the AFIT campus, ITC, AFRL, and 711th Human Performance Wing (711 HPW) (Figure 1-2). The proposed location covers approximately 13 acres bound by 10th Street to the south, Hobson Way to the east, 8th Street to the north, and Skyline Drive to the west.

1.3 Summary of Environmental Study Requirements

This section provides a brief summary of the National Environmental Policy Act (NEPA) (42 United States Code [USC] 4321 et seq.), which is the guiding statute for preparing this EA, and other regulatory requirements that apply to the Air Force's Environmental Impact Analysis Process (EIAP).

1.3.1 *National Environmental Policy Act*

NEPA is a mandate for federal agencies to utilize a systematic, interdisciplinary approach to environmental planning and decision-making. The intent of NEPA is to minimize adverse impacts to the human environment through available information, evaluating alternative actions, and implementing mitigation measures. The Council on Environmental Quality (CEQ) issued regulations (40 Code of Federal Regulations [CFR] 1500-1508) to implement NEPA that address both the content and procedural aspects of the environmental analysis. This EA is a concise public document intended to provide agency decision makers with sufficient information and analysis to make a finding of no significant impact (FONSI) or decide an environmental impact statement (EIS) is necessary to address significant impacts.

The Air Force regulations for the EIAP (32 CFR 989) provide procedures for the Air Force to achieve and maintain compliance with NEPA and CEQ regulations.

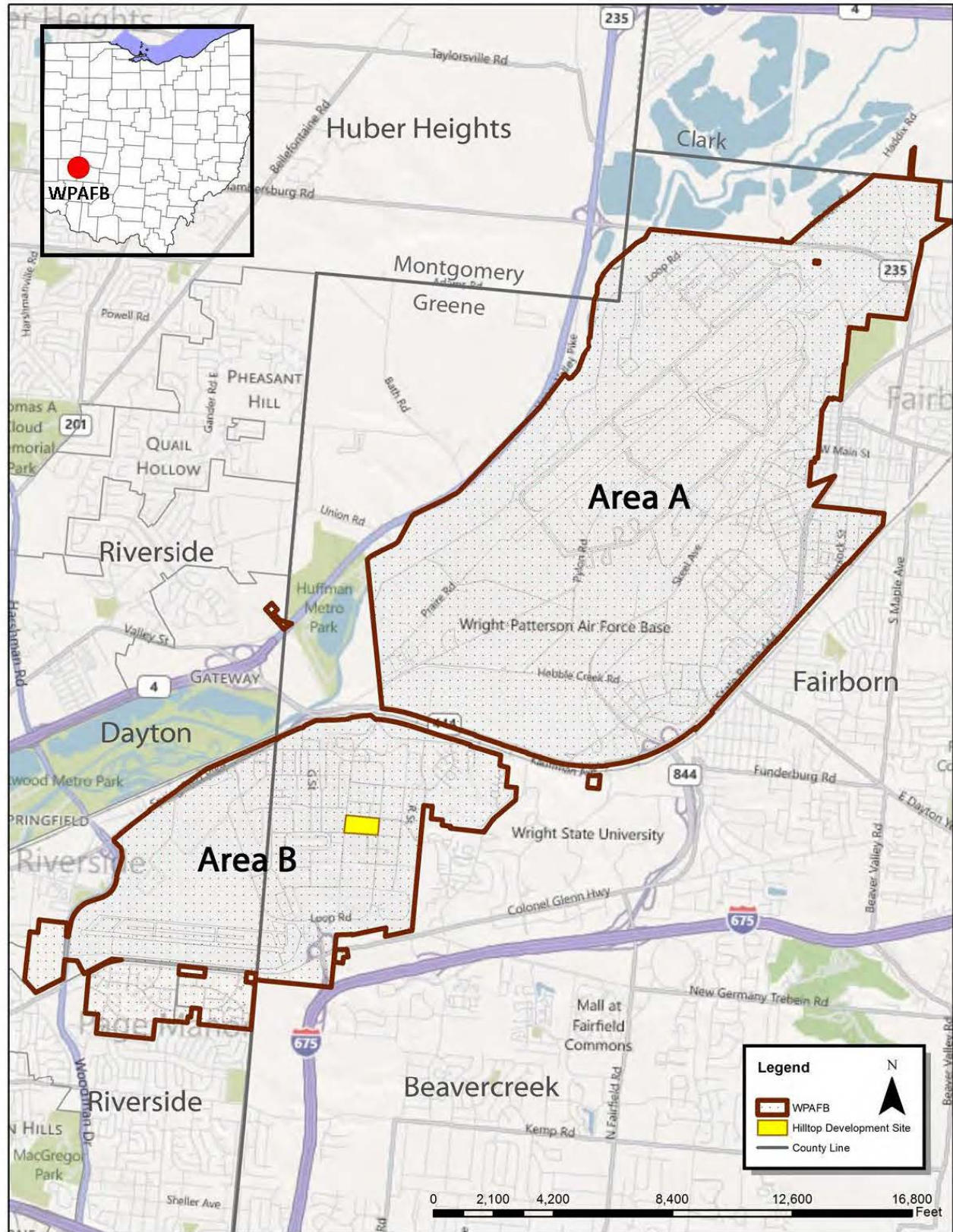


Figure 1-1: Location Map

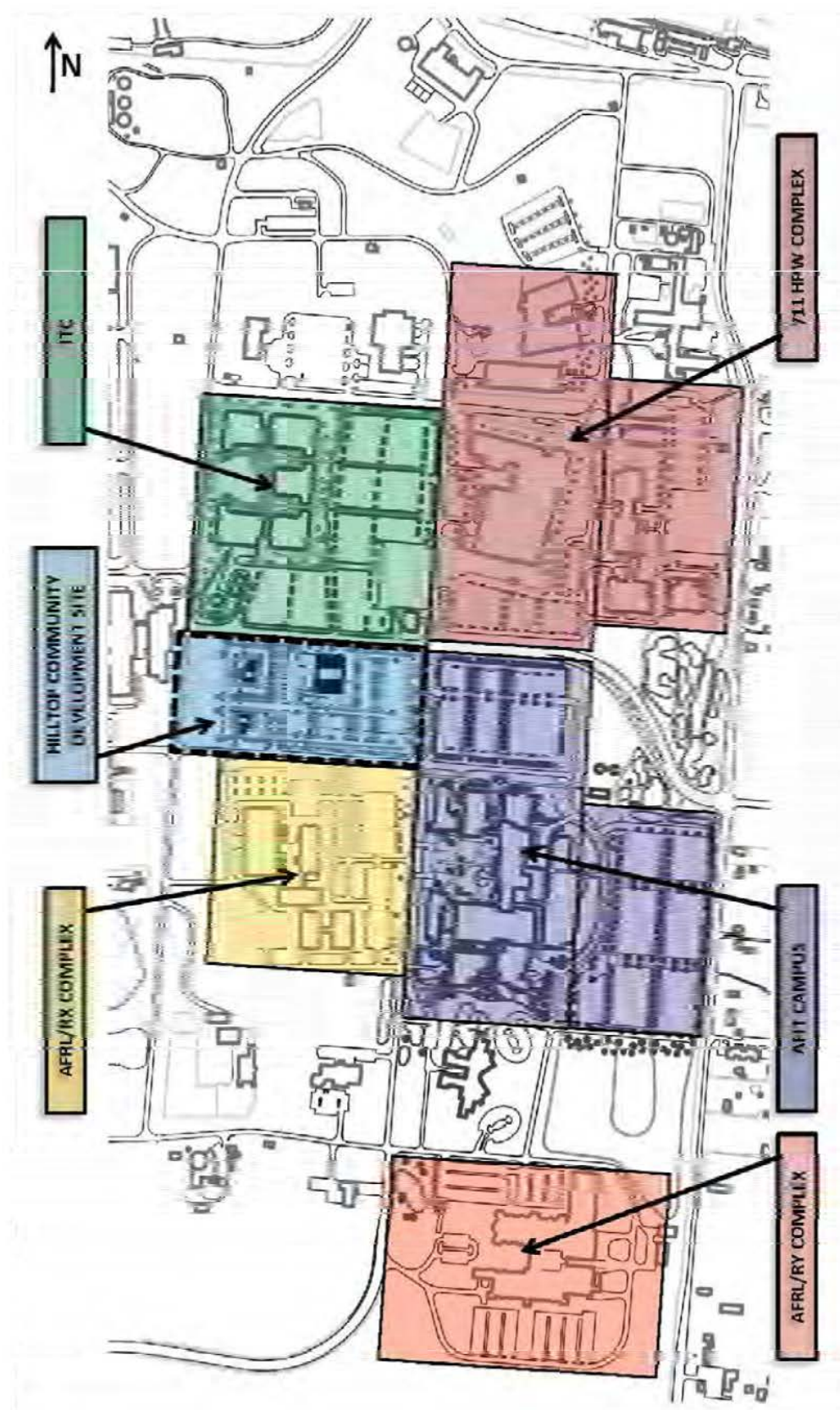


Figure 1-2: Hilltop Community Development Location and Adjacent Complexes

1.3.2 Interagency and Intergovernmental Coordination for Environmental Planning

Air Force Interagency and Intergovernmental Coordination for Environmental Planning (IICEP) implements the Department of Defense (DoD) policy for reciprocal exchange of program and planning information with state, regional, and local agencies concerned with environmental planning. The IICEP process aids in identifying potential problems that may interfere with accomplishing the Air Force mission. Similar to the scoping (information-gathering) process of the CEQ regulations, IICEP promotes intergovernmental notification of proposed Air Force actions prior to making any detailed statement of environmental impacts. The correspondence received from the government agencies consulted on the Proposed Action is in Appendix A.

1.3.3 Other Regulatory Requirements

Table 1-1 lists the major environmental statutes, regulations, Executive Orders (EO), and Department of Defense Instructions (DoDI) that may be applicable to implementing the Proposed Action.

Table 1-1: Relevant Federal Environmental Statutes, Regulations, and Executive Orders

Resource	Regulatory Requirements
Air	• Clean Air Act (42 USC 7401 et seq.; 40 CFR 50-99)
Water	• Clean Water Act (33 USC 1251 et seq.; 40 CFR 112-133, 404-471) • National Pollutant Discharge Elimination System (40 CFR 122) • Energy Independence and Security Act, Section 438 Stormwater Runoff (42 USC 17094)
Biological Resources	• Endangered Species Act (16 USC 1531-1543; 50 CFR 400-499) • Migratory Bird Treaty Act (16 USC 703 et. seq.) • Bald and Golden Eagle Protection Act (16 USC 668)
Wetlands and Floodplains	• Clean Water Act, Section 404 (33 CFR 320-332) • Protection of Wetlands (EO 11990) • Floodplain Management (EO 11988)
Cultural Resources	• National Historic Preservation Act (16 USC 470 et seq.; 36 CFR 800) • Protection and Enhancement of Cultural Environment (EO 11593) • Indian Sacred Sites (EO 13007) • American Indian Religious Freedom Act (42 USC 1996) • Antiquities Act (16 USC 431-433) • Archaeological Resources Protection Act (16 USC 470a-11) • Native American Graves Protection and Repatriation Act (25 USC 3001)
Solid/Hazardous Materials and Waste	• Resource Conservation and Recovery Act (42 USC 6901; 40 CFR 243-282) • Comprehensive Environmental Response, Compensation and Liability Act (42 USC 9601; 40 CFR 300-310) • Toxic Substances Control Act (15 USC 2601 et seq.; 40 CFR 702-799)
Environmental Justice	• Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations (EO 12898) • Protection of Children from Environmental Health Risks and Safety Risks (EO 13045)
Safety	• Occupational Safety and Health Act (29 USC 651 et seq.; 29 CFR 1910)
Energy	• Strengthening Federal Environmental, Energy, and Transportation Management (EO 13423)

1.4 Scope of Environmental Analysis

The scope of the environmental analysis is based on the environmental resources and issues potentially affected by the Proposed Action and alternatives. The CEQ regulations and guidance and Air Force EIAP regulations emphasize that an EA should be a concise document; thus, this EA focuses on those resources or issues that are appropriate for evaluation context with the Proposed Action and alternatives.

Internal scoping discussions with WPAFB staff identified environmental, social, and economic resources that are either present in or otherwise considered important to the project area. Scoping discussions and consultations with federal, state, and local resource agencies facilitate an efficient environmental analysis process by identifying resources and issues for full consideration and analysis in the EA, while devoting less attention and time to issues that are not relevant or affected by the Proposed Action and alternatives.

An initial scoping meeting was conducted in August 2011. During this meeting and through subsequent conversations with WPAFB staff, and from review of existing data, the following environmental resources and issues were discussed:

- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazardous Materials and Waste/Environmental Restoration
- Land Use
- Noise and Air Installation Compatible Use Zone (AICUZ)
- Occupational Safety and Health
- Socioeconomics, Environmental Justice
- Transportation and Infrastructure
- Visual Resources
- Water Resources

The resources or issues identified as potentially being affected by the Proposed Action are air quality, biological resources, cultural resources, hazardous materials and waste/environmental restoration sites, soils, noise, occupational safety and health, socioeconomics, transportation, and water resources. These resources are therefore described in Chapter 3 Affected Environment, and the potential impacts to these resources and any necessary mitigation measures are evaluated in Chapter 4 Environmental Consequences.

Resources not in the project area or not affected by the Proposed Action or alternatives are not described in detail in Chapters 3 or 4. As determined through the scoping process with WPAFB staff and consultation with agencies, the issues not evaluated in detail are land use, environmental justice, and visual resources. Table 3-1 at the beginning of Chapter 3 provides the rationale for excluding detailed analysis of these issues.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

THIS PAGE INTENTIONALLY LEFT BLANK

2.0 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

This chapter describes the Proposed Action and alternatives considered for the HCSD facilities, including the No Action Alternative. The No Action Alternative is the baseline to which the Proposed Action and other alternatives are compared.

The Air Force must analyze a reasonable range of alternatives to the Proposed Action. Reasonable alternatives are those considered feasible or practical to implement from a technical, environmental, and economic standpoint, and for the most part, meet the purpose and need for the project. In accordance with 32 CFR 989.8(c), developing selection criteria is an effective mechanism for identifying, comparing, and evaluating reasonable alternatives. Criteria are developed consistent with the purpose and need for the action and to address pertinent environmental, safety, and health factors. The criteria used to identify reasonable alternatives and locations for evaluation in this EA included:

Consistent with Mission of Providing for Morale, Welfare, and Recreation. A mission of the Air Force is to provide for the morale, welfare, and recreation of military personnel and their families. To support this mission, WPAFB should have the appropriate area and infrastructure to construct, operate, and maintain adequate community service facilities to accommodate the Base population.

Adequate Space and Infrastructure to Accommodate New Facilities. The site should provide adequate developable land to accommodate the project. It should accommodate the recommended footprint or square footage necessary to supplement or replace community service facilities that are currently inadequate or substandard. The site should also provide safe and efficient connectivity to existing infrastructure and avoid known areas of environmental regulatory concern.

Compatible with the WPAFB General Plan. The site should be compatible with long-range development plans of the Base and consider the functional relationships that support the WPAFB missions.

Access and Accessibility to Users. The site should provide safe vehicular and pedestrian access and have minimal impacts on existing traffic flow at WPAFB. The site should be conveniently accessible to the greatest number of Base personnel.

2.1 Proposed Action

The Proposed Action is the implementation of the long-range Hilltop Community Development Plan and construction of the community service facilities in Area B, as shown in Figure 2-1. The site bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street was evaluated against the selection criteria described above and was determined to be the preferred location for community service facilities. This Hilltop site is approximately 13 acres and is adequate space to develop the community service concept. Infrastructure and existing and planned access to the site are adequate to accommodate the proposed facilities. The site is central to new construction in Area B for the relocated BRAC missions and to existing large complexes of buildings (see Figure 1-2) with many employees, and therefore, supports the community services mission by being conveniently accessible to a large Base population. The proposed use of the site is consistent with the General Plan and an update to the plan approving the site use was completed.

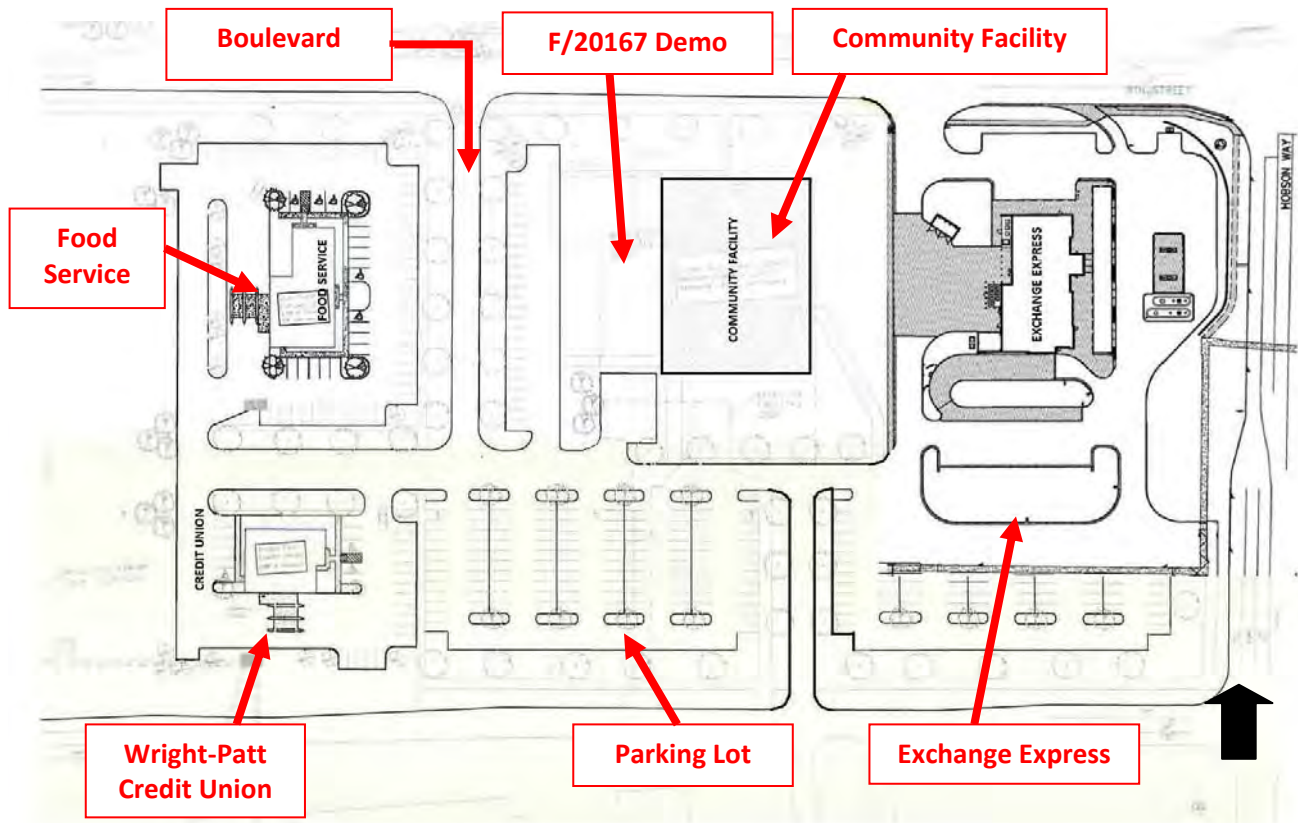


Figure 2-1: Hilltop Community Development Plan Facilities

The long-range Hilltop Community Development Plan includes construction and operation of separate facilities and demolition of an existing facility (F/20167). The planned facilities include an AAFES Exchange Express convenience store, a branch of the Wright-Patt Credit Union, an 88th Force Support Squadron (88 FSS) food service establishment, a parking lot, and an undefined community facility or green space or a park where F/20167 currently stands.

The main ingress and egress for the area would be a north-south boulevard from 8th Street to 10th Street. The boulevard would divide the area into functional sites and aid with traffic control. The boulevard would align with an entrance to the ITC under construction north of 8th Street. Two additional entry points and one exit for the Exchange Express are planned on 8th Street in the northeast corner of the area. Traffic controls would consist of stop signs for traffic exiting the Hilltop Community area.

