



Hill Air Force Base, Utah

Final

Environmental Assessment:

New Homes in Area A, Hill Air Force Base, Utah

January 26, 2026

Final
**Environmental Assessment (EA):
New Homes in Area A,
Hill Air Force Base, Utah**

**Department of the Air Force
Air Force Materiel Command
Hill Air Force Base, Utah 84056**

January 26, 2026

Prepared in accordance with the National Environmental Policy Act (NEPA) as amended by the Fiscal Responsibility Act (FRA) of 2023 (Public Law 118-5); Department of the Air Force's (DAF's) Environmental Impact Analysis Process (EIAP) implementing regulations [32 Code of Federal Regulations (CFR) Part 989] to the extent they are consistent with NEPA as revised by the FRA; and Executive Order (EO) 14154.

FINDING OF NO SIGNIFICANT IMPACT

- 1. NAME OF ACTION:** New Homes in Area A, Hill Air Force Base (AFB), Utah.
- 2. DESCRIPTION OF THE PROPOSED ACTION:** Hill AFB proposes to provide on base housing for officers and their families on Hill AFB, Utah, by replacing an aging fourplex housing unit (Building 1130) that has outlived its serviceable life.
- 3. SELECTION CRITERIA:**

The proposed action satisfies the following criteria:

- be located on base,
- provide a healthy and safe living environment,
- not conflict with the *Hill AFB Compatible Use Plan*, which dictates development zones applicable to maintaining facilities and building new structures on the base, and
- comply with federal, state, and local environmental regulations.

4. ALTERNATIVES CONSIDERED:

Alternative A: No Action

Under the no action alternative, additional on-base housing units would not be provided. The fourplex would not be demolished. Off-base housing units would be rented for officers and their families. Neither the stated needs nor the selection criteria would be satisfied.

Alternative B: Proposed Action

Demolish one fourplex housing unit and construct 26 housing units on Hill AFB. The new housing units would consist of 13 slab on grade two-story duplexes, each having four bedrooms, two and a half bathrooms, and a two-car garage.

Alternative C: Construct New Homes Near Pond 3

Construct 26 housing units adjacent to Hill AFB Pond 3 and the Hill AFB Medical Clinic. There are environmental restrictions for this acreage.

Alternative D: Demolition Only

Demolish the fourplex and do not construct new housing units.

5. SUMMARY OF ANTICIPATED ENVIRONMENTAL EFFECTS:

This section only applies to the alternatives considered in detail.

Issue	Alternative A No Action	Alternative B Proposed Action - Construct New Homes in Area A
Air Quality	No effect.	None of the expected emissions associated with the proposed action meets or exceeds threshold values; the proposed action would not have a significant effect on air quality and a general conformity determination is not necessary. Design engineers would specify sub-structure vapor barriers to protect indoor air quality.
Water Resources	No effect.	During construction and operations, water quality would be protected by implementing stormwater management practices. Stormwater would be routed to existing connection points. Pre-development runoff volumes would be maintained.
Cultural Resources	No action would eventually have an adverse impact on historic properties. The existing duplex is deteriorating and will become increasingly unfeasible to maintain, thus detracting from the Historic District.	The project falls within the Hill AFB Historic Housing Area District and Cultural Landscape which has been determined eligible for the National Register of Historic Places. The proposed project will have adverse impacts to the District. Building 1130 has been determined eligible as a contributing element to the District and its demolition will have an adverse effect to the District. The demolition of Building 1130 was previously mitigated through a Memorandum of Agreement (MOA) with the Utah State Historic Preservation Office (SHPO) and all stipulations have been completed for this portion of the project. All remaining adverse effects would be mitigated in compliance with a 2026 MOA with the SHPO.
Geology and Soils	No effect.	To preclude effects from arsenic and from potential presence of per- and polyfluoroalkyl substances (PFAS), the entire area of the proposed action would be covered by structures, pavements, grass, and landscaping with mulch.

6. FINDING OF NO SIGNIFICANT IMPACT: Based on the above considerations, a finding of no significant impact (FONSI) is appropriate for this assessment.

FENG.PETER.PE
I-YIN.1005264401
Digitally signed by
FENG.PETER.PE-I-
YIN.1005264401
Date: 2026.01.27 12:21:49 -07'00'

PETER P. FENG, PE, PhD, NH-IV, DAF
Director

27 January 2026



**DEPARTMENT OF THE AIR FORCE
75TH CIVIL ENGINEER GROUP (AFMC)
HILL AIR FORCE BASE UTAH**

27 January 2026

MEMORANDUM FOR WHOM IT MAY CONCERN

FROM: Director, 75th CEG

SUBJECT: New Homes in Area A, Hill Air Force Base Environmental Assessment (EA),
Certification of Page Limits and Deadline

This memorandum pertains to the Area A Housing EA (attached). In accordance with the National Environmental Policy Act (NEPA), 42 U.S.C. § 4321, et seq., the Department of the Air Force (DAF) has considered the factors mandated by NEPA in the preparation of this EA.

I certify that the analysis within the EA has been tailored to comply with page limits and deadlines. The EA represents DAF's good-faith effort to prioritize and document the most important considerations required by NEPA within the congressionally mandated page limits and timeline. This prioritization reflects DAF's expert judgment. The effort is substantially complete. Considerations addressed briefly or unaddressed were, in DAF's judgment, to be comparatively not of a substantive nature that meaningfully informed the consideration of environmental effects and the resulting decision on how to proceed.

In the DAF's expert opinion, it has thoroughly considered the factors mandated by NEPA. The analysis contained within the EA is, in DAF's judgment, adequate to inform and reasonably explain the DAF's final decision regarding the proposed action to provide on base housing for officers and their families on Hill AFB, Utah, by replacing an aging fourplex housing unit (Building 1130) that has outlived its serviceable life.

FENG.PETER.PE
I-YIN.1005264401
Digitally signed by
FENG.PETER.PE-I-
YIN.1005264401
Date: 2026.01.27 12:24:38 -07'00'

PETER P. FENG, PE, PhD, NH-IV