The Exchange Express convenience store and WPCU are currently programmed for design and construction over the next two years. As funding becomes available in later years, other types of facilities would be identified and programmed for design and construction in the available space remaining within the Hilltop Community area. The available design details for each facility are described below.

AAFES Exchange Express: The facility would encompass approximately 2.4 acres of the Hilltop site and include a convenience store, gas dispensing pumps and fuel storage tanks, and a Burger King restaurant with drive-through services. Construction would consist of a reinforced concrete slab and footings, steel framing, mechanical systems, electrical systems, life safety systems, pavement, parking, sidewalks, curbs

and gutters, storm drainage, other site improvements, and landscaping. The facility would connect to existing WPAFB utilities and infrastructure, and the roof and exterior finishes would match WPAFB design standards. The design of the new facility would be LEED (Leadership in Energy and Environmental Design) Silver Certified.

Site preparation would include demolishing the existing parking lot paving, parking bumpers, concrete steps, walkways, and storm sewer catch basins plus extensive re-grading for proper drainage and accessibility. Excess fill from leveling the site and excavating for the underground fuel storage tanks would be used to construct retaining walls along the northeast corner of the property.

The existing central high-pressure steam heating system tunnel located on the south and part of the east sides of the site would not be an obstacle for the development. Natural gas would be extended approximately 1,000 feet from the existing main located on Skyline Drive.

The site would be designed to reduce impervious cover and promote infiltration of storm water runoff. Two sand filter basins, a minimum of 500 to 750 square feet, would be constructed along the east and south sides of the site to capture and control the release of storm water.

The facility footprint would be approximately 2.4 acres, which includes 7,463 square feet for the building, 1,456 square feet for the canopy and gas pumps, and the remaining area for outside improvements (pavement, parking, sidewalks, retaining walls, storm water controls, and landscaping). There are 50 parking spaces planned for the Exchange Express and a drive-through lane for the Burger King restaurant.

The Exchange Express would include two gas pumps with four nozzles to dispense three grades of unleaded fuel. Fuel would be dispensed from two double-wall, fiberglass underground storage tanks (USTs) of 15,000-gallon and 12,000-gallon capacity. A canopy would be installed over the gas pumps. Stage II vapor recovery equipment would be installed on the nozzles and Stage I vapor recovery on the USTs.

Approximately 20 people would be required to staff the Exchange Express, including seven full-time, four part-time, and nine intermittent employees.

Construction would begin the second half of calendar year 2012 and take approximately nine months to finish.

Wright-Patt Credit Union: WPAFB would grant a license to Wright-Patt Credit Union, Inc. to use 0.84 acre of land to construct, operate, and maintain a full service credit union. The facility would be sited in the southwest corner of the Hilltop Community area and would replace the existing branch located in F/20016.

Construction would consist of a reinforced concrete slab and footings, steel framing, mechanical systems, electrical systems, life safety systems, parking, sidewalks, curbs and gutters, storm drainage, other site improvements, and landscaping. The facility would connect to existing WPAFB utilities and infrastructure, and the roof and exterior finishes would match WPAFB design standards.

The existing central high-pressure steam heating system tunnel located on the south side of the site would not be an obstacle in accessing and developing the site. Natural gas would likely be extended from the existing main located on Skyline Drive.

The site footprint would be approximately 35,000 square feet (less than one acre), which includes approximately 3,900 square feet for the building and the remaining area for approximately 28 parking spaces and other outside improvements (access road, drive-through lanes, sidewalks, storm water control, and landscaping). There are 2 covered lanes planned for the south side of the building for drive-through services.

The WPCU employees at the current location would continue to staff the new branch. Because the planned facility would be larger, additional full-time and part-time employees are likely needed to service more customers. Since the size and scope of this facility are still being refined, an estimate of additional employees is not yet available; however, the number is not expected to be large.

Final design of the WPCU should be completed in 2012 with construction completed in 2013 or 2014.

Food Service Establishment: The food service facility would probably be a dining and drinking establishment with banquet and meeting room space. The facility would be sited on approximately 1.5 acres within the Hilltop Community area to the north of the WPCU proposed location. Construction would likely consist of a reinforced concrete slab and footings, steel framing, mechanical systems, electrical systems, life safety systems, parking, sidewalks, curbs and gutters, storm drainage, other site improvements, and landscaping. The facility would connect to existing WPAFB utilities and infrastructure, and the roof and exterior finishes would match WPAFB design standards.

The facility would be approximately 10,000 square feet and the remaining footprint would be outside improvements (parking, sidewalks, storm water controls, and landscaping). Approximately 70 parking spaces would be planned around the facility and a drive-through lane for the restaurant could be included in the design and layout on the site.

Because this would be a new establishment and not a replacement or expansion of a similar facility on Base, new full-time and part-time employees would be required to staff the operations. An estimate of additional employees is not yet available; however, the number is not expected to be large.

Facility 20167 Demolition: F/20167 currently occupies the center portion of the Hilltop Community area. The east side of the building is vacant and approximately 180 AFRL Contracting personnel occupy the west side. The building demolition is planned in two to five years depending on funding and relocation of the occupants. Approximately 2.5 acres would be disturbed for demolition.

Undefined Community Facility, Open Space, or Park: After demolition of F/20167, the site would be available for construction of another community facility or for use as open space or a park. The type of use for this site would depend on future community service needs. Approximately 2.5 acres would be available for a new facility or park. The design and construction of a facility would adhere to applicable Air Force standards and other requirements for regulatory compliance, including storm water control.

Parking Lot: A parking lot to accommodate the full build-out of the HCSD would be designed and constructed on approximately 2 acres. This parking lot would be in addition to the parking spaces proposed for the separate facilities (Exchange Express, WPCU, and food service establishment). The parking lot would replace the existing parking in the southeast corner and extend west across the site to the WPCU. The design would adhere to applicable Air Force standards and would include appropriate low impact development practices and storm water runoff controls.

2.2 Short-range Hilltop Community Development Plan Alternative

As described in Section 2.1, the developed part of Area B was evaluated and determined to be the preferred location for a community development concept. Although the site is of adequate size to accommodate four different facilities, an alternative short-range plan would include only the AAFES Exchange Express and WPCU. The Exchange Express and WPCU are currently programmed and funded for design and construction within the next two years. The design and construction details of these facilities would be the same as described under the Proposed Action. The Fly-Wright Club was recently remodeled. Under the short-range plan alternative, planning a larger food service establishment in the same area would be delayed to minimize competition with the Fly-Wright Club. Future planning for a community facility, open space, or park would not occur until F/20167 is demolished.

2.3 No Action Alternative

The No Action Alternative is the baseline to which the impacts of other alternatives are compared. The CEQ and Air Force regulations implementing NEPA require the evaluation of taking no action to allow decision makers to compare the impacts of approving or not approving the project. The No Action Alternative may not meet the purpose and need for the project, but it must be described and analyzed in the EA.

Under the No Action Alternative, the Hilltop Community Development Plan would not be implemented and the community service facilities would not be constructed for the HCSD. The Hilltop site would remain as it is today or be occupied in the future by other units. There would be no community facilities to provide convenient services for the increased concentration of personnel on the AFIT campus and working in the AFRL complexes surrounding the Hilltop area. An increased number of Area B personnel would travel off Base to acquire the types of services (food, gas, incidentals, banking) provided by the Proposed Action, increasing workday inefficiencies. The WPCU in Area B would no longer be available after the existing location is vacated because of partial demolition of F/20016. The current location at F/20016 would hinder expansion opportunities to serve additional WPAFB personnel. Existing full-service banking locations are not within convenient walking distance to a large portion of the Base population and thus access to these services would continue primarily by driving.

Existing community service facilities at Kittyhawk Center in Area A could experience increased competition if commercial establishments located off WPAFB are more convenient to use, and could thereby lose the economic opportunity of serving additional patrons. Incoming military and civilian personnel and their families from BRAC relocations would place greater demand on existing community services, resulting in possible negative customer service experiences.

2.4 Alternatives Eliminated from Analysis

Alternatives were evaluated against the purpose and need for the HCSD and on the ability to meet the selection criteria described at the beginning of this chapter. The alternatives were also evaluated against pertinent environmental, safety, and health factors. Alternatives that did not meet the purpose and need for the project, did not accommodate most site selection criteria, or resulted in a fatal flaw because of environmental, safety, or health factors were eliminated from further consideration and analysis of impacts.

Other locations in Area B of the Base were evaluated for separately siting an AAFES Exchange Express and a new Wright-Patt Credit Union. Alternative locations for an Exchange Express focused in the area

along Hobson Way from 10th Street to Gate 22B. One feasible location was the southwest corner of Hobson Way and 5th Street. This location was open and available for development, well positioned to serve the AFIT campus, AFRL complexes, ITC, and the new BRAC facilities, and would serve personnel outbound through Gate 19B. A location on Loop Road near the flightline in Area B was evaluated for siting the WPCU. This location is in the historic district of the Base near F/20006 and not conveniently located to the greater Base population.

Constructing the AAFES Exchange Express and Wright-Patt Credit Union in separate locations did not fulfill the selection criteria and were therefore eliminated from further analysis. These separate other locations would not meet the purpose and need of providing a community service concept within Area B of WPAFB. The available space identified for either facility would only accommodate the Exchange Express or the WPCU and no other community facilities such as a food service establishment. The General Plan identifies other uses for these locations and historic issues would affect siting and design along the flightline. Possible other separate locations would be farther removed from the concentration of military and civilian personnel working in the complexes surrounding the Hilltop area, thereby limiting convenient accessibility. For these reasons, separate other locations were not analyzed in detail as an alternative in this EA.

2.5 Summary of Impacts by Alternative

Table 2-1 compares the potential impacts of resources by alternative. The information is summarized from Chapters 3 and 4.

Table 2-1: Summary of Impacts by Alternative

Resource	Proposed Action	Short-range Alternative	No Action
Air Quality	Short-term increases in fugitive dust and construction equipment emissions during construction; conforms to PM2.5 State Implementation Plan; no impact on ozone maintenance status	Similar to Proposed Action; less construction emissions because of fewer facilities	No impact
Biological Resources	No effect to listed species; disturbance to improved/landscaped grounds; no impact to suitable wildlife habitat	Similar to Proposed Action; less ground disturbance because of fewer facilities	No impact
Cultural Resources	No disturbance to listed properties; no impacts on contributing characteristics to Wright Field Historic District or Cold War significance because of distance and visibility	Similar to Proposed Action	No impact
Environmental Justice, Protection of Children	No impact	No impact	No impact
Geology and Soils	No excess fill for site preparation and construction; proper construction techniques would minimize soil erosion from wind and runoff	Similar to Proposed Action; less soil disturbance because of fewer facilities	No impact

Resource	Proposed Action	Short-range Alternative	No Action
Hazardous Materials and Waste	Asbestos-containing materials and lead-based paint would require appropriate abatement; minor amounts of hazardous waste generated during construction and hazardous materials used during operation would be handled in accordance with site policies; consult with Ohio EPA to identify any mitigation actions necessary to maintain integrity of adjacent earthfill disposal zone prior to construction	Similar to Proposed Action except asbestos-containing materials or lead-based paint would not be an issue because of no building demolition	No impact
Land Use	No impact	No impact	No impact
Noise	Temporary construction noise; additional traffic (delivery trucks and customers) noise during facility operations	Similar to Proposed Action; less temporary construction noise because of fewer facilities	No impact
Health and Safety	Adherence to standards would prevent risks to safety or health	Similar to Proposed Action	No impact
Socioeconomics	Negligible yet beneficial impact to local economy and employment	Similar to Proposed Action; less construction dollars and employees because of fewer facilities	No impact
Transportation and Infrastructure	Temporary increases in construction traffic; no impact to level of service at intersections; no impact to utility infrastructure	Similar to Proposed Action; less traffic because of fewer facilities	No impact
Water Resources	No impact to floodplain, groundwater, or surface water; design would meet EISA requirements for storm water runoff	Same as Proposed Action	No impact
Visual Resources	No impact	No impact	No impact

THIS PAGE INTENTIONALLY LEFT BLANK

AFFECTED ENVIRONMENT

THIS PAGE INTENTIONALLY LEFT BLANK

3.0 AFFECTED ENVIRONMENT

This chapter describes the existing environment in the project area. The project area is defined as the location proposed for the HCSD and the surrounding area that would likely be affected by implementing the Hilltop Community Development Plan. The existing environmental conditions serve as a baseline for identifying and evaluating potential environmental changes attributable to the Proposed Action and alternatives.

Following CEQ regulations and guidelines, and Air Force EIAP regulations, the description of the affected environment focuses on those environmental, social, and economic resources and issues potentially subject to impacts. The scope of the environmental analysis, as discussed in Section 1.4, identified resources for detailed evaluation; those affected resources are described in this chapter. Although all resource areas and issues were initially considered, some were eliminated from detailed examination because they were not in the project area or not affected by the Proposed Action or alternatives. The resources not evaluated and the rationale for excluding them are provided in Table 3-1.

Table 3-1: Resources Not Analyzed in Detail

Resource	Justification
Environmental Justice, Protection of Children	WPAFB must identify and address disproportionately high and adverse effects of projects on the health or environment of minority and low-income populations (EO 12898) and disproportionately high and adverse human health or environmental effects of its activities on children (EO 13045). Construction of the HCSD would not cause any unmitigated adverse effects; therefore, any low income or minority populations or children that may reside in the vicinity of WPAFB would not be disproportionately or adversely affected by the Proposed Action.
Land Use	The site for the HCSD is the developed part of Area B that is surrounded by occupied buildings and active construction of new buildings. Half of the existing site is occupied by a parking lot and F/20167; the other half is maintained lawn with a sidewalk, vents, and concrete vaults associated with the underground high-pressure steam line. The proposed land use would be compatible with existing and future uses in that part of Area B. The site is approved for use for community facilities in the WPAFB General Plan.
Visual Resources	The site for the HCSD is located in the developed part of Area B that is surrounded by occupied buildings and active construction of new buildings. The design of the proposed facilities would be compatible with adjacent buildings and include landscaping. There is no unique visual quality of the surrounding area affected by implementing the HCSD.

3.1 Air Quality

3.1.1 Definition of Resource

The National Ambient Air Quality Standards (NAAQS), established by the U.S. Environmental Protection Agency (EPA) and adopted by the Ohio EPA Division of Air Pollution Control, define the maximum allowable concentrations of pollutants that may be reached but not exceeded within a given time period. The standards were selected to protect human health with a reasonable margin of safety. The ambient standards are for the criteria pollutants of carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), lead, particulate matter (PM), and sulfur dioxide (SO₂). Particulate matter is further defined by size – less

than 10 microns (or micrometers) in diameter (PM₁₀) and smaller than 2.5 microns in diameter (PM_{2.5}). While ozone is a regulated pollutant, it is not emitted directly from sources but is formed by a combination of nitrogen oxides (NO_x) and volatile organic compounds (VOCs) reacting with sunlight in the atmosphere. Exceeding concentration levels within a given time period is a violation of the NAAQS and constitutes nonattainment of the criteria. A federally enforceable State Implementation Plan (SIP) is required for areas of nonattainment and an EPA approved maintenance plan is required when an area is reclassified from nonattainment to attainment.

3.1.2 Existing Conditions

Climate

The climate in this region of Ohio is continental, characterized by a relatively large range of seasonal variability with cold winters and warm, humid summers. Climate data from a weather station in Greene County show January is the coldest month with a normal mean temperature of 28 degrees Fahrenheit (°F) and July is the warmest month with a normal mean temperature of 73°F (MRCC, 2011a). Average annual precipitation is 40 inches with February the driest month and May the wettest (MRCC, 2011b).

Local Air Quality

WPAFB is located in the Dayton-Springfield Air Quality Control Region, which is in attainment of the NAAQS except for the annual PM_{2.5} standard (EPA, 2011). The EPA has recently proposed reclassifying the area to attainment status for PM_{2.5} (Federal Register, 2011). The SIP for PM_{2.5} was revised in 2010 and remains in effect. The area is currently in attainment of the 8-hour ozone standard with a maintenance plan in effect until 2017.

Emissions at Installation

WPAFB is classified as a major source of air pollution under Title V of the Clean Air Act. A major source has the potential to emit more than 100 tons per year (tpy) of any one criteria pollutant, 10 tpy of a hazardous air pollutant, or 25 tpy of any combination of hazardous air pollutants. WPAFB operates several hundred air emission sources, listed as both insignificant and significant sources in the Title V permit. A renewal application submitted in July 2008 is still pending (Erdei, 2011).

WPAFB reports greenhouse gas (GHG) emissions. In 2010, direct GHG emissions from onsite combustion or release totaled 222,100 metric tons CO₂, which was mostly from the coal boilers (WPAFB, 2010).

3.2 Biological Resources

3.2.1 Definition of Resource

Biological resources include native or naturalized plants and animals and the habitats, such as wetlands, woodlands, and grasslands in which they exist. Sensitive and protected biological resources include plant and animal species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS) or by the Ohio Department of Natural Resources (ODNR).

3.2.2 Existing Conditions

The site for the HCSD is the developed part of Area B and is surrounded by occupied buildings and active construction of new buildings. The site is an area designated by WPAFB as “improved grounds”, which consist of turf grass and plant materials that require intensive maintenance. There are no wetlands or

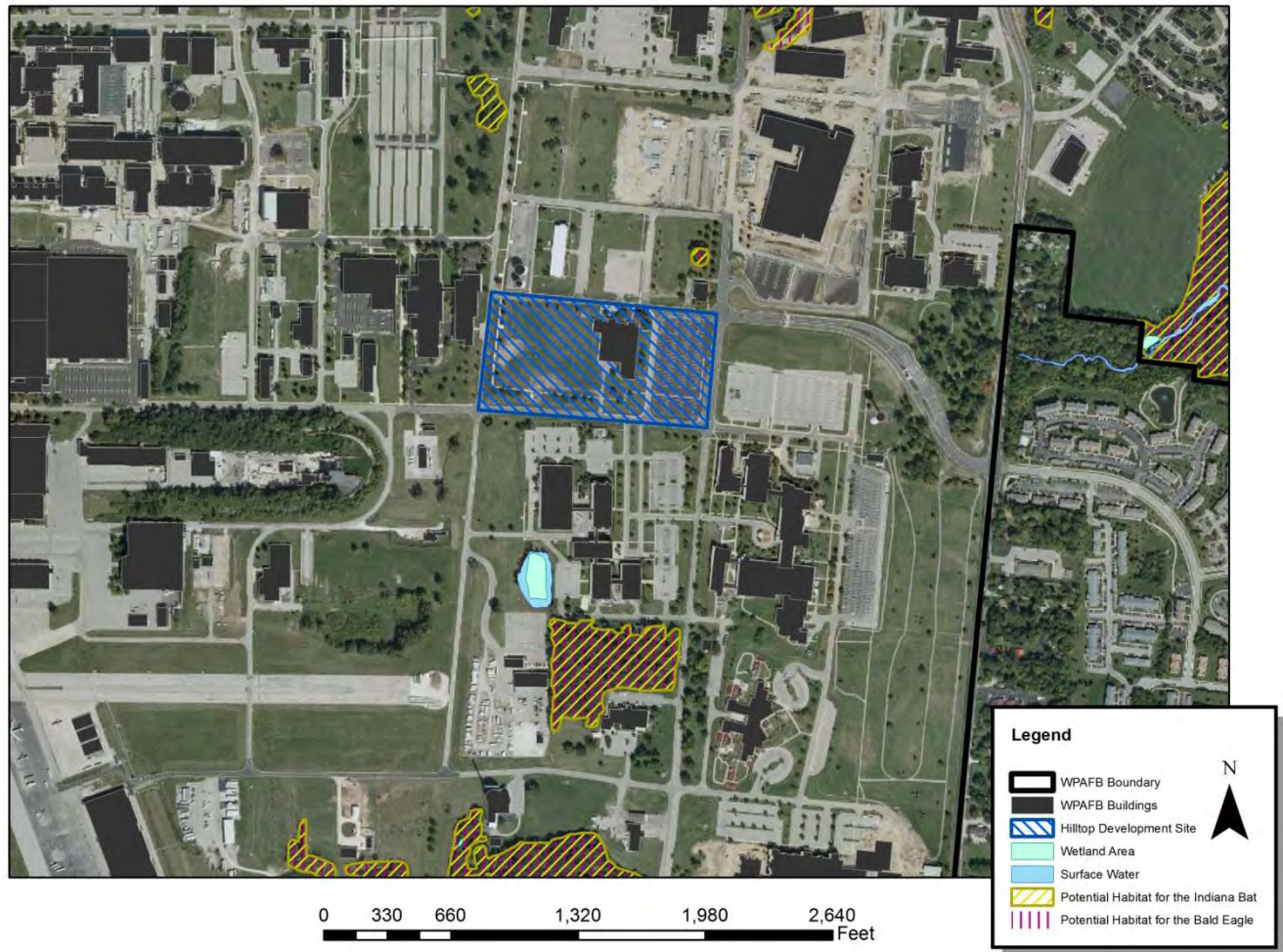


Figure 3-1: Biological Resources Near Hilltop Community Area

wooded areas on the site. A ½ acre isolated wetland and a wooded lot of approximately 5 acres are located more than 900 and 1,200 feet, respectively, south of the project area (see Figure 3-1).

The maintained lawn on the west half and the shade trees that line the sidewalk may provide feeding and nesting sites for urban wildlife, such as the eastern fox squirrel (*Sciurus carolinensis*), eastern chipmunk (*Tamias striatus*), deer mouse (*Peromyscus maniculata*), and songbirds, such as sparrows, meadowlarks, mourning doves, and robins. A flock of resident geese (*Branta canadensis*) is observed periodically feeding and resting in the area.

Two federally listed as endangered species — Indiana bat (*Myotis sodalis*) and clubshell mussel (*Pleurobema clava*) — are known to or may occur on WPAFB. The eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*), a federal candidate species, may also occur on WPAFB. Based on the Integrated Natural Resources Management Plan (INRMP) (WPAFB, 2007) and a review of the July 2011 list of protected species for Greene and Montgomery counties (USFWS, 2011), no other threatened, endangered, proposed, or candidate species are known to or may occur in the project area. No critical habitat has been designated or proposed for WPAFB (WPAFB, 2007). In addition to the information from the INRMP, a search of the Biodiversity Database maintained by ODNR indicated the Indiana bat (federal

endangered, state endangered) and eastern massasauga rattlesnake (federal candidate, state endangered) have occurred within a one-mile radius of the Hilltop area.

The bald eagle (*Haliaeetus leucocephalus*) is no longer federally listed as an endangered species, but it does receive special protection under other federal laws including the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. Bald eagles could potentially roost in any suitable tree on WPAFB but would most likely be found near open water bodies. Although there are no records of bald eagles nesting on WPAFB, a pair of eagles began nesting near the Mad River in 2009 at the City of Dayton well field east of Harshman Road. That nest site is approximately 3 miles east of the Hilltop area.

3.3 Cultural Resources

3.3.1 Definition of Resource

Cultural resources are defined as properties that possess significant information in areas relating to archaeology, architecture, engineering, history, and culture. Cultural resources can be prehistoric or historic sites where physical evidence gives clues to human activity. Archaeological resources are often related to Native American activity and burial customs. Architectural resources refer to the buildings, structures, landscapes, and objects that are of aesthetic and/or historical significance.

Authorized by the National Historic Preservation Act (NHPA) of 1966, the National Register of Historic Places provides the standards and methods for identifying and evaluating cultural resources by age, integrity, and significance. A property must maintain an adequate level of historical integrity for inclusion in the National Register. Some level of integrity must be present in terms of location, design, setting, materials, workmanship, association, and feeling. A minimum 50-year threshold is required for properties considered to be of historic age.

3.3.2 Existing Conditions

WPAFB has participated in ongoing compliance with Section 110 of the NHPA by identifying and evaluating cultural resources as part of the Integrated Cultural Resources Management Plan (ICRMP).

WPAFB has worked closely with and received concurrence from the Ohio State Historic Preservation Office (SHPO) in updating the ICRMP. As new undertakings, construction projects, and ground disturbances are proposed, the cultural resources inventory within the ICRMP is referenced to minimize or avoid adverse effects to identified resources in accordance with Section 106 of the NHPA.

Numerous cultural resources are located on WPAFB, including at least 256 eligible and/or contributing historic buildings, 17 identified prehistoric sites, 17 historical sites, 5 historic landscapes, and 3 historic districts.

Area B contains many identified historic buildings, most of which comprise the Wright Field Historic District. There are 84 buildings, 15 structures, and 2 contributing objects that make up the District with construction dates between 1925 and 1958. The easternmost boundary for the District runs parallel along Skyline Drive as shown on Figure 3-2.

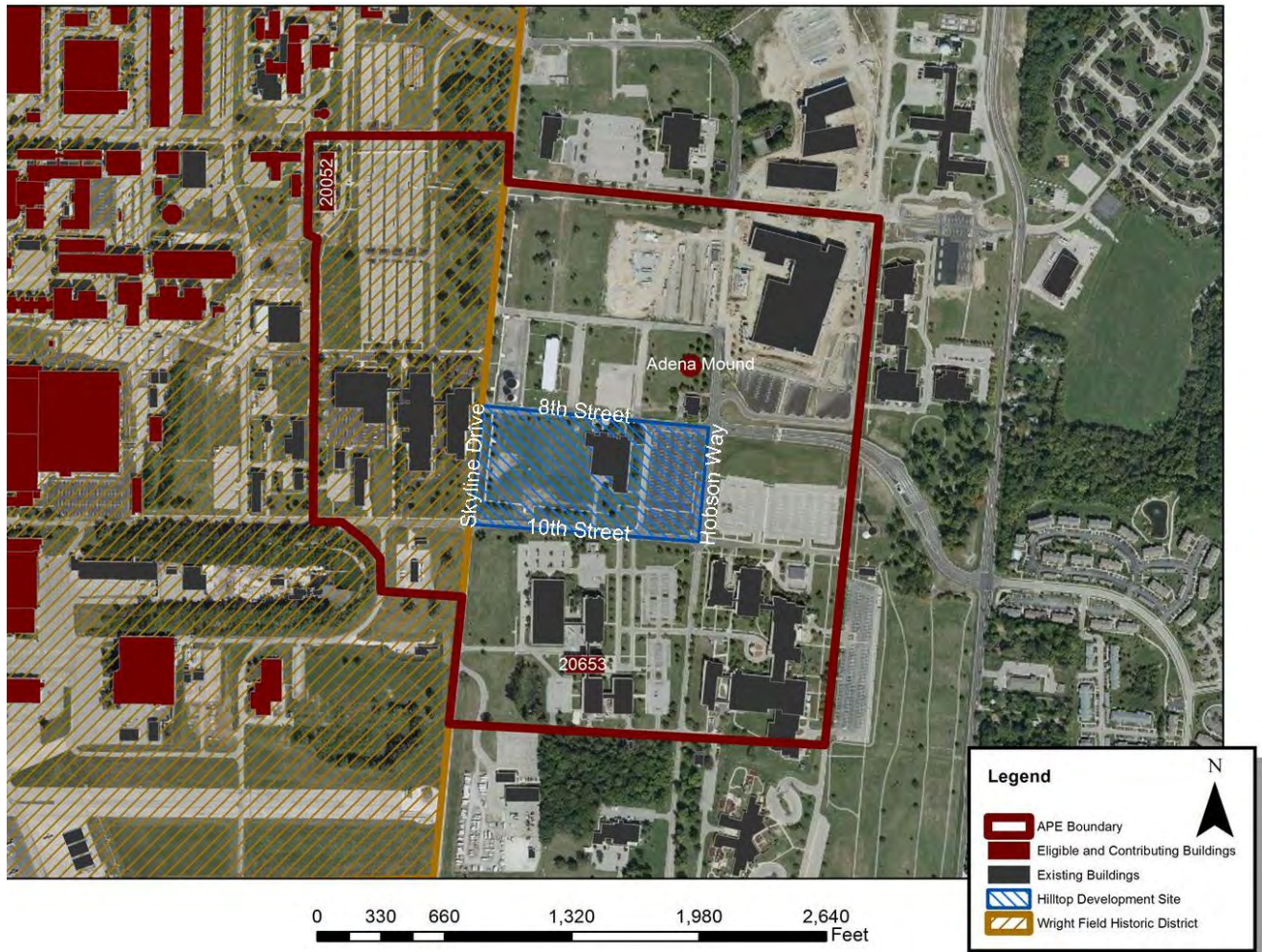


Figure 3-2: Cultural Resources Near Hilltop Community Area

WPAFB has a rich history in aviation and military innovation. As buildings at WPAFB reach the 50-year mark, their integrity and significance for eligibility for the National Register are evaluated. WPAFB has evaluated all facilities constructed before 1962 and is in the process of evaluating facilities constructed between 1962 and 1966. Facilities at WPAFB that are directly associated with national efforts throughout the Cold War are given special consideration to identify those properties that have achieved significance within the past 50 years. Currently, there are 17 facilities identified as individually eligible for the National Register for Cold War Significance.

An Area of Potential Effect (APE) is established to evaluate the potential impact of an undertaking on adjacent cultural resources. The cultural resources located within the APE for the proposed HCSD include, Adena Mound (33GR31) which is a prehistoric burial site listed on the National Register; Aircraft Laboratory Building B (F/20052) which is a contributing structure to Wright Field Historic District; Manufacturing Technology Laboratory (F/20653) which is a facility eligible for National Register because of Cold War era significance; and a pre-historic campsite (33GR798) which is ineligible for the National Register.

3.4 Geology and Soils

3.4.1 Definition of Resource

Geological resources include the physical surface and subsurface features including landforms, topography, soils, minerals, and hazards.

3.4.2 Existing Conditions

Surface soil at WPAFB formed on unconsolidated deposits, primarily alluvium, glacial outwash, glacial till, and loess (WPAFB, 2007). Development and substantial earthmoving activities have altered the natural soil characteristics at WPAFB, making precise classifications difficult. The Natural Resource Conservation Service (NRCS), previously Soil Conservation Service (SCS), mapped most of WPAFB as urban land complexes. Small areas of residual soils over limestone and shale bedrock exist on steep slopes in the eastern portion of Area B.

The two dominant soil types over the project area are Miamian-Urban land complex, rolling (MrC) and undulating (MrB). These soils are loess over loamy till with slopes from 2 to 12 percent. The soils are well-drained with moderate erosion potential (SCS, 1978).

There are no unique geological features in the project area.

3.5 Hazardous Materials and Waste Management

3.5.1 Definition of Resource

In general, both hazardous materials and wastes are substances that, if released or improperly managed, may present a danger to public health or safety or to the environment because of their quantity, concentration, or characteristics.

3.5.2 Existing Conditions

The 88 ABW maintains a Hazardous Waste Management Plan that prescribes the roles and responsibilities of WPAFB staff for hazardous waste inventory, analysis, procedures, training, emergency response, and pollution prevention. The plan establishes the procedures to comply with applicable federal, state, and local regulations for hazardous waste management.

The Environmental Restoration Program requires WPAFB to identify, investigate, and clean up hazardous waste disposal or release sites. WPAFB entered into a Consent Order with the Ohio EPA and was placed on the National Priorities List in 1989. Confirmed or suspected sites requiring investigation and characterization are grouped into 11 geographically based operable units (OUs). The HCSD area falls within OU9, which is a collection of 11 discrete sites, nine of which have been used for disposal of earthfill materials. Earthfill Disposal Zones (EFDZs) 2 through 10 were included in OU9 because of the potential for disposal of hazardous chemical materials during or subsequent to fill placement. Figure 3-3 shows the location of OU9 in reference to the Hilltop area.

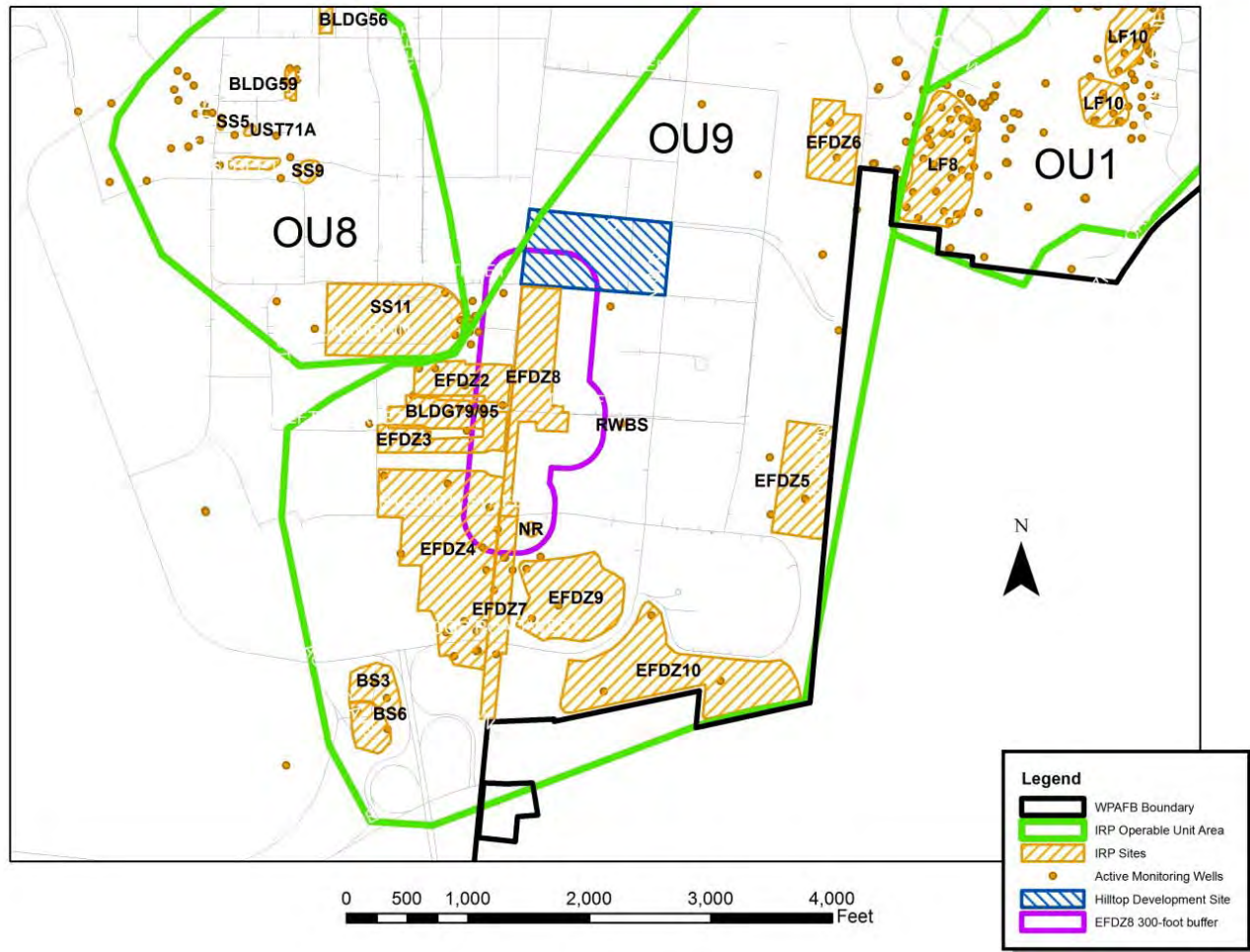


Figure 3-3: OU9 Sites Near Hilltop Community Facilities

EFDZ 8 is the nearest site located to the south of the proposed HCSD. This EFDZ is subject to use restrictions. Digging, construction, or other soil disturbance is allowable after approval by WPAFB environmental restoration staff and Ohio EPA.

AFI 32-1052, *Facility Asbestos Management* (March 22, 1994) incorporates by reference applicable regulatory requirements on asbestos management and requires bases to develop an Asbestos Management Plan to maintain a permanent record of the status and condition of asbestos-containing materials (ACM) in installation facilities. The 88 ABW Civil Engineering staff has developed standard contract specifications for the removal and disposal of ACM.

The *Air Force Policy and Guidance on Lead-Based Paint in Facilities* (April 2, 1993) establishes lead-based paint (LBP) management processes at Air Force installations for identifying, evaluating, managing, and abating LBP hazards. More than 95 percent of existing WPAFB facilities were constructed prior to 1980 and contain LBP, although the concentrations are generally below action thresholds. However, it is assumed that lead exists in all buildings until sampled and tested.

Various types of solid wastes are generated by the numerous tenants and organizations located at WPAFB. Solid wastes generally include household trash, office products and trash, packing materials, construction debris.

F/20167, located in the project area, generates solid waste from its operations as an administrative office facility. After recycling efforts are applied, approximately 50 to 75 percent of the municipal solid waste generated at WPAFB is disposed mostly via landfill with a small fraction incinerated. Solid waste accumulated in containers is hauled by contractor to an off Base landfill (Stony Hollow Landfill) in Dayton.

3.6 Noise

3.6.1 Definition of Resource

Noise is unwanted sound that interferes with normal activities or in some way reduces the quality of the environment. Response to noise varies according to its type, its perceived importance, its appropriateness in the setting and time of day, and the sensitivity of the individual receptor.

A decibel (dB) is the physical unit commonly used to describe sound levels. Sound measurement is further refined by using an "A-weighted" decibel (dBA) scale that more closely describes how a person perceives sound. People tend to exhibit differing sensitivity to noises generated by time of day, with noise at night being more annoying than daytime noise. Therefore, a day-night average noise level (DNL) is used to determine whether noise would be perceived adversely. Cumulative noise levels resulting from multiple single events, such as aircraft overflights are used to characterize community noise effects from aircraft or the airfield environment, and are measured in the DNL metric.

Noise-sensitive receptors are defined as the occupants of a facility or a location where a state of quietness is a basis for use or where excessive noise interferes with the normal use of the facility or location. Typical noise-sensitive receptors include schools, hospitals, churches, libraries, and homes. Some species of wildlife may also be sensitive to noise.

3.6.2 Existing Conditions

Compatible land use on and around WPAFB relative to noise is guided by the Air Installation Compatible Use Zone (AICUZ) program. The AICUZ program establishes noise contours that range from 65 to 85 dBA to identify noise impacts from aircraft operations.

The goal of AICUZ is to promote compatible land use on and off Base to minimize noise complaints and safety hazards. Noise generated by aircraft approaching and leaving the main runway at Patterson Field has been modeled based on the type and number of aircraft. The DNL is mapped as contours in increments of 5 dB, radiating from the main airfield. The airfield near the museum in Area B is so infrequently used that it was not included in the model. A recent noise analysis for WPAFB used a scenario that allowed for potential increases in operations of different aircraft and basing additional flying missions at WPAFB. The noise contours that resulted from that analysis captured the maximum feasible operational capacity of the airfield and support activities. As shown in Figure 3-4, the HCSD is located within the 70-75 dBA noise contour. The existing WPCU in F/20016 is located closer to the flightline in the 75-80 dBA noise contour.

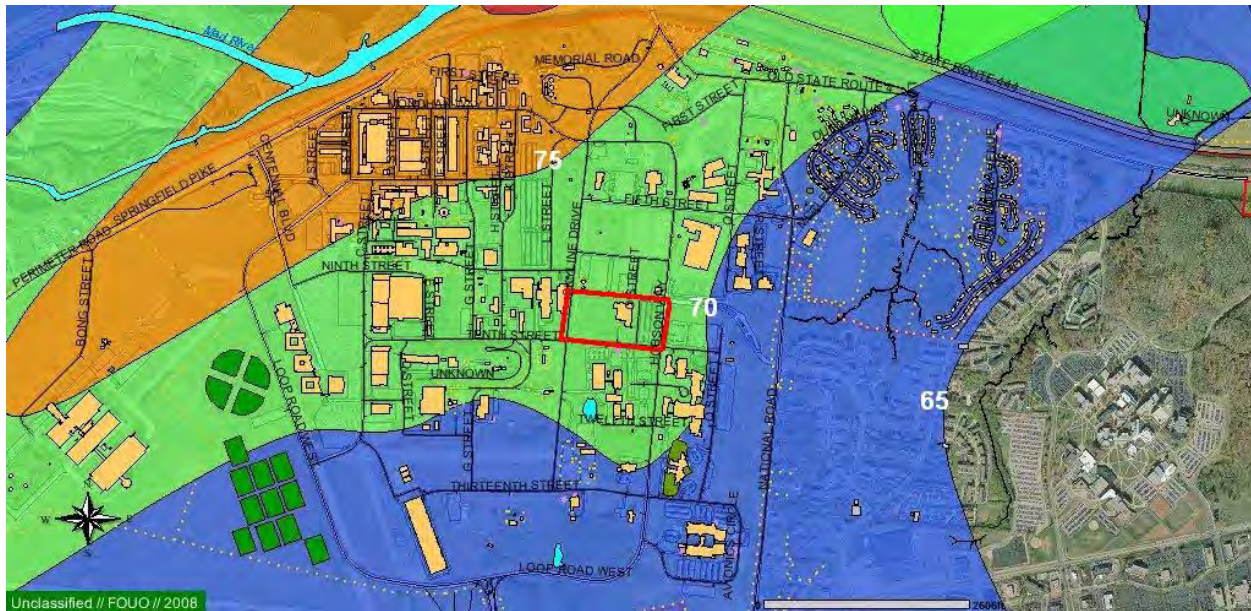


Figure 3-4: Location of Hilltop Community Facilities within Noise Contours

Surrounding the HCSD is ongoing construction of BRAC facilities and additions and improvements to other complexes, including the AFIT campus and the different AFRL complexes. This construction activity is expected to continue for approximately two more years. Primary access to Gate 19B, the closest base entry to the HCSD, is by Hobson Way and 8th Street, thereby generating more vehicle noise in the HCSD area at peak commute times. Other than classroom buildings on the AFIT campus, there are no noise-sensitive receptors located in the vicinity of the Hilltop area.

3.7 Health and Safety

3.7.1 Definition of Resource

Risks to health and safety of workers and the public can include construction hazards, physical and chemical hazards, radiation, explosives, and bird and wildlife hazards to aircraft. Necessary elements for an accident or environmental risk include the presence of the hazard itself together with an exposed population. For non-chemical hazards, the degree of exposure depends primarily on the proximity of the hazard to the population. The Occupational Safety and Health Act (OSHA) is the guiding legislation for protection of workers.

3.7.2 Existing Conditions

The Bio-environmental Engineering Flight is responsible for implementing Air Force Occupation Safety and Health (AFOSH) standards for WPAFB military personnel and civilian employees. Some programs AFOSH addresses includes hazard abatement, hazard communication, training, personal protective equipment, and other controls to ensure that occupational exposures to hazardous agents do not adversely affect health and safety.

Construction site safety is largely measured by adherence to regulatory requirements imposed for the benefit of employees and using practices that reduce risks of illness, injury, death, and property damage. The health and safety of onsite military and civilian workers are safeguarded by Air Force regulations (AFI

91-301, *Air Force Occupational and Environmental Safety, Fire Protection, and Health (AFOSH) Program*, June 1, 1996) designed to ensure compliance with standards issued by OSHA and EPA. These Air Force standards specify the amount and type of training required for industrial workers, the use of protective equipment and clothing, engineering controls, and maximum exposure limits for workplace stressors. The Air Force standards also address protection from occupational noise exposure compliant with OSHA's established noise exposure standards.

Workers performing lead abatement or removing other lead disturbance are required to have a lead workers license issued by the Ohio Department of Health as defined in the Ohio Administrative Code, Chapter 3701-32.

3.8 Socioeconomics

3.8.1 Definition of Resource

Socioeconomic factors describe the local economy, employment, and demographics that may be influenced by the Proposed Action.

3.8.2 Existing Conditions

WPAFB provides a major source of employment in the five-county area. In addition, WPAFB awards numerous contracts every year to local businesses. For Fiscal Year 2009, the total number of jobs provided by WPAFB was 27,406 (WPAFB, 2011a). This number includes military active duty, trainees and reservists, DoD civilians, and contractors. The number of indirect jobs supported by the Base, such as restaurants, retail, and others is estimated at 33,090. The total economic impact to the local Dayton community was \$5.1 billion.

The unemployment rate for the Dayton-Springfield metropolitan area in July 2010 was 11.2 percent, slightly higher than the statewide average of 10.3 percent (WPAFB, 2011a). The 2010 unemployment rate around WPAFB and within Greene County was 9.6 percent, slightly lower than the state average of 10.2 percent.

3.9 Transportation and Infrastructure

3.9.1 Definition of Resource

Transportation and infrastructure consist of the systems and physical structures that enable a population in a specified area to function. The availability of infrastructure and its capacity to support growth are generally regarded as essential to economic growth of an area.

3.9.2 Existing Conditions

The Hilltop site is bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street. Most of the traffic to and from this area enters through Gate 19B. As part of the BRAC Infrastructure Upgrades, Gate 19B along National Road was relocated to the intersection with Reese Drive. The relocated gate provides greater vehicle queuing capacity by having two entry lanes, three checkpoint lanes, and a security checkpoint farther from National Road. National Road was also widened to the west (on WPAFB land) to allow for an additional southbound right turn lane and a northbound left turn lane at the new/relocated gate.

As part of the BRAC project, improvements to roadways in the Hilltop District were made to accommodate the additional local traffic. The proposed improvements streamlined traffic flow within Area B by redistributing traffic to particular major thoroughfares, namely Hobson Way, 8th Street, and 10th Street. Hobson Way was widened between 5th Street and 13th Street, increasing the capacity of this street and further improving connectivity of the Hilltop District to the primary arterials. Also, 8th Street and 10th Street were widened to three lanes in the Hilltop District to improve east/west connection to the primary arterials. Dedicated turn lanes were provided at the Hobson Way intersections with 8th Street and 5th Street.

The BRAC Infrastructure Upgrades EA calculated level of service (LOS) using traffic models for the improved conditions. The LOS is a composite measure of the operational efficiency of a roadway based on the amount of delay relative to travel at the design speed (seconds per vehicle) and the density of vehicles (cars per mile per lane). There are six LOS levels from A, which is optimal to F, which represents severely congested (often stop and go) traffic. Typically, the goal is to provide a LOS of C or better during the peak hours, although in the case of urban areas LOS D is acceptable. Traffic analysis for the Hilltop District assumed both the built condition and the future traffic volumes of the BRAC facilities. Table 3-2 shows that the improvements for BRAC will provide a minimum LOS D for each intersection in the Hilltop District.

Parking is adequate in the project area for the existing uses. Parking is provided in a number of surface lots generally close to the buildings they serve. On-street parking is provided along main roadways in the Hilltop District including Q Street, 5th Street, and Hobson Way.

Other infrastructure includes utilities. The utilities (sewer, water, electrical, gas) were previously upgraded in the Hilltop area to accommodate the increase in growth of the BRAC facilities.

Table 3-2: Level of Service at Intersections BRAC Infrastructure Improvements

Intersection	Level of Service with BRAC Infrastructure Upgrades	
	Morning Peak Hour	Evening Peak Hour
Hobson Way at 5 th Street	D	D
Hobson Way at 8 th Street	C	C
Hobson Way at 10 th Street	D	D
Hobson Way at 13 th Street	B	B
Skyline Drive at 8 th Street	D	D
Skyline Drive at 10 th Street	D	D
National Road at Reese Drive/Relocated Gate 19B	B	D

3.10 Water Resources

3.10.1 Definition of Resource

Water resources include groundwater, surface water, and floodplains. Evaluation of water resources examines the quantity and quality of the resource and demand for it for various purposes.

3.10.2 *Existing Conditions*

Groundwater in Area B occurs at depths ranging from just below the surface to 35 feet below ground surface (WPAFB, 2007a). The groundwater flow pattern through this area is created by a bedrock ridge that trends northwest from the southeast corner of Area B to Huffman Dam (WPAFB, 2007a).

Area B is supplied water from four WPAFB-owned and operated wells located near Springfield Street approximately between Gate 1B and Gate 16B. These wells obtain water from the Mad River buried valley aquifer. The portion of the aquifer supplying water to the Area B well field consists of glacially deposited sands and gravels that fill a buried bedrock-valley system.

The Ohio EPA rated the Area B well field as having a high susceptibility to contamination based upon the numbers and types of potential contaminant sources within the protection areas and evidence of groundwater quality impacts from human activities (OEPA, 2006). To control groundwater contamination risk, the 88 ABW environmental staff conducts a biennial inventory of regulated substances that are stored within the source water protection area. This includes facilities where large quantities of potential pollutants, such as fuels are stored. Special efforts are implemented to prevent the release of the pollutants to the ground. The inventory performed within the Area B drinking water source protection area in late 2010/early 2011 identified 13 potential contamination source facilities. These facilities are located over ¾ mile to the northwest of the Hilltop area.

There are no surface water features across the project area. The nearest drainages are north of 5th Street between Q Street and Hobson Way and they flow north eventually to Hebble Creek and Mad River.

The Hilltop area is located outside the 100-year floodplain of the Mad River.

ENVIRONMENTAL CONSEQUENCES

THIS PAGE INTENTIONALLY LEFT BLANK

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter presents an evaluation of the environmental consequences or impacts that might result from implementing the Proposed Action or alternatives. The specific criteria for evaluating impacts and assumptions for the analyses are presented for each resource. Evaluation criteria are generally based on federal, state, or local agency regulations and guidelines. Mitigation measures are proposed, as appropriate, to reduce potential impacts.

Impacts are defined in general terms and are qualified as adverse or beneficial, and as short-term or long-term. There may be construction-related impacts to certain resources. Such impacts are generally addressed by best management practices or permits required by federal, state, or local regulations to minimize or control the adverse effects of construction. Construction-related impacts are generally temporary, short-term, and cease after construction is complete, whereas operational impacts are generally permanent, long-term, and begin or continue after construction is complete.

4.1 Air Quality

4.1.1 Evaluation Criteria

In attainment areas, an impact would be considered significant if the net increase in pollutants causes or contributes to a violation of the NAAQS, exposes sensitive receptors to substantially increased pollutant concentrations, or exceeds any evaluation criteria established by a SIP. In nonattainment areas, emission increases would be considered significant if they cause or contribute to a new violation of a NAAQS, increase the frequency or severity of a violation of NAAQS, or delay the attainment of any standard or other milestone contained in the SIP such that the project would not conform to the SIP.

4.1.2 Proposed Action

Because WPAFB is located in a nonattainment area for PM_{2.5} and a maintenance area for O₃, a conformity applicability analysis is required to determine whether the Proposed Action is subject to the general conformity requirements of the Clean Air Act. A conformity determination is required if the total direct and indirect emissions equal or exceed the *de minimis* threshold of the pollutant and any precursors. The *de minimis* threshold for PM_{2.5}, O₃, and their precursors is 100 tpy (40 CFR 93.153 (b)(1) and (b)(2)).

Fuel dispensing at the Express Exchange would generate fugitive VOC emissions and associated hazardous air pollutants and GHG emissions. Estimated VOC emissions were calculated from annual throughput using a total evaporative emissions factor of 3.1 pounds of organic compound per 1,000 gallons of throughput for service station operations, as directed by Ohio EPA for the WPAFB Title V permit. Annual throughput is currently unknown but was assumed at 1.93 million gallons, which is two-thirds the annual throughput at the existing gas station at Kittyhawk Center. This assumption was based on a ratio of UST capacity at the proposed Hilltop facility and the existing UST capacity at the Kittyhawk Center. Using this factor and throughput, the estimated emissions would be 5,983 pounds or approximately 3 tpy of organic compounds. This is well below the *de minimis* threshold level of 100 tpy of VOCs, which are O₃ precursors; thus, the Proposed Action would not affect the attainment designation and maintenance status for O₃.

The GHG emissions would represent a very small percentage of overall GHG emissions from the base and be included in the GHG emissions inventory calculated from current fuel dispensing across the Base (WPAFB, 2010a).

The existing AAFES facility at Kittyhawk Center and the USTs are listed as insignificant sources in the state and federally enforceable section of the Title V permit. The Title V permit would be modified to include the new Exchange Express.

Emissions of VOCs, NO_x, and CO would result from fuel combustion in construction equipment, construction worker vehicles, and personal vehicles.

Construction activities would generate particulate emissions primarily from site preparation, grading, and excavation for installation of utilities and USTs. Total suspended particulates (TSP) were calculated using the emission factor for heavy construction activity operations from AP-42 Compilation of Air Pollutant Emission Factors (EPA, 1995) to provide a conservative estimate of PM₁₀ and PM_{2.5} emissions. The calculation results are shown in Table 4-1.

Table 4-1: Estimated Emissions of Particulate Matter

Facility	Area ¹ (acres)	Project Duration (months)	TSP Emission Factor ^{2, 3} (tons/acre/month)	Control Efficiency ⁴ (%)	Estimated Emissions ⁵ (tons)
Exchange Express	2.4	12	1.2	80	6.9
Wright-Patt Credit Union	1.0	12	1.2	80	2.9
Subtotal	3.4				9.8
Food Service Establishment	1.5	12	1.2	80	4.3
F-20167 Demolition	2.5	12	1.2	50	18.0
Undefined Facility	2.5	12	1.2	80	7.2
Parking Lot	2.0	12	1.2	80	5.8
Subtotal	8.5				35.3
Total	11.9				45.1

¹ The entire area for each facility is estimated, although not all of this area would actually be exposed for the entire project duration.

² Emission factor Section 13.2.3 "Heavy Construction Operations" (dated 1/95), of AP-42, "Compilation of Air Pollutant Emission Factors", 5th Edition, U.S. EPA, Research Triangle Park, NC, 1998.

³ Use of this factor to estimate PM₁₀ emissions will result in conservatively high estimates; therefore, it is also conservative for PM 2.5.

⁴ Control efficiency of 80% is based on Appendix G of the BRAC Facilities and Remote Field Training Site EA (WPAFB, 2008a). Control efficiency for demolition is assumed to be lower than for other construction phases; therefore, it was assumed to be 50%.

⁵ TSP is a conservative estimate for PM₁₀ and PM_{2.5}.

The conservative estimate of particulate emissions from construction of the Proposed Action facilities individually and collectively are well below the *de minimis* threshold level of 100 tpy. Since the full build

out of the HCSD is expected to take many years, the Proposed Action is assumed to conform to the SIP for PM_{2.5}.

Passenger vehicle traffic is expected to increase in the HCSD during construction and as customers access the services. However, total vehicle emissions across WPAFB would probably decrease because the new facilities would allow customers to make a single local stop for multiple services and reduce the need for personnel to travel off Base for these community services. Due to required vehicular emission controls, passenger vehicle emissions are expected to be negligible and do not warrant a detailed estimation.

Fugitive dust emissions from base-wide construction activity are covered under the Title V permit as an insignificant unit and are exempt from permit requirements.

4.1.3 Short-range Alternative

The same area as the Proposed Action would be utilized for the short-range plan for the HCSD but for a smaller development; therefore, impacts would be similar to the Proposed Action. Similar to the Proposed Action, construction of the WPCU and Exchange Express would not generate emissions of pollutants that would affect conformance with the PM_{2.5} SIP or impact the maintenance status of the O₃ attainment designation.

4.1.4 No Action Alternative

There would be no construction or disturbance activities in the Hilltop area for community service facilities; therefore, no impacts to air quality would occur.

4.1.5 Mitigation and Best Management Practices

No adverse impacts to air quality were identified; therefore, mitigation measures are not necessary. However, best management practices to minimize fugitive dust would be implemented. The Ohio Administrative Code requires reasonably available control measures to prevent fugitive dust from becoming airborne during construction and demolition. Control measures generally include water or chemical dust suppression. Construction contractors working on WPAFB are required to have fugitive emissions suppression plans written and implemented when construction begins (Erdei, 2011).

4.2 Biological Resources

4.2.1 Evaluation Criteria

Surface disturbance from construction would impact any biological resources that are present. The extent of disturbance relative to adjacent or replacement habitat types and the importance of the resource determines the extent of the impact. The impacts on biological resources are adverse if species or habitats of high concern are negatively affected over relatively large areas, or population size or distribution of a protected species is reduced.

4.2.2 Proposed Action

The HCSD would maintain many of the existing shade trees and would plant additional landscaping that would provide habitat for urban wildlife. Full development of the HCSD would affect approximately 5

acres of maintained lawn or turf grass and displace common urban wildlife that inhabit or use the area for forage and cover. Similar habitat on adjacent landscaped and maintained areas would support the displaced species and thus any impacts would be negligible. The typical species that could be impacted are widely distributed; thus, loss of some individuals and habitat would not affect the populations throughout their range.

There is no suitable habitat for Indiana bat or eastern massasauga rattlesnake on or adjacent to the area that would be developed. The 5-acre wooded lot to the south and the wooded area of less than ¼ acre near the Adena Mound to the north are identified as potential habitat for the Indiana bat; however, neither of these areas would be disturbed. Because the Hilltop area does not support habitat for the listed or candidate species that may occur on WPAFB, and any potential habitat in the vicinity would not be disturbed, WPAFB has determined the Proposed Action would have no effect to listed species. WPAFB notified the USFWS of this determination of no effect and requested their concurrence, although no further consultation under Section 7 of the Endangered Species Act was necessary. The USFWS responded with no objection to the determination. Correspondence between WPAFB and the USFWS is included in Appendix A.

No trees would be removed that could potentially serve as roost sites for eagles and no eagles are known to frequent WPAFB. Therefore, no impacts are expected and the USFWS agreed with this conclusion (see Appendix A).

4.2.3 Short-range Alternative

The same area as the Proposed Action would be utilized under the short-range plan but for a smaller development; therefore, impacts would be similar to the Proposed Action. Less maintained lawn would be disturbed since only the WPCU would be constructed on the west half of the area; thus, less urban wildlife may be displaced. This alternative would not affect listed species or other biological resources.

4.2.4 No Action Alternative

There would be no further construction or disturbance activities in the Hilltop area for community service facilities; therefore, no impacts to biological resources would occur.

4.2.5 Mitigation or Best Management Practices

No adverse impacts to biological resources were identified and therefore no mitigation measures or best management practices are necessary.

4.3 Cultural Resources

4.3.1 Evaluation Criteria

Construction work involving excavation, constructing new structures, or altering existing structures can impact cultural resources. Impacts would be considered adverse if the action includes physically altering, damaging, or destroying all or part of a resource; altering characteristics of the surrounding environment that contribute to the resource's significance; or introducing visual or audible elements that are out of character with the property or alter its setting.

An APE is established to evaluate the potential impact of an undertaking on adjacent cultural resources. Considering the historically sensitive nature of Area B, the APE for the proposed HCSD was established to provide a broad assessment of potentially affected resources beyond the actual area of disturbance. The APE boundaries consider all structures and sites within the direct viewshed of the Hilltop area, resulting in a zone approximately 500 to 1,000 feet wide. An APE is often extended for up to ½ mile, but the viewshed from the proposed HCSD is obstructed at a shorter distance, and therefore, the APE for the HCSD is generally bound by Q Street to the east, 12th Street to the south, K Street to the west, and 5th Street to the north (see Figure 3-2).

4.3.2 Proposed Action

The preferred location for the HCSD is not within the Wright Field Historic District, nor are there any National Register listed or eligible sites, buildings, structures, or objects in the APE that would be directly affected by ground disturbance or construction activities for the Proposed Action.

Within the area proposed for constructing the HCSD is archaeological site 33GR798, a prehistoric campsite. The site was first identified during a 1990 survey in which isolated tertiary flakes were collected. The site was noted as being heavily disturbed due to grading and some digging for tree planting and was determined not eligible for the National Register (USACERL, 1991). Phase II testing of 33GR798 was completed in 2002; no cultural materials were observed and no further artifacts are expected to be recovered (Hardlines, 2002). Today, the site remains ineligible for the National Register.

Proposed for demolition, F/20167 is a two-story modern structure constructed in 1948 to facilitate storage for the Air Force Central Motion Picture Depository (see Figure 4-1). The building was expanded in 1953 and has been renovated in recent years. The building was evaluated for historical significance in 1998 and determined not eligible for the National Register; it does not contribute to any characteristics of the Wright Field National Register District (Labat, 2011). No adverse impacts are expected from the demolition of this facility.

Prehistoric site 33GR31 is located in the APE approximately 200 feet to the north of the Hilltop area. Often referred to as the Adena Mound, 33GR31 is a prehistoric burial site listed on the National Register. The Adena Mound has remained undisturbed since the land was acquired by WPAFB in the 1940s, and is currently concealed by a small grove of trees and other vegetation. The mound is not easily viewed from the Hilltop site, nor would any construction activities take place near the mound.

F/20052 (Aircraft Laboratory Building B) is a contributing structure to the Historic District located within the APE for the Proposed Action. It is located approximately 1,300 feet to the northwest of the proposed construction site for the HCSD facilities. Constructed in 1944, F/20052 possesses the Army Art Deco style that is prominent within the Wright Field Historic District (Labat, 2011). The proposed HCSD site is not viewable from F/20052, nor would any construction activities or use of the Hilltop site impact F/20052. Therefore, no adverse impacts would occur to F/20052 from the Proposed Action.

Outside the Wright Field Historic District but within the APE is F/20653, Manufacturing Technology Laboratory. Although this facility was constructed in 1975, it has been determined eligible for the National Register because of having achieved historical significance through its association with Cold War efforts (Archaeological, 1996). No adverse impacts would occur to F/20653 from the Proposed Action because of the view from the proposed HCSD site is obstructed by AFIT campus buildings.



Figure 4-1: South End of Facility 20167 from Q Street

Although new construction near or adjacent to architectural resources could have a negative impact on their eligibility or National Register status, no impact to the National Register status or contributing qualities to other structures in the Historic District is expected from the Proposed Action due to the distance, topography, and visibility between the proposed development site and these buildings. No listed or eligible archaeological resources are located within the area of ground disturbance under the Proposed Action.

WPAFB consulted with the Ohio SHPO to concur with WPAFB's determination that implementing the plan for the Hilltop area and constructing the HCSD facilities would have no adverse effect on historic properties. The SHPO concurred that the Exchange Express and WPCU would have no adverse effect on historic properties but withheld concurrence on the dining establishment because no design information was available for SHPO's review.

WPAFB consulted with four Native American tribes (see Section 6.0) that have expressed an interest in projects and activities occurring at the Base because of historic and traditional connections to the area. The United Keetoowah Band of Cherokee Indians in Oklahoma responded with no objections to the project (see Appendix A). The other three tribes did not respond.

4.3.3 Short-range Alternative

The same area as the Proposed Action would be utilized for the short-range alternative but for a smaller undertaking. Site 33GR798 (ineligible for listing on the National Register) would not be disturbed further

and F/20167 (ineligible for listing on the National Register) would not be demolished for construction of community service facilities. Similar to the Proposed Action, construction of the WPCU and Exchange Express would not adversely affect the building in the Wright Field District or the building with Cold War significance. This alternative would have no impacts to cultural resources.

4.3.4 No Action Alternative

There would be no further construction or disturbance activities in the Hilltop area for community service facilities; therefore, no impacts to cultural resources would occur.

4.3.5 Mitigation or Best Management Practices

Although no adverse impacts to archaeological resources are expected, WPAFB is prepared to appropriately handle an inadvertent or unanticipated discovery from ground-disturbing activities. In the event of a discovery of human remains or cultural objects, any work will be halted within a 100-foot radius of the find and the WPAFB Cultural Resources Manager will be notified immediately. WPAFB will comply with the Native American Graves Repatriation and Protection Act and other applicable regulations to identify and treat the remains or cultural objects.

When design information is available for future Hilltop community facilities, WPAFB will forward it to SHPO for review and concurrence that such design of those facilities will have no adverse effect to historic properties.

4.4 Geology and Soils

4.4.1 Evaluation Criteria

Protecting unique geological features, minimizing soil erosion, and siting facilities to avoid potential geologic hazards are considered when evaluating potential impacts of a proposed action on geological resources. Effects on geology and soils would be adverse if the soil composition, structure, or function adversely changes within the environment.

4.4.2 Proposed Action

Site preparation and construction of the proposed facilities would affect the topography and soils in the area. Preparing the Exchange Express site for construction would require cut and fill activities to remove the three terraces to level the site and excavate the hole for the USTs. The excess cut not needed to level or compact the site would be used to construct the retaining walls, thereby eliminating the need to haul and dispose of excess fill. Additional cut and fill work may be needed for the access road and site preparation for the WPCU on the west end of the Hilltop area. The central part of the HCSD is fairly level so impacts of the other community service facilities would likely be soil disturbance from grading and compacting the sites for construction.

No adverse effects to soil composition, structure, or function are anticipated as a result of the proposed construction on this previously disturbed location.

As stated in Section 4.1.2, fugitive dust emissions from base-wide construction activity are covered under the Title V air quality permit as an insignificant unit and are exempt from permit requirements.

Surface soil within the project area is composed primarily of silt to clayey loams; as a result, there would be a continuous potential for erosion. Impacts from erosion of disturbed soils in storm water runoff would be minimized by implementing the Storm Water Pollution Prevention Plan (SWPPP) (see Section 4.10.2).

4.4.3 Short-range Alternative

The same area as the Proposed Action would be utilized for the short-range alternative but for a smaller development. Similar to the Proposed Action, construction of the WPCU and Exchange Express would not have an adverse impact on geology and soils.

4.4.4 No Action Alternative

The No Action Alternative entails no new construction or land disturbance activities for community facilities in the Hilltop area; therefore, geology or soils would not be impacted.

4.4.5 Mitigation and Best Management Practices

No adverse impacts to geology and soils were identified and therefore mitigation measures are not necessary. Generally, impacts can be avoided or minimized when proper construction techniques, erosion control measures, and structural engineering are incorporated into the project design. Erosion control measures in accordance with the site-specific SWPPP would be implemented to ensure minimal erosion would occur, with no significant adverse effect to soil resources.

4.5 Hazardous Materials and Waste

4.5.1 Evaluation Criteria

Impacts related to hazardous materials and hazardous/nonhazardous waste management would be considered adverse if the action resulted in noncompliance with applicable federal and state regulations, or increased the amounts generated or procured beyond current WPAFB waste management procedures and capacities. Impacts on the Environmental Restoration Program would be considered adverse if the action disturbed or created contaminated sites resulting in negative effects on human health or the environment.

4.5.2 Proposed Action

Although contaminated shallow soil is not known to exist on the project site, there is potential to encounter previously unidentified contaminated soils or groundwater during construction activities. Based on the results of the Environmental Baseline Survey completed for WPCU, there are no known past uses of hazardous substances within the area of the project site.

Small amounts of potentially hazardous materials (waste oils, lubricants, solvents) would be used with wastes generated during construction but proper use, storage, spill prevention, and disposal of the materials in accordance with Base policies would ensure no impact to workers and the environment. These policies include *Integrated Pollution Prevention, Green Procurement and Solid Waste Management Plan* (WPAFB, 2008b), *Installation HAZMAT Management Program Plan*, (WPAFB, 2008c), and *Spill Prevention Control and Countermeasure Plan* (WPAFB, 2006).

The Proposed Action would not involve excavation or construction within the boundaries of the sites identified within OU9. However, construction of the facilities, primarily the WPCU, would occur within 300 feet of EFDZ 8 (see Figure 3-3). To comply with the Ohio Administrative Code, the 88 ABW Environmental Restoration Program staff would be required to notify and consult with the Ohio EPA and any mitigation actions they require would be implemented.

Preliminary assessments of F/20167 indicate the presence of ACM, which would require appropriate abatement prior to demolition. Additional sampling may be conducted to determine the condition of ACM (friable or non-friable) to recommend the method of abatement, containment, and disposal. Non-friable ACM can be disposed of in a sanitary landfill but friable asbestos must be disposed of in an EPA-approved landfill. Abatement contractors must be licensed and would be responsible for obtaining required permits from Ohio EPA and Ohio Department of Health. No impact to workers or the environment is expected from ACM abatement of F/20167.

Procedures specified in *Air Force Policy and Guidance on Lead-Based Paint in Facilities* (April 2, 1993) would be followed prior to demolishing F/20167 to safeguard against environmental impacts

The USTs for fuel storage would be double-wall fiberglass tanks that meet regulatory requirements for underground storage. Hazardous materials that may be used during operation of the facilities would generally consist of cleaning supplies typically used in food service establishments and retail facilities; they would be stored properly in appropriate locations and used in accordance with labeled instructions.

4.5.3 Short-range Alternative

The same area as the Proposed Action would be utilized for the short-range alternative but for a smaller development; therefore, impacts would be similar to the Proposed Action. No demolition waste or ACM would be disposed as F/20167 would not be demolished for construction of community service facilities. Similar to the Proposed Action, the 88 ABW Environmental Restoration Program staff would be consult with the Ohio EPA and implement any mitigation actions that may be necessary to construct within 300 feet of EFDZ 8. This alternative would have no impacts on handling, storage, or disturbance of hazardous materials or waste.

4.5.4 No Action Alternative

There would be no impacts under this alternative because no construction-related or operational-related hazardous materials or waste would be used or generated. Demolition of F/20167 may occur at some time in the future to meet space reduction requirements of the DoD; any potential impacts would be assessed at that time in the context of a future project proposal.

4.5.5 Mitigation and Best Management Practices

No direct adverse impacts from storage, handling, or disturbance of hazardous materials and waste were identified and therefore mitigation measures are not necessary. Best management practices would be followed, such as notifying appropriate regulatory authorities and taking necessary actions for cleanup and proper disposal should hazardous materials be spilled during construction. The *Spill Prevention Control and Countermeasure Plan* would be updated to include the new Exchange Express fuel storage and dispensing. Should it be determined that construction may impact the integrity of EFDZ 8, any mitigation requirements imposed by the Ohio EPA would be followed.

4.6 Noise

4.6.1 Evaluation Criteria

Noise impact analyses evaluate potential changes to the existing noise environment from a proposed action and whether the proposed action is compatible with the existing noise environment. The evaluation addresses the three principal types of noise sources – mobile, stationary, and construction. Construction noise sources include both mobile (trucks, bulldozers) and stationary (compressors, pile drivers, power tools) sources. Construction noise is temporary, regardless of the construction duration.

4.6.2 Proposed Action

Noise from the operation of the community service facilities would primarily be from additional traffic, including delivery trucks and customers. Most of this traffic would likely occur during peak morning and evening commute hours, and during the lunch time. There would be no new stationary noise sources from the operation of the facilities.

Primary access to Gate 19B that would serve the HCSD is by Hobson Way and 8th Street, thereby generating more vehicle noise in the Hilltop area at peak commute times. Other than classroom buildings on the AFIT campus, there are no noise-sensitive receptors located in the vicinity of the Hilltop area.

The existing WPCU in F/20016 is located closer to the flightline in the 75-80 dBA noise contour. The new WPCU would be located in a lower noise contour than the existing location, which would be a beneficial relocation for WPCU employees and customers.

During construction of the facilities, there would be short-term adverse impacts on ambient noise levels in the project area from the operation of heavy machinery and equipment. Heavy equipment such as bulldozers, graders, backhoes, excavators, and dump trucks would generate noise that could affect the construction workers. Later demolition of F/20167 and construction of other community service facilities would extend the presence of construction noise for additional years.

Surrounding the Hilltop area is ongoing construction of BRAC facilities and additions and improvements to other complexes, including the AFIT campus and the different AFRL complexes. This construction activity is expected to continue for approximately two more years.

4.6.3 Short-range Alternative

The same type of construction as the Proposed Action would occur for the short-range alternative but for a smaller development; therefore, impacts would be similar to the Proposed Action but of a shorter duration. After construction of the Express Exchange and WPCU is complete, no additional construction noise would occur.

4.6.4 No Action Alternative

There would be no impacts under the No Action Alternative because no construction-related or operation-related noise would be generated.

4.6.5 Mitigation and Best Management Practices

No noise-sensitive receptors were identified in the vicinity of the Proposed Action; therefore, mitigation measures are not necessary. Best management practices to minimize construction noise include limiting construction activity to daylight hours.

The DoDI 4165.57 on the AICUZ program recommends indoor (compared to outdoor) noise reduction levels for facilities to be compatible with specific noise contours. Eating establishments and financial services within the 70-75 dBA DNL should achieve a reduction of 25 dB in the design of the facility.

4.7 Health and Safety

4.7.1 Evaluation Criteria

Actions are evaluated for the potential to jeopardize the health and safety of WPAFB personnel and the surrounding public. Impacts might arise from physical changes in the work environment, construction activities, introduction of construction-related risks, and risks created by either direct or indirect workforce and population changes related to proposed activities such as increased traffic.

4.7.2 Proposed Action

The community service facilities proposed for construction are not of the design or operational type that would create human safety or health risks. The operations of adjacent facilities would not expose users of the Hilltop community facilities to any unusual safety or health risks. Health and safety impacts and risks would be greatest during construction.

Heavy equipment would generate noise that could affect the onsite workers during construction. Construction equipment typically emits noise in the 80 dB to 120 dB range (Spencer-ER, 2005). The construction contractor would require workers to wear hearing protection in accordance with OSHA regulations. Occupants in nearby facilities could experience short-term, intermittent muffled noise during the workday. This intermittent exposure could be a nuisance but would not pose a threat to hearing.

The paint on F/20167 would be tested to identify the level of lead concentration to determine the type of protection required for demolition workers. The OSHA standards for LBP abatement would be followed. Workers performing LBP abatement or removal are required to have a lead workers license issued by the Ohio Department of Health. Demolition contractors do not require special licensing for mechanical demolition.

The public has little access to the construction activities associated with the Proposed Action and therefore no impacts to public health and safety are expected.

4.7.3 Short-range Alternative

The same area as the Proposed Action would be utilized for the short-range alternative but for a smaller development; therefore, impacts would be similar to the Proposed Action. No LBP would be abated because F/20167 would not be demolished for construction of community service facilities, thereby eliminating that potential hazard to construction workers. This alternative would have no impacts to the health and safety of WPAFB personnel or the public.

4.7.4 *No Action Alternative*

There would be no impacts under this alternative because no construction-related or operation-related health and safety risks would occur.

4.7.5 *Mitigation and Best Management Practices*

No adverse impacts to health and safety of WPAFB personnel and the public were identified and therefore mitigation measures are not necessary. Best management practices would be followed, such as identifying the construction zone and prohibiting access to unauthorized individuals. Construction contractors would be responsible for complying with applicable health and safety regulations.

4.8 Socioeconomics

4.8.1 *Evaluation Criteria*

Construction expenditure and job creation are two socioeconomics indicators that are evaluated in terms of direct effects on the local economy and related effects on other socioeconomic resources such as housing and public services. An adverse impact with respect to the socioeconomic conditions in the surrounding area would result if a negative change in the local business volume and employment exceeds the area's historical annual change.

4.8.2 *Proposed Action*

The estimated number of new full-time (less than 15) and part-time (less than 20) employees to operate the Express Exchange and WPCU, although personally beneficial, would result in negligible contributions to the local economy and have a minimal effect on the unemployment rate. Similarly, new employees may be hired for the other community facilities planned for the Hilltop area, but the expected number and future timing of those hires would not measurably affect the local economy. Opportunities would exist for local construction workers; however, these jobs may be filled by existing workers who are finishing the construction of BRAC facilities.

Estimated construction costs for the Express Exchange and WPCU would be approximately \$5 million. Although this amount would contribute to the local economy, it would not be large in comparison to on-going construction projects.

All identified effects related to increased employment and construction costs contributing to the local economy would be relatively small and would be beneficial impacts.

4.8.3 *Short-range Alternative*

A smaller development would occur under this alternative, and therefore, impacts would be similar to the Proposed Action. Costs would be lower and fewer people would be employed than under the Proposed Action. This alternative would have no other impacts to the local socioeconomic environment surrounding WPAFB.

4.8.4 *No Action Alternative*

There would be no impacts under this alternative because no construction-related or operation-related gains for employment and the economy would be realized.

4.8.5 *Mitigation and Best Management Practices*

No adverse impacts to socioeconomics were identified and therefore mitigation measures are not necessary.

4.9 Transportation and Infrastructure

4.9.1 *Evaluation Criteria*

Impacts on transportation and infrastructure are evaluated for the potential to disrupt or improve existing levels of service and additional needs for utilities and transportation patterns and circulation. Impacts might arise from physical changes to circulation, construction activities, introducing construction-related traffic on local roads, changes in daily or peak-hour traffic volumes, and energy needs created by either direct or indirect workforce and population changes related to Base activities.

4.9.2 *Proposed Action*

The main ingress and egress for the area would be a north-south boulevard from 8th Street to 10th Street. The boulevard would divide the area into functional sites and aid with traffic control. The boulevard would align with an entrance to the ITC under construction north of 8th Street. Two additional entry points and one exit for the Exchange Express are planned on 8th Street in the northeast corner of the area. Traffic controls would consist of stop signs for traffic exiting the Hilltop Community area.

A small number of additional employees would be hired to staff the facilities resulting in a negligible increase in vehicle traffic due to commuting. Because the Proposed Action results in the consolidation of services that are currently dispersed on and off Base, traffic by those accessing the services would increase slightly in the project area.

After constructing the Exchange Express, closing Q Street as a through street and access to the existing parking lot could add more vehicles onto Skyline Drive or Hobson Way. The road improvements made for BRAC facilities accounted for other new construction in the project area, including the Hilltop Community Services District. The 8th Street and 10th Street intersections with Skyline Drive would have a LOS of D during peak hours, which would be considered acceptable, as would the LOS at the intersections with Hobson Way (see Table 3-2).

The Proposed Action would reconfigure a portion of the existing parking to accommodate the Exchange Express and WPCU. Because there are other existing and planned surface lots in the area, an ample amount of parking for Base personnel would remain. With the convenience of having these community services in one location, base personnel may be encouraged to use other modes of transportation such as walking or biking.

Construction activities would result in a slight increase to traffic volume in the project area due to on-road use by construction equipment, construction workforce vehicles, and vehicles delivering construction materials. The construction of the HCSD would have negligible impacts to traffic at WPAFB.

The utilities infrastructure needed to support the Hilltop community service facilities would be adequate because these utilities were recently upgraded to support the BRAC facilities currently under construction.

4.9.3 *Short-range Alternative*

A smaller development would occur under this alternative; therefore, impacts would be similar to the Proposed Action. Although there would be fewer community service facilities, the traffic during peak hours would likely be as described for the Proposed Action. This alternative would have no other impacts to the local transportation and infrastructure surrounding the Hilltop area.

4.9.4 *No Action Alternative*

There would be no impacts under this alternative because there would be no construction-related or operation-related change to traffic patterns and infrastructure surrounding the Hilltop area.

4.9.5 *Mitigation and Best Management Practices*

No adverse impacts to transportation and infrastructure were identified and therefore mitigation measures would not be necessary.

4.10 *Water Resources*

4.10.1 *Evaluation Criteria*

Evaluation criteria for impacts on water resources are based on water quality and use, existence of floodplains, and compliance with local, state, and federal regulations. An impact would be adverse if it affects water quality adversely, threatens or damages unique hydrologic characteristics, limits water supply, or violates established laws or regulations adopted to protect water resources.

4.10.2 *Proposed Action*

Construction of each facility would involve the disturbance of more than one acre. Therefore, contractors would be required to file a Notice of Intent application with the Ohio EPA for the construction storm water general permit and prepare a SWPPP outlining measures to be used during construction to minimize runoff from the site. Adherence to these requirements would result in no adverse impact to surface water quality.

Section 438 of the Energy Independence and Security Act of 2007 (EISA) requires federal agencies developing or redeveloping facilities with footprints exceeding 5,000 square feet must do so in a manner that maintains or restores the predevelopment site hydrology to the maximum extent technically feasible. The “maximum extent technically feasible” criterion requires full employment of accepted and reasonable storm water retention and reuse technologies (bio-retention areas, permeable pavements, cisterns/recycling, and green roofs), subject to site and applicable regulatory constraints such as site size, soil types, vegetation, demand for recycled water, existing structural limitations, state or local prohibitions on water collection.

To implement Section 438 of EISA, low impact development techniques would be incorporated into the designs of the separate facilities. The design of the Exchange Express includes two sand filter basins. This

corner of the Hilltop area is currently an asphalt parking lot so the designed location of these basins would be sufficient to retain additional runoff. The designs for the WPCU and other community service facilities, when completed, would include similar retention technologies to meet the requirements in Section 438 of EISA.

Excavations for the footings, foundations, USTs, and utilities are not expected to encounter groundwater, which may occur at depths of approximately 35 feet and greater.

The preferred location for the Proposed Action is not within the 100-year floodplain of the Mad River or the floodplain of any nearby tributaries, and there are no surface waters in the vicinity; therefore, no impacts would occur to these resources.

Operation of the facilities would not impact the existing WPAFB water supply source for Area B (wells located near Springfield Street). Sufficient quantity is available with the recent infrastructure upgrades for the BRAC facilities.

4.10.3 *Short-range Alternative*

A smaller development would occur under this alternative; therefore, impacts would be similar to the Proposed Action. Less area would be developed having less potential to impact surface water quality from runoff. The design of the Exchange Express and WPCU would incorporate stormwater retention basins to meet the intent of EISA.

4.10.4 *No Action Alternative*

The No Action Alternative entails no new construction or land disturbance activities for community facilities in the Hilltop area; therefore, surface water and groundwater quality and quantity would not be impacted.

4.10.5 *Mitigation and Best Management Practices*

No adverse impacts to water resources were identified and therefore mitigation measures are not necessary. WPAFB has both surface water and groundwater protection programs in place to ensure projects do not impact water quality (WPAFB, 2007c; WPAFB, 2011c). Best management practices would continue to be followed, such as implementing soil erosion and siltation control measures described in the SWPPP. Some of these may include installing silt fencing and straw bales around each construction site and nearby storm sewer inlets.

Area B of WPAFB is managed as an integral part of the installation's source water protection area under a Memorandum of Agreement with the City of Dayton. As part of that agreement, the 88 ABW environmental staff conducts a biennial inventory of regulated substances that are stored within the source water protection area. Special efforts are implemented to prevent the release of the pollutants to the ground.

4.11 *Cumulative Impacts*

This section describes the impacts to the environment that may potentially occur because of the additive (cumulative) effects of implementing the Proposed Action with other past, present, and

reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over time.

Past and present actions near the proposed Hilltop area included in the cumulative impact analysis are the construction and operation of the BRAC facilities, infrastructure upgrades, AFIT Campus Master Plan, and installation of the tomography range. The foreseeable future actions include the continued expansion of the ITC, consolidating the Civil Engineering complex, AFRL parking lot expansion, relocating the perimeter fence, and reconfiguring entry gates.

The Proposed Action would not affect biological resources, cultural resources, soils, hazardous materials, and safety and health beyond the boundaries of the area proposed for the Hilltop development and the immediately adjacent area; therefore, no cumulative impacts to these resources would occur.

Air quality in the project area is generally good, as demonstrated by the recent proposal to reclassify the area as in attainment for PM_{2.5}. Construction emissions are short-term and with adequate dust control measures during and after construction, cumulative increases in PM_{2.5} emissions should not exceed NAAQS or affect the attainment designation in the area. Consolidating community service facilities would have a beneficial cumulative impact on air quality by reducing multiple vehicle trips on and off Base for these services.

WPAFB has adequate systems and capacity to manage the small amounts of hazardous waste generated by the Proposed Action in combination with other proposed projects; therefore, no adverse cumulative impacts to hazardous waste management would occur.

The existing ambient noise levels include the ongoing construction activities surrounding the Hilltop area. The Proposed Action would represent a minor addition to this temporary impact to the extent that construction activities overlap with those of other projects.

The construction dollars and additional employment for the Proposed Action would have a beneficial, yet negligible cumulative impact on the local economy with the other ongoing construction projects.

The Proposed Action would contribute to cumulative impacts from temporary increased construction traffic. The possible overlap of construction among the BRAC facilities, AFIT campus improvements, ITC, and other AFRL complex improvements with the Proposed Action would have cumulative impacts on traffic, but the extent of impact would depend on the timing of the construction projects. Any overlap in construction traffic with other projects would be adverse but temporary and localized.

The Proposed Action would contribute to cumulative effects on the transportation network around the Hilltop area. The recent upgrades to widen the roads and add turning lanes to accommodate increased traffic for the BRAC expansion considered future uses of the Proposed Action site. Although a small number of new employees may be hired, the Proposed Action would not have a cumulative increase in operational traffic because the consolidation of services within the Hilltop area would reduce traffic now supporting travel to different locations for the same services. The Proposed Action would not have an adverse cumulative effect with the future reconfiguration of gates and relocation of the perimeter fence. That future project would benefit the transportation network with increased capacity, safety, and efficiencies.

The utilities infrastructure needed to support the Hilltop community service facilities would be adequate because these utilities were recently upgraded to support the BRAC facilities currently under construction. No adverse cumulative impacts to infrastructure would occur.

Compliance with a SWPPP and EISA requirements for the Proposed Action and other projects would ensure no cumulative impacts to water quality. The available water supply for Area B is adequate for the totality of the Hilltop community services facilities and the needs of the other ongoing and future projects.

4.12 Irreversible or Irretrievable Commitments of Resources

An irreversible commitment of resources can be defined as the loss of future options. Irreversible effects result primarily from consumption or destruction of a specific resource that cannot be replaced within a reasonable timeframe (minerals or soils). Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored because of the action (extinction of a threatened or endangered species or the destruction of a cultural site).

Labor, energy, materials, and capital would be committed for construction of the Hilltop facilities. These resources would not be recovered. Construction would make permanent use of building materials; however, rare resources would not be consumed in the process. The construction materials, except to the extent they can be recycled, would be irretrievably committed.

The HCSD would occupy approximately 13 acres of land for some time into the future until the operations are terminated. This land could be re-used for other mission essential functions or restored to its existing condition as open space along the west half area; therefore, the commitment of land is not irreversible.

Other committed resources would include water, natural gas, fossil fuels, and electricity used for the construction of the proposed facilities and for their continued operation.

4.13 Relationship between Short-term Uses of the Environment and the Maintenance and Enhancement of Long-term Productivity

Short-term use of a labor force would result in long-term productivity of the site for convenient and consolidated community services. The relocation and consolidation of community services would provide efficiencies for WPAFB personnel that would improve workday readiness. Short-term effects from construction activities with negligible adverse impacts, such as temporary and minor increases in traffic and noise would provide for a long-term situation with shorter trips required to obtain services. This would result in less traffic from an area-wide and Base-wide perspective. Re-location of some services (the credit union) to an area with decreased ambient noise compared to its current location would enhance long-term productivity.

THIS PAGE INTENTIONALLY LEFT BLANK

LIST OF PREPARERS

THIS PAGE INTENTIONALLY LEFT BLANK

5.0 LIST OF PREPARERS

This EA was prepared by the 88 ABW Asset Management Division, Planning and Real Property Section with contractual assistance from Labat Environmental, Inc. The following individuals were primarily responsible for preparing and reviewing the EA, or for providing senior level guidance and quality control.

Name	Role	Qualification
Cory Edwards	Historic Preservation Specialist Cultural Resources, GIS	M. Arch., Architecture B.S., Architecture Years of Experience: 4
Tamar Krantz	Ecologist/Biologist Air Quality, Regulatory Compliance	M.P.H., Environmental Health Sciences (Air Quality) B.A., Biology and Environmental Studies Years of Experience: 20
Kelly Maiorana	Senior Natural Resource Specialist Alternatives, Transportation, Soils	B.S., Environmental Science Years of Experience: 12
Christine Modovsky	Quality Assurance Coordinator Senior Technical Reviewer	M.S., Environmental Science B.S., Environmental Science Years of Experience: 23
Dan Moyes	Project Manager Purpose and Need, Senior Technical Reviewer	B.S., Information Systems A.A.S. Environmental Technology Years of Experience: 38
Mary Peters	Senior NEPA Specialist Purpose and Need, Alternatives, Biology, Water Resources	J.D., Law B.S., Fisheries and Wildlife Biology Years of Experience: 27
Thomas Walker	Senior Environmental Engineer Hazardous Waste	Ph.D., Environmental Engineering M.S., Civil Engineering B.S., Civil Engineering Years of Experience: 39

THIS PAGE INTENTIONALLY LEFT BLANK

PERSONS CONTACTED

THIS PAGE INTENTIONALLY LEFT BLANK

6.0 PERSONS CONTACTED

Several persons associated with WPAFB, AAFES, and federal, state, and local agencies contributed information and data for the preparation of this EA. The following persons were contacted or consulted.

Name	Role	Air Force Organization
Jo Lynn Anderson	Chief, Planning and Real Property Section	88 ABW/CEAOR
Robin Ayling	AAFES General Manager	W-P AAFES
Treva Bashore	Environmental Restoration Program Manager	88 ABW/CEANQ
Karen Beason	EIAP Program Manager	88 ABW/CEAOR
Frank Boaz	AAFES Exchange Express Program Manager	88 ABW/CEPMP
Laurel Buchanen	Wright-Patt Credit Union Program Manager	88 ABW/CEPMP
Richard Carlson	Design Manager/Architectural Designer	88 ABW/CEPT
Gary Dowen	Toxics Program Manager, Asbestos	88 ABW/CEANP
Emily Erdei	Air and Water Program Support	88 ABW/CEANQ
Bill McGuyer	GIS Support	88 ABW/CEAX
Gerry Mitchell	Program Manager	88 ABW/CEPMW
Letitia Nelson	AAFES Exchange Express Design Manager	88 ABW/CEPMP
Zack Olds	Water Quality Program Manager	88 ABW/CEANQ
Jeremy Potts	AAFES Project Manager	HQ AAFES
Gregory Smith	AAFES Environmental	HQ AAFES
Fred Tito	Design Manager, Traffic	88 ABW/CEPMP
Laura Wade	Community Planner	88 ABW/CEAOR
Darryn Warner	Natural Resources Program Manager	88 ABW/CEANQ
Paul Woodruff	Cultural Resources Program Manager	88 ABW/CEANQ
Name	Role	Agency
Johnathan Buffalo	Historical Preservation Director	Sac and Fox Tribe of the Mississippi in Iowa
Summer Sky Cohen	Tribal Historic Preservation Officer	Keweenaw Bay Indian Community
Mark Epstein	Resource Protection and Review	Ohio Historic Preservation Office
William Johnson	Historic Preservation	Saginaw Chippewa Indian Tribe
Mary Knapp	Ecological Services, Section 7 Consultation	U.S. Fish and Wildlife Service
Kurt Rinehart	Chief Engineer, Floodplain Protection	Miami Conservancy District
Lisa Stopp	Historic Preservation	United Keetoowah Band Cherokee Indians
Debbie Woischke	Species Biodiversity Database	Ohio Department of Natural Resources

THIS PAGE INTENTIONALLY LEFT BLANK

REFERENCES

THIS PAGE INTENTIONALLY LEFT BLANK

7.0 REFERENCES

- Archaeological and Historical Consultants, Inc. (Archaeological). 1996. *Documenting the Cold War Significance of Wright Laboratory Facilities, WPAFB, Greene and Montgomery Counties, Ohio*. February.
- Boonshoft Museum of Discovery. 2012. Dayton Eagle Cam Project. Accessed at <http://www.boonshoftmuseum.org/programs-events/205> on January 26, 2012.
- Environmental Protection Agency (EPA). 2011. Greenbook for Particulate Matter (PM-2.5) 1997 Standard Nonattainment State/Area/County Report. April 21, 2011. Accessed at <http://www.epa.gov/oagps001/greenbk/gncs.html#OHIO> on August 28, 2011.
- _____. 1995. AP-42, Compilation of Air Pollutant Emission Factors, Section 13.2.3 Heavy Construction Operations.
- Erdei, Emily. 2011. Air and Water Program Support, 88 ABW/CEANQ, Wright-Patterson Air Force Base. Personal communication with Tamar Krantz, Labat Environmental regarding Title V permit. September 22, 2011.
- Federal Emergency Management Administration (FEMA). 2010. Flood Insurance Rate Map Community, Montgomery County, Ohio. Accessed at <http://map1.msc.fema.gov/idms/IntraView.cgi?KEY=22955309&IFIT=1> on September 15, 2011.
- Federal Register. 2011. Volume of 76, No. 95, May 17, 2011
- Hardlines Design Company (Hardlines). 2002. *Phase II Cultural Resource Evaluation Testing of Site 33-GR-796 and the Documentation of Disturbance at Sites 33-GR-797 and 33-GR-798, All Located on Wright-Patterson Air Force Base (Area B), Beavercreek Township, Greene County, Ohio*. August 12, 2002.
- Labat Environmental, Inc. (Labat). 2011. *Integrated Cultural Resources Management Plan for Wright-Patterson Air Force Base*. September.
- Midwestern Regional Climate Center (MRCC). 2011a. Historical Climate Data Temperature Summary Station: 339361 XENIA 6 SSE, OH. Accessed at http://mrcc.isws.illinois.edu/climate_midwest/historical/temp/oh/339361_tsum.html on August 28, 2011.
- _____. 2011b. Precipitation Summary Station: 339361 XENIA 6 SSE, OH. Accessed at http://mrcc.isws.illinois.edu/climate_midwest/historical/precip/oh/339361_psum.html August 28, 2011.
- Ohio Environmental Protection Agency (OEPA). 2011. Redesignation Request and Maintenance Plan for the Dayton-Springfield Annual PM_{2.5} Nonattainment Area, Clark, Greene, and Montgomery Counties, Ohio. Division of Air Pollution Control. May 2011. Accessed on August 28, 2011 at

- http://www.epa.ohio.gov/portals/27/SIP/Attain/PM2_5/FINAL_Dayton-Springfield_PM25_annual_redesignation.pdf
- _____. 2010. The State of Ohio Fine Particulate (PM2.5) SIP for Ohio's Nonattainment Areas. Division of Air Pollution Control. July 2008, revised June 7, 2010. Accessed at http://www.epa.ohio.gov/portals/27/SIP/Attain/PM2_5/Final_SIP_PM25_Document.pdf on August 28, 2011.
- _____. 2007. Request for Redesignation and Maintenance Plan for Ozone Attainment in the Eight-hour Ozone Basic Nonattainment Area Dayton-Springfield, OH (Clark, Greene, Miami and Montgomery Counties). Division of Air Pollution Control. Accessed at http://www.epa.ohio.gov/portals/27/SIP/Nonattain/Doc_DaytonSpringfield030807.pdf on August 28, 2011.
- _____. 2006. Developing Source Water Protection Plan for Public Drinking Water Systems Using, Ohio Environmental Protection Agency - Division of Drinking and Groundwaters, signed - November, 2000.
- Soil Conservation Service (SCS). 1978. *Soil Survey of Greene County, Ohio, in cooperation with Ohio Department of Natural Resources and Ohio Agricultural Research and Development Center*. Accessed at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> on October 12, 2011.
- Spencer-ER. 2005. Heavy Construction Equipment Noise Study Using Dosimetry and Time-Motion Studies. Proceedings of the 2007 National Conference on Noise Control Engineering (pp. 1-8). Minneapolis, MN: Institute of Noise Control Engineering of the USA.
- U.S. Army Construction Engineering Research Laboratories (USACERL). 1991. Tri-Services Cultural Resources Management Center. *Cultural Resource Investigation for Proposed Marker Pylons at the Wright Brothers Flying Field, Huffman Prairie, Wright-Patterson Air Force Base, Ohio*.
- U.S. Fish and Wildlife Service (USFWS). 2011. Ohio Biodiversity Database Rare Species List for Greene County as of 7/5/2011. Access at www.fws.gov/midwest/endangered/section7/sppranges/ohio-cty.html on September 15, 2011.
- Wright-Patterson Air Force Base (WPAFB). 2011a. *Final Environmental Assessment for the AFIT Master Plan*. 88th Air Base Wing, Environmental Management Division, Wright-Patterson Air Force Base. May.
- _____. 2011b. *Wright-Patterson AFB Implementation Plan to Address Potential Disturbance of Landfills*. March.
- _____. 2011c. *Drinking Water Source Protection Plan*. 88th Air Base Wing, Environmental Management Division, Wright-Patterson Air Force Base. July.
- _____. 2010. GHG_Inventory_Revised_07-2010, Excel file.

- _____. 2008a. *Final Environmental Assessment for BRAC Facilities and Remote Field Training Site*. 88th Air Base Wing, Environmental Management Division, Wright-Patterson Air Force Base. March.
- _____. 2008b. *Integrated Pollution Prevention, Green Procurement and Solid Waste Management Plan, Wright-Patterson Air Force Base*. 88th Air Base Wing, Environmental Management Division. February.
- _____. 2008c. *Installation HAZMAT Management Program Plan, Wright-Patterson Air Force Base*. 88 Air Base Wing Environmental Management Division. May.
- _____. 2007a. *Integrated Natural Resources Management Plan 2007-2011, Wright-Patterson Air Force Base, Ohio*. Final. February 2007.
- _____. 2007b. *Final Environmental Assessment for Construction of BRAC Infrastructure Upgrades and the Human Performance Wing Complex in the Area B Hilltop District*. 88th Air Base Wing, Environmental Management Division, Wright-Patterson Air Force Base, Ohio. September.
- _____. 2007c. *Storm Water Pollution Prevention Plan, Wright-Patterson Air Force Base*. 88th Air Base Wing Environmental Management Division, Wright-Patterson Air Force Base, Ohio, July.
- _____. 2001. Aeronautical Systems Center. *General Plan for Wright-Patterson Air Force Base*. May.
- _____. 1998. *Record of Decision for 41 No Action Sites at Wright-Patterson Air Force Base, Wright-Patterson Air Force Base, Ohio*. 88th Air Base Wing, Environmental Management Division. 20 August.

THIS PAGE INTENTIONALLY LEFT BLANK

APPENDIX A

INTERAGENCY AND INTERGOVERNMENTAL COORDINATION FOR ENVIRONMENTAL PLANNING

THIS PAGE INTENTIONALLY LEFT BLANK



LABAT
Environmental

1406 Fort Crook Road South, Suite 101
Bellevue, NE 68005-2980
Phone (402) 291-2362
Fax (402) 291-2836

Ohio Department of Natural Resources
Division of Wildlife
Ohio Biodiversity Database Program
4625 Morse Road, Building G-3
Columbus, OH 43229-3096

August 9, 2011

Subject: Data Request, Hilltop Community Service Development, Wright-Patterson Air Force Base

Dear Database Administrator:

The U.S. Air Force is proposing to construct three service facilities as part of the Hilltop Community Service Development (HCSD) at Wright-Patterson Air Force Base (AFB). On behalf of the 88th Air Base Wing Environmental Management Division, we are requesting information on Ohio's rare plants and animals, high quality plant communities, and other natural features that may be within a one-mile radius of the proposed project location. The Database Request Form is attached. The information will be used in the preparation of an Environmental Assessment (EA) in compliance with the National Environmental Policy Act.

The HCSD is proposed to be located on approximately 15 acres within the developed part of Area B of Wright-Patterson AFB. The HCSD is near the Air Force Institute of Technology campus and the new Information Technology Complex. The three service facilities proposed for construction include a restaurant, Credit Union, and shoppette/gas station. The proposed location is shown on the attached topographic map.

The Draft EA is scheduled for release by mid-September and thus a prompt response is greatly appreciated. If there are any questions or additional information is needed, please contact Mary Peters by telephone at 702-285-3784 or by e-mail at mary.peters@labatenv.com. Thank you for your assistance.

Regards,

Labat Environmental, Inc.

Dan G. Moyes, CECM
Vice President

Attachments

Data Request Form
Location Map

cc: Karen Beason, via email: Karen.Beason@wpafb.af.mil
Ms. Jo Lynn Anderson: via email: JoLynn.Anderson@wpafb.af.mil
Ms. Pat Long, via email: Pat.Long@wpafb.af.mil (letter only)

LABAT Environmental Inc.

A Service-Disabled Veteran Owned Small Business



DATA REQUEST FORM

OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF WILDLIFE
OHIO BIODIVERSITY DATABASE PROGRAM
2045 MORSE RD., BLDG. G-3
COLUMBUS, OHIO 43229-6693
PHONE: 614-265-6452; FAX: 614-267-3096

INSTRUCTIONS:

Please complete both sides of this form, sign and return it to the address or fax number given above along with: (1) a brief letter describing your project, and (2) a map detailing the boundaries of your project site. A copy of the pertinent portion of a USGS 7.5 minute topographic map is preferred but other maps are acceptable. Our turnaround time is two weeks, although we can often respond more quickly. If you fax in your request you do not need to mail the original unless otherwise requested.

FEES:

As of June 2010, we have temporarily suspended charging a fee until a review of the data request process has been completed.

WHAT WE PROVIDE: The Biodiversity Database is the most comprehensive source of information on the location of Ohio's rare species and significant natural features. Records for the following will be provided: plants and animals (state and federal listed species), high quality plant communities, geologic features, breeding animal concentrations and unprotected significant natural areas. We also provide locations for managed areas including federal, state, county, local and non-profit sites, as well as state and national scenic rivers. A minimum one mile radius around the project site will automatically be searched. Because the data is sensitive information, it is our policy to provide only the data needed to complete your project.

Date: 8/8/11 Company name: Labat Environmental, Inc.

Name of person response letter should be addressed to: Mr. ☒ Ms. ☐
Dan Moyes

Address: 8626 Tesoro, Suite 810

City/State/Zip: San Antonio, TX 78217

Phone: 210-654-3546 Fax: 210-654-3802

E-mail address: dan.moyes@labatenv.com

Project Name: HCSD EA

Project Number: 9324-006

Project Site Address: Skyline Road and 10th Street, Wright Patterson AFB

Project County: Greene

Project City/Township: Fairborn | Bath

Project site is located on the following USGS 7.5 minute topographic quad(s): _____

Fairborn 1992 1:24,000

Section 12 T7.0N R2.0E

Description of work to be performed at the project site: construction of 3 facilities
(shopette/gas station, Credit Union, restaurant) to Support Wright-
Patterson AFB personnel.

How do you want your data reported? (Both formats provide exactly the same data. The only difference is in the format of our response. The manual search is most appropriate for small scale projects or for those who do not have GIS capabilities. Please choose only one option.)

Printed list and map (manual search) X OR GIS shapefile (computer search) _____

Additional information you require: _____

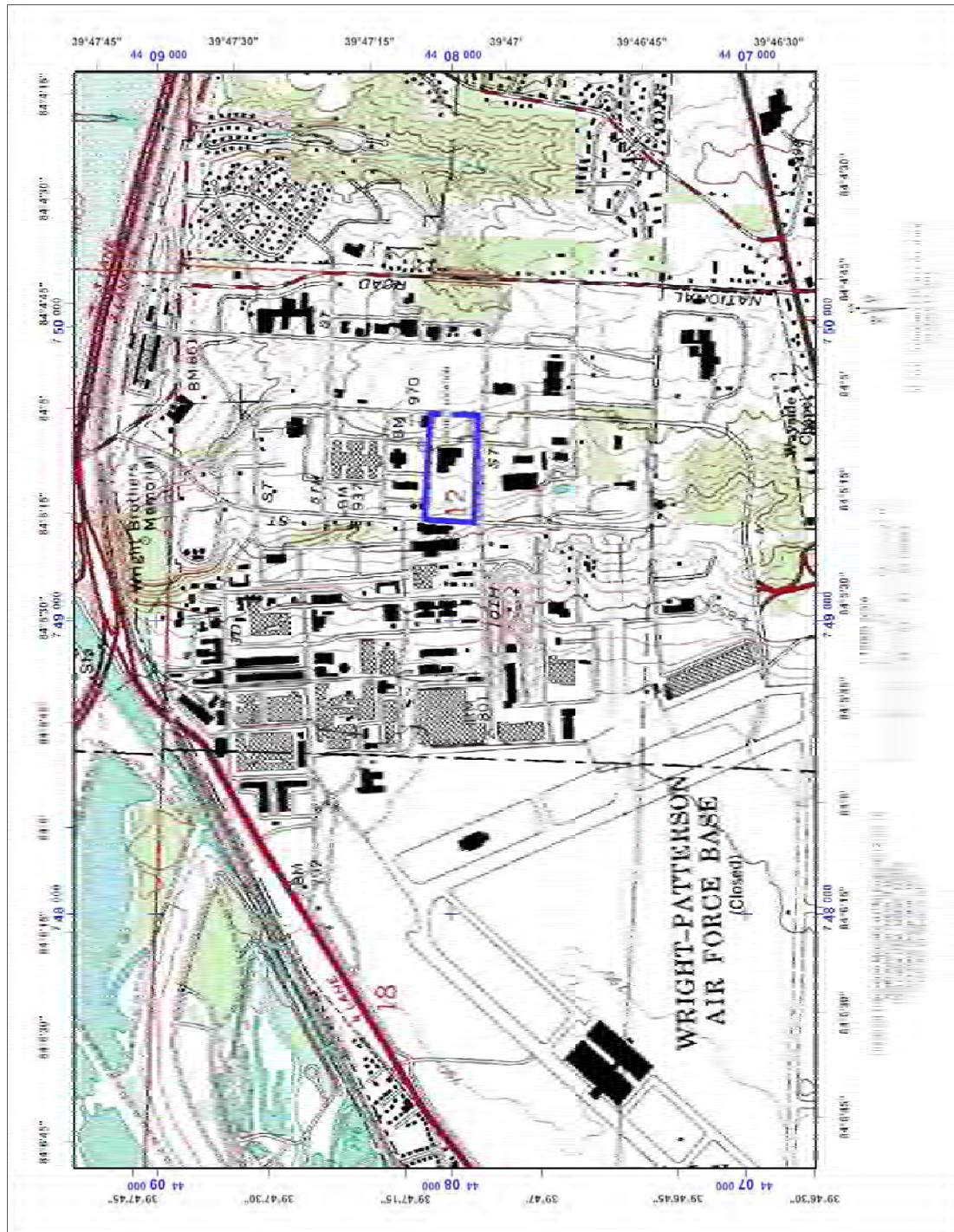
How will the information be used? preparation of Environmental Assessment
for construction of facilities for Hilltop Community Service Development
in compliance with National Environmental Policy Act

I certify that data supplied by the Ohio Biodiversity Database Program will not be published without crediting the ODNR Division of Wildlife as the source of the material. In addition, I certify that electronic datasets will not be distributed to others without the consent of the Division of Wildlife, Ohio Biodiversity Program.

Signature _____

Date: _____

DNR 5203
REV 8/2010





Ohio Department of Natural Resources

JOHN R. KASICH, GOVERNOR

DAVID MUSTINE, DIRECTOR

Ohio Division of Wildlife

David B. Lane, Chief
2045 Morse Rd., Bldg. G
Columbus, OH 43229-6693
Phone: (614) 265-6300

August 11, 2011

Dan Moyes
Labat Environmental, Inc.
8626 Tesoro, Suite 810
San Antonio, TX 78217

Dear Mr. Moyes:

I have reviewed our Biodiversity Database for the Hilltop Community Service Development project area, including a one mile radius, at Skyline Rd. and 10th St., Wright-Patterson Air Force Base, in Bath Township, Greene County, and on the Fairborn Quad (9324-006). The numbers/letters on the list below correspond to the areas marked on the accompanying map. Common name, scientific name and status are given for each species.

Fairborn Quad

- A. Huffman Metro Park – Five Rivers Metro Parks (2 parcels)
1. *Myotis sodalis* – Indiana Bat, state endangered, federal endangered

In addition to the species given in the list above, there is a record for the Eastern Massasauga (*Sistrurus catenatus*), a state endangered and federal candidate species, within the project vicinity. Please be aware that we do not give out specific location data for this sensitive species so it is not included in the list above or shown on the map. Due to the project's proximity to current records, if wetlands are within the vicinity of the project, a habitat survey is required on the proposed site. The survey must be done by a professional herpetologist approved by the DOW. Unless the herpetologist determines that the presence of the Eastern Massasauga is highly unlikely, a presence/absence survey will be required. If no wetland habitat is present in the vicinity of the project area, the project is not likely to have a negative impact to the species.

We are unaware of any geologic features, animal assemblages, scenic rivers, state wildlife areas, nature preserves, parks or forests or national wildlife refuges, parks or forests within a one mile radius of the project area.

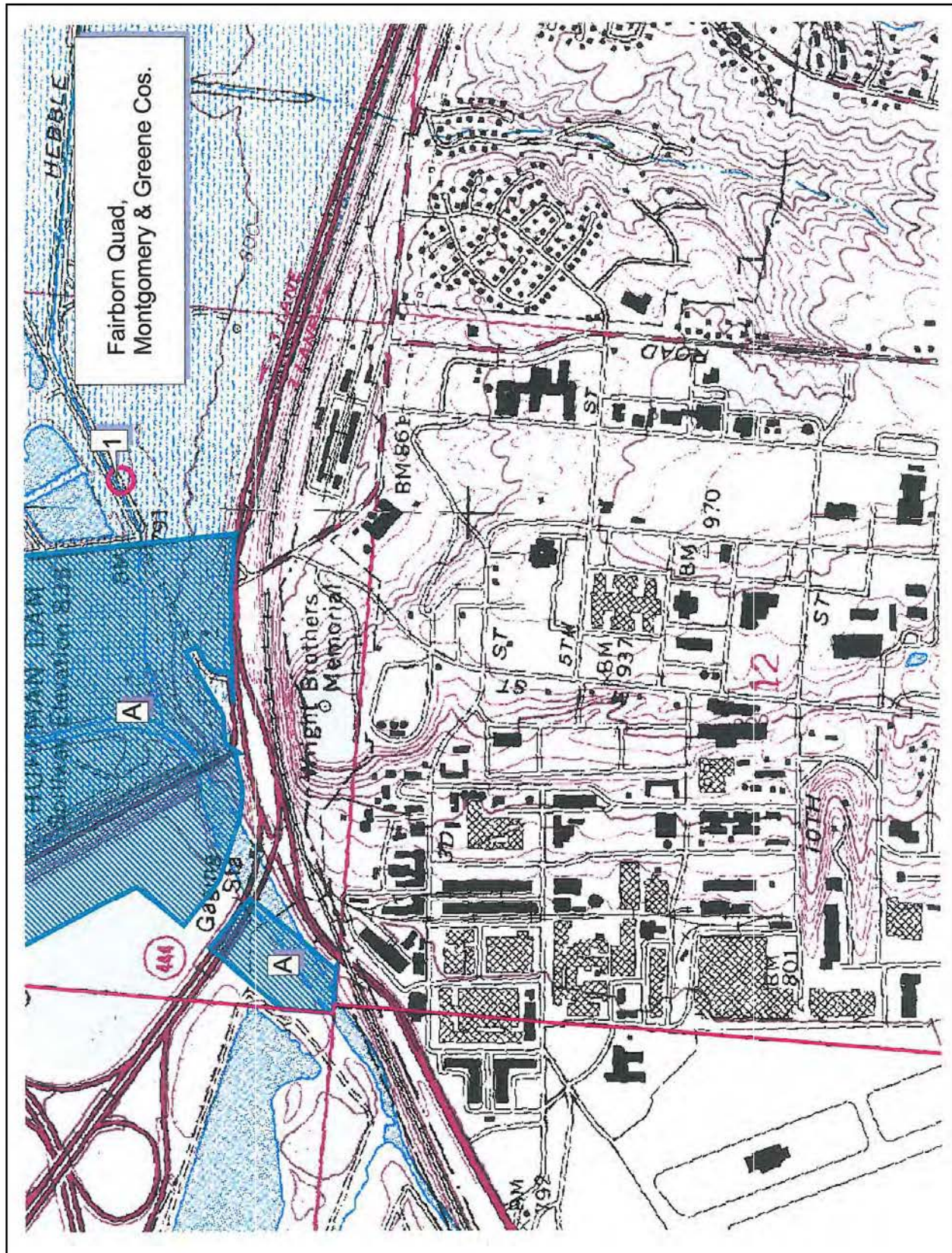
Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Please note that although we inventory all types of plant communities, we only maintain records on the highest quality areas.

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

A handwritten signature in dark ink, appearing to read "Debbie Woischke".

Debbie Woischke, Ecological Analyst
Ohio Biodiversity Database Program





DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

17 October 2011

88 ABW/CEANQ
1450 Littrell Road
Wright-Patterson AFB OH 45433-5209

Mr. Mark Epstein
Department Head, Resource Protection & Review
Ohio Historic Preservation Office
1982 Velma Ave
Columbus OH 43211-2497

Dear Mr. Epstein

Wright-Patterson Air Force Base (WPAFB) is preparing an Environmental Assessment (EA) in accordance with the requirements of the National Environmental Policy Act (NEPA) to analyze the potential impacts from implementing the Hilltop Community Development Plan (Hilltop Plan) in Area B. The Hilltop Plan would provide new and improved community service amenities to Area B. It is our opinion that the proposed undertaking would have no adverse effect on any historic properties listed or eligible for listing on the National Register of Historic Places. In accordance with 36 CFR 800.11(e), we are submitting the following documentation to support this determination.

Description of the undertaking. The Hilltop Plan area is bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street and is central to new construction in Area B for the relocated BRAC missions. The long-range Hilltop Plan includes construction and operation of new facilities and the demolition of an existing facility (Bldg 20167). The planned facilities include an AAFES Shoppette, a branch bank of the Wright-Patt Credit Union, a food service establishment, parking lot, and an undefined community facility or green space or a park where Bldg 20167 currently stands. The main ingress and egress for the area would be a north-south boulevard from 8th Street to 10th Street. Attachment 1 shows the Hilltop Plan, which is directly adjacent to the eastern boundary of the Wright Field Historic District, a National Register eligible property.

The Shoppette and Credit Union are currently programmed for design and construction over the next two years. As funding becomes available in later years, other facilities would be identified and programmed for design and construction in the available space remaining within the Hilltop Plan area.

Description of steps taken to identify historic properties. As part of the Integrated Cultural Resources Management Plan, WPAFB has conducted surveys of the entire base to locate historic

and prehistoric archaeological sites. Known archaeological sites, buildings on the installation that are 50 years old or older, and buildings having exceptional significance relating to the Cold War have been assessed. Considering the historically sensitive nature of Area B, the Area of Potential Effect (APE) for the proposed Hilltop Plan was established to provide a broad assessment of potentially affected resources beyond the proposed area of disturbance. The APE boundary extends approximately 500 to 1,000 feet beyond the proposed area and includes structures and sites within the direct view shed of the Hilltop Plan area. The APE is roughly bordered by Q Street to the east, 12th Street to the south, K Street to the west, and 5th Street to the north (Attachment 2).

Description of the affected properties. One known archaeological site and one building would be directly affected by the undertaking within the proposed area of disturbance. Site 33GR798 is a previously disturbed camp site. A phase II survey and testing in 2002 recovered no artifacts and no further artifacts are expected to be recovered, and therefore, the site was determined ineligible for the National Register (*Phase II Cultural Resource Evaluative Testing of Site 33-GR-797 and the Documentation of Disturbance at Sites 33-GR-797 and 33-GR-798, December 2002*). Building 20167 was constructed in 1948 as a film storage facility. The building has documented alterations, the film storage area is now vacant, and later additions are currently occupied by Air Force Research Laboratory personnel. A 1998 historic building evaluation concluded that Building 20167 is not eligible for the National Register, nor does it contribute to the District.

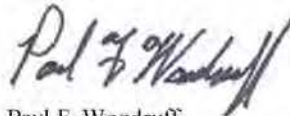
Three historic properties are located outside the proposed area of disturbance but within the APE. Site 33GR31 (Adena Mound) is a National Register listed prehistoric archaeological mound located north of the proposed Hilltop area. The mound is fenced and heavily vegetated. Building 20052, constructed in 1944, is a contributing building to the Wright Field Historic District. Building 20653, constructed in 1975, is individually eligible for the National Register for Cold War significance. Ohio Archaeological Inventory (OAI) forms and Ohio Historic Inventory (OHI) forms for these identified properties are included as Attachment 3.

Description of the undertaking's effects on historic properties. Construction for the Hilltop Plan would not impact any identified historic properties listed or eligible for listing on the National Register. Construction would not occur within 200 feet of the Adena Mound and would not affect the site. Construction would not change the character defining features of the Wright Field Historic District, or diminish the Cold War significance of Building 20653. Therefore, in accordance with 36 CFR 800.5(b), we have determined the proposed Hilltop Community Development Plan would have no adverse effect on historic properties.

WPAFB is consulting with the four Native American Tribes who requested consultation when ground disturbing activities on previously undisturbed land is proposed, or when a project has the potential to affect one of the Adena Mounds at WPAFB.

Please review the information and inform us of your concurrence with the no adverse effect determination. Should you have questions, I can be reached at 937-257-1374 or via email at paul.woodruff@wpafb.af.mil.

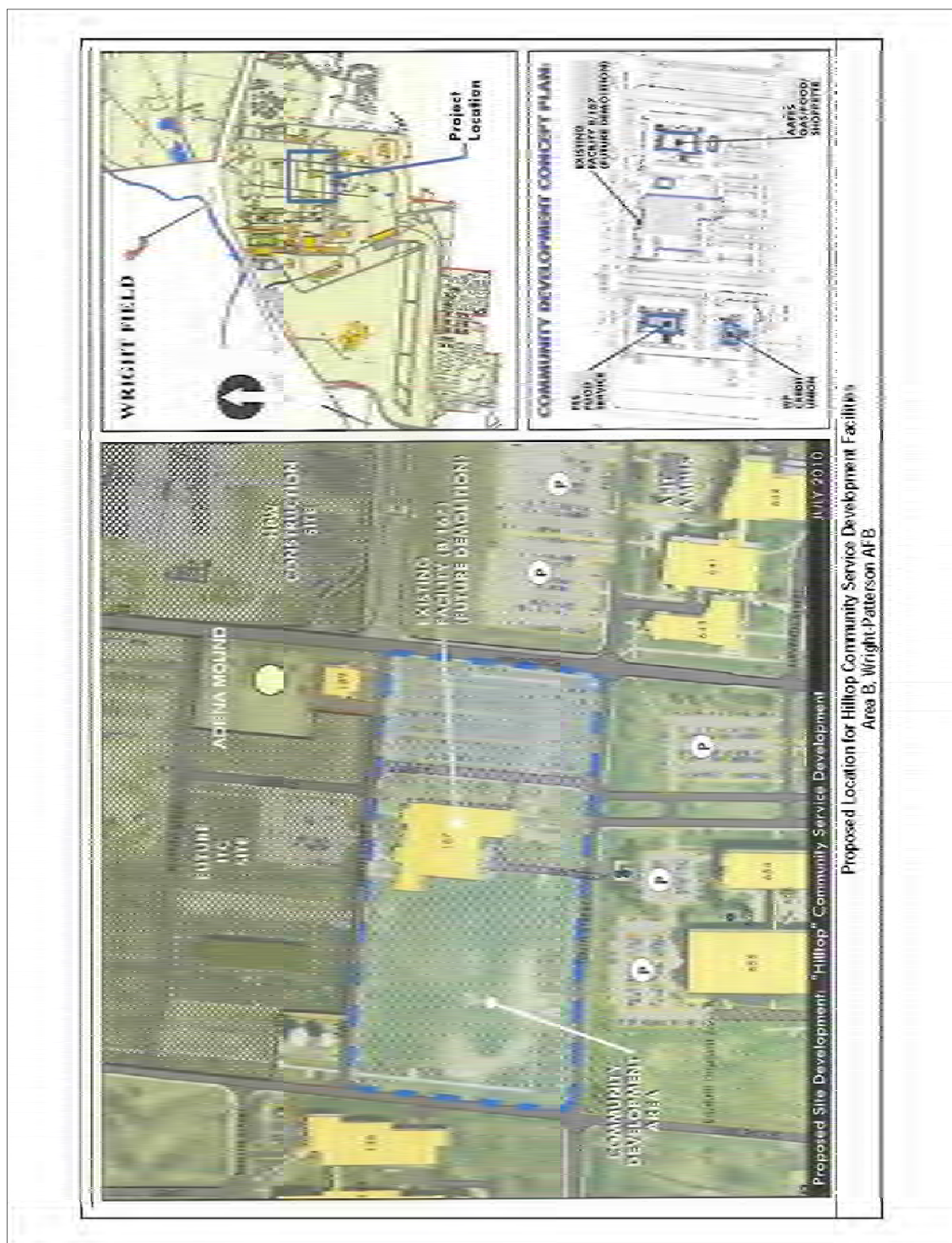
Sincerely

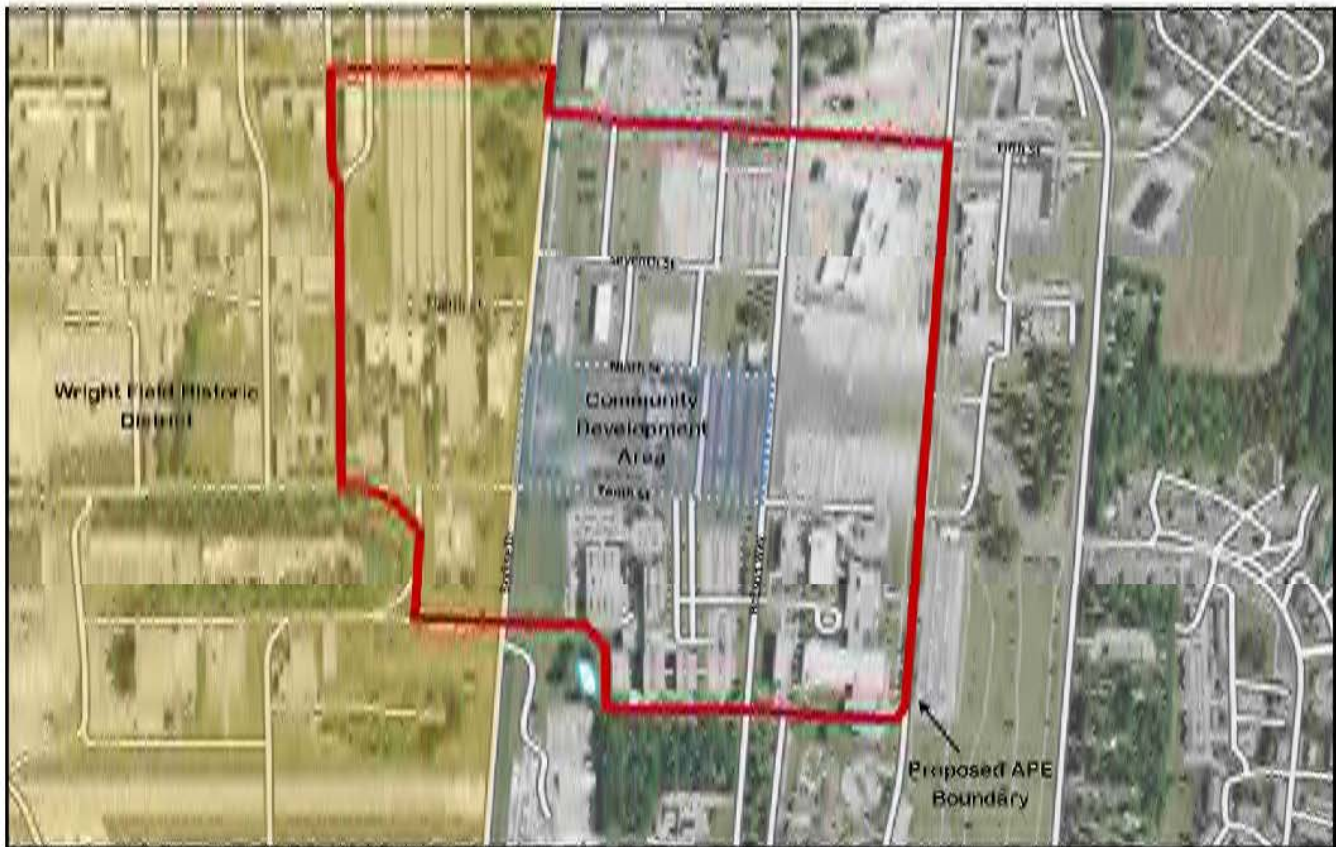
A handwritten signature in dark ink, appearing to read "Paul F. Woodruff". The signature is fluid and cursive, with the first name "Paul" being more prominent.

Paul F. Woodruff
Cultural Resources Manager
Environmental Quality Section
Environmental Branch

Attachments:

1. Site Map
2. APE Map
3. OAI and OHI Forms





Proposed Area of Potential Effects for the Hilltop Community Service District
Area B, Wright-Patterson AFB

0 100 500 1,000



Attachment 3 – OAI and OHI Forms are available upon request following confidentiality requirements under Air Force Instruction 32-7065 (1 Jun 04; Section 4.4) and pertinent authorities protecting cultural resources. Contact:

Cultural Resources Manager
88 ABW/CEANQ
Wright-Patterson AFB
937-257-1374



November 21, 2011

Paul Woodruff, Cultural Resources Manager
Environmental Quality Section
Environmental Branch
88 ABW/CEANQ
1450 Littrell Road
Wright-Patterson AFB OH 45433-5209

Re: Hilltop Community Development Plan, Wright-Patterson Air Force Base

Dear Mr. Woodruff,

This is in response to correspondence from your office dated October 17, 2011 (received October 19, 2011) regarding the above referenced undertaking. Additional information was received by email on November 15, 2011. Comments of the Ohio Historic Preservation Office (OHPO) are offered under provisions of the National Historic Preservation Act of 1966, as amended (16 USC 470 with implementing regulations at 36 CFR 800).

Wright-Patterson Air Force Base proposes to construct a shoppette, credit union branch bank and accompanying parking lot in an area bound by Hobson Way, 10th Street, Skyline Drive and 8th Street. The proposed project also includes the demolition of Building 20167, which your office determined not eligible for listing in the National Register of Historic Places (NRHP) in a 1998 historic building evaluation.

The Hilltop Plan area is immediately adjacent to the eastern boundary of the Wright Field Historic District. The renderings of the proposed shoppette and existing credit union branch, which will be used as a model for the proposed new construction, are of low profile and are obstructed from view of the Wright Field Historic District due to the presence of intervening buildings and topography. Therefore, the proposed shoppette and credit union will not have an adverse effect on historic properties.

While the current design proposal that you have presented leads me to concur with your finding of "No Adverse Effect" for the shoppette and credit union, I have concerns that this design will change since it is still in the early planning stages. Therefore, please resubmit this project for review if significant changes are made to the current design proposal as planning progresses. Please also note that our "No Adverse Effect" finding does not apply to the potential effects of the dining establishment since there are no design plans to date.

No further coordination is required unless there are changes to the project scope. In such a situation, this office should be contacted as per 36 CFR Section 800.13. If you have any questions, please contact me by phone at (614) 298-2000 or by email at jbertram@ohiohistory.org. Thank you.

Sincerely,

Jamie Bertram, Project Reviews Manager
Resource Protection and Review

OHIO HISTORICAL SOCIETY

Ohio Historic Preservation Office

1982 Velma Avenue, Columbus, Ohio 43211-2497 ph: 614.298.2000 fx: 614.298.2037
www.ohiohistory.org

OHPO 2011-GRE-18125



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

11 October 2011

88 ABW/CEANQ
1450 Littrell Road, Building 22
Wright-Patterson AFB OH 45433-5209

Kurt A. Rinehart, Chief Engineer
Miami Conservancy District
38 East Monument Avenue
Dayton, OH 45402

Dear Mr. Rinehart:

The U.S. Air Force is preparing an Environmental Assessment in accordance with the National Environmental Policy Act to analyze the potential impacts from implementing the proposed Hilltop Community Development Plan in Area B of Wright-Patterson Air Force Base (WPAFB). The proposed facilities are needed to serve the additional military and civilian personnel and families relocating to WPAFB to support mission changes and expansions because of Base Realignment and Closure. The purpose of this letter is to notify you of the proposed project and request your evaluation of potential impacts this project may have on flood protection, water resources, and water quality under the purview of the Miami Conservancy District.

The proposed project includes construction and operation of new facilities and the demolition of an existing facility (Building 20167). The planned facilities include an Army-Air Force Exchange Service Shoppette, a branch bank of the Wright-Patt Credit Union, a food service establishment, parking lot, and an undefined community facility or green space or a park where Building 20167 currently stands. The project area is bound by Hobson Way, 10th Street, Skyline Drive, and 9th Street and is central to new construction in Area B for relocated and expanded missions (see Attachment 1). The project area is within the developed part of Area B with surrounding complexes of buildings and infrastructure. This location is below Huffman Dam and is outside the 100-year floodplain. The topography of the project area slopes west with elevations ranging from 970 to 930 feet MSL.

Thank you for your assistance. If there are any questions or additional detail is needed, please contact me by telephone at 937-257-4857 or by e-mail at darryn.warner@wpafb.af.mil.

Sincerely,

Darryn M. Warner
Natural Resources Program Manager
Environmental Quality Section
Asset Management Division

cc: Karen Beason, NEPA Manager, WPAFB

Attachment: Location Map

Printed On  Recycled Paper



BOARD OF DIRECTORS
William E. Lukens
Gayle B. Price, Jr.
Mark G. Rentschler

GENERAL MANAGER
Janet M. Bly

October 24, 2011

Mr. Darryn M. Warner
Natural Resources Program Manager
88 ABW/CEANQ
1450 Littrell Road, Building 22
Wright-Patterson AFB OH 45433-5209

Dear Mr. Warner:

The Miami Conservancy District (MCD) staff has reviewed the proposed Hilltop Community Development Plan, located in the area bounded by Hobson Way, 10th Street, Skyline Drive, and 9th Street in Area B of Wright Patterson Air Force Base. The proposed development is downstream of Huffman Dam and would not affect the MCD flood protection system. MCD has no objections to, or additional comments regarding the proposed development.

Please contact me if you require additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Rinehart".

Kurt A. Rinehart
Chief Engineer

File: Huffman RB WPAFB

38 E. Monument Avenue • Dayton, Ohio 45402-1265 • 937-223-1271 • Fax 937-223-4730



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

13 October 2011

88 ABW/CEANQ
1450 Littrell Road, Building 22
Wright-Patterson AFB OH 45433-5209

Dr. Mary Knapp
U.S. Fish and Wildlife Service
Ecological Services
4625 Morse Road, Suite 104
Columbus OH 43230

Dear Dr. Knapp:

The U.S. Air Force is preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act to analyze the potential impacts from implementing the proposed Hilltop Community Development Plan in Area B of Wright-Patterson Air Force Base (WPAFB). Pursuant to its obligations under Section 7(a)(2) of the Endangered Species Act, WPAFB has identified species federally listed or proposed for listing as threatened or endangered and designated or proposed critical habitat that may be in the project area, and has determined the proposed project will have no effect on such species or habitat. Your written concurrence with this determination is requested.

The proposed project includes construction and operation of new facilities and the demolition of an existing facility (20167). The planned facilities include an Army-Air Force Exchange Service Shoppette, a branch of the Wright-Patt Credit Union, a food service establishment, parking lot. An undefined community facility, green space, or a park would go where Facility 20167 currently stands. The project area is bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street and is central to new construction in Area B for relocated and expanded missions (see Attachment 1). This location of Area B is developed with surrounding complexes of building and infrastructure. The vacant part of the project area is conventional landscaping of mowed grass and shade trees planted along the streets. There are no adjacent areas of native upland, riparian vegetation, or wetlands.

Through the Integrated Natural Resources Management Plan (INRMP) process, it has been determined two federally listed as endangered species (Indiana bat (*Myotis sodalis*) and clubshell mussel (*Pleurobema clava*)) are known to or may occur on WPAFB. The Eastern massasauga rattlesnake (*Sistrurus catenatus catenatus*), a federal candidate species, may also occur on WPAFB. Based on the INRMP process and a review of the January 2011 revised list for Greene and Montgomery counties (www.fws.gov/midwest/endangered/section7/sppranges/ohio-ctv.html), no other threatened, endangered, proposed, or candidate species are known to or may occur in the project area. No critical habitat has been designated or proposed for WPAFB.

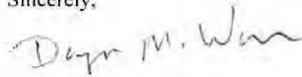
The shade trees would not be removed for project construction and additional landscaping would be planted with each proposed facility. An ½ acre isolated wetland and a wooded lot of approximately 5 acres are located south of the project area by more than 900 and 1,200 feet, respectively. The project area does not support habitat for the listed or candidate species that may occur on WPAFB and any potential habitat in the vicinity would not be disturbed.

Printed On  Recycled Paper

Because the project area is not within suitable habitat nor will any potential habitat be disturbed, no listed species would be directly or indirectly impacted. WPAFB has therefore determined the proposed project will have no effect on listed species and further consultation with your office is not necessary. Your written concurrence with this determination of no effect is, however, requested.

Thank you for your assistance. If there are any questions or additional detail is needed, please contact me by telephone at 937-257-5899 or by e-mail at darryn.warner@wpafb.af.mil.

Sincerely,



Darryn M. Warner
Natural Resources Program Manager
Environmental Quality Section
Asset Management Division

cc: Karen Beason, NEPA Manager, WPAFB

Attachment:

1. Location Map

-----Original Message-----

From: Melanie_Cota@fws.gov [mailto:Melanie_Cota@fws.gov]
Sent: Tuesday, November 08, 2011 4:53 PM
To: Beason, Karen N Civ USAF AFMC 88 ABW/CEAOR
Cc: Warner, Darryn M Civ USAF AFMC 88 ABW/CEANQ
Subject: Re: Hilltop Community Service District EA - FWS Letter.

Hi Karen,

The FWS has reviewed the above referenced Hilltop Community Development project in Area B of WPABF. You have made a no effect determination on three of the federally listed species within the range of the proposed project (see below). We understand there are no impacts to trees or wetlands/streams or other native habitat that supports these species. There is no consultation required for no effect determination by federal agencies and the Service does not give concurrence on no effects. However, we have no objection to your no effect determination based on the location of the project and lack of suitable habitat for these species. The Service recommends that any landscaping/enhancements be of native species to benefit wildlife.

Please note that in addition to the Indiana bat, eastern massasauga and clubshell mussel, the rayed bean and snuffbox mussels are proposed for listing as federally endangered and are known or have the potential to occur in the County. The Service recommends these species be addressed in the Section 7 consultation process for all proposed projects at WP. The Service also recommends including the bald eagle, protected by MBTA and BGEPA, that also occurs in the adjacent County and within close proximity to the base. Based on the information received for this project however, it does not appear that any of these species would be impacted. Please let me know if you have any questions.

Thanks! ~MC

Melanie Cota
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
4625 Morse Road, Suite 104
Columbus, OH 43230
614-416-8993 Ext. 15
614-416-8994 (Fax)
Melanie_Cota@fws.gov
<http://fws.gov/midwest/ohio>



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 88TH AIR BASE WING (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

17 October 2011

88 ABW/CEANQ
1450 Littrell Road
Wright-Patterson AFB OH 45433-5209

Ms. Lisa Larue
United Keetoowah Band of Cherokee Indians in Oklahoma
PO Box 746
Tahlequah, OK 74465

Dear Ms. Larue,

Wright-Patterson Air Force Base (WPAFB) is preparing an Environmental Assessment (EA) in accordance with the requirements of the National Environmental Policy Act (NEPA) to analyze the potential impacts from implementing the Hilltop Community Development Plan (Hilltop Plan) in Area B. The Hilltop Plan would provide new and improved community service amenities to Area B. It is our opinion that the proposed undertaking would have no adverse effect on any historic properties listed or eligible for listing on the National Register of Historic Places. In accordance with 36 CFR 800.11(e), we are submitting the following documentation to support this determination.

Description of the undertaking. The Hilltop Plan area is bound by Hobson Way, 10th Street, Skyline Drive, and 8th Street and is central to new construction in Area B for the relocated BRAC missions. The long-range Hilltop Plan includes construction and operation of new facilities and the demolition of an existing facility (Bldg 20167). The planned facilities include an AAFES Shoppette, a branch bank of the Wright-Patt Credit Union, a food service establishment, parking lot, and an undefined community facility or green space or a park where Bldg 20167 currently stands. The main ingress and egress for the area would be a north-south boulevard from 8th Street to 10th Street. Attachment 1 shows the Hilltop Plan, which is directly adjacent to the eastern boundary of the Wright Field Historic District, a National Register eligible property.

The Shoppette and Credit Union are currently programmed for design and construction over the next two years. As funding becomes available in later years, other facilities would be identified and programmed for design and construction in the available space remaining within the Hilltop Plan area.

Description of steps taken to identify historic properties. As part of the Integrated Cultural Resources Management Plan, WPAFB has conducted surveys of the entire base to locate historic and prehistoric archaeological sites. Known archaeological sites, buildings on the installation

that are 50 years old or older, and buildings having exceptional significance relating to the Cold War have been assessed. Considering the historically sensitive nature of Area B, the Area of Potential Effect (APE) for the proposed Hilltop Plan was established to provide a broad assessment of potentially affected resources beyond the proposed area of disturbance. The APE boundary extends approximately 500 to 1,000 feet beyond the proposed area and includes structures and sites within the direct view shed of the Hilltop Plan area. The APE is roughly bordered by Q Street to the east, 12th Street to the south, K Street to the west, and 5th Street to the north (Attachment 2).

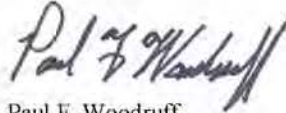
Description of the affected properties. One known archaeological site and one building would be directly affected by the undertaking within the proposed area of disturbance. Site 33GR798 is a previously disturbed camp site. A phase II survey and testing in 2002 recovered no artifacts and no further artifacts are expected to be recovered, and therefore, the site was determined ineligible for the National Register (*Phase II Cultural Resource Evaluative Testing of Site 33-GR-797 and the Documentation of Disturbance at Sites 33-GR-797 and 33-GR-798, December 2002*). Building 20167 was constructed in 1948 as a film storage facility. The building has documented alterations, the film storage area is now vacant, and later additions are currently occupied by Air Force Research Laboratory personnel. A 1998 historic building evaluation concluded that Building 20167 is not eligible for the National Register, nor does it contribute to the District.

Three historic properties are located outside the proposed area of disturbance but within the APE. Site 33GR31 (Adena Mound) is a National Register listed prehistoric archaeological mound located north of the proposed Hilltop area. The mound is fenced and heavily vegetated. Building 20052, constructed in 1944, is a contributing building to the Wright Field Historic District. Building 20653, constructed in 1975, is individually eligible for the National Register for Cold War significance. Ohio Archaeological Inventory (OAI) forms and Ohio Historic Inventory (OHI) forms for these identified properties are included as Attachment 3.

Description of the undertaking's effects on historic properties. Construction for the Hilltop Plan would not impact any identified historic properties listed or eligible for listing on the National Register. Construction would not occur within 200 feet of the Adena Mound and would not affect the site. Construction would not change the character defining features of the Wright Field Historic District, or diminish the Cold War significance of Building 20653. Therefore, in accordance with 36 CFR 800.5(b), we have determined the proposed Hilltop Community Development Plan would have no adverse effect on historic properties.

WPAFB is currently consulting with the Ohio State Historic Preservation Office regarding this undertaking. Please review the information and if you have any concerns in the areas described, please contact me by phone (937) 257-1374 or email me at paul.woodruff@wpafb.af.mil.

Sincerely



Paul F. Woodruff
Cultural Resources Manager
Environmental Quality Section
Environmental Branch

Attachments:

1. Site Map
2. APE Map
3. OAI and OHI Forms

From: [Lisa LaRue](#)
To: [Woodruff, Paul F Civ USAF AFMC SS ABW/CFANO](#)
Cc: [Lavema Stapleton](#)
Subject: Wright-Patterson Airforce Base Hilltop Plan
Date: Monday, October 31, 2011 1:41:22 PM

We concur. The United Keetoowah Band has reviewed this project, and has no objection. However, if any human remains are inadvertently discovered, please cease all work and contact us immediately.

Lisa LaRue

Acting Tribal Historic Preservation Officer

United Keetoowah Band of Cherokee Indians in Oklahoma

918-822-1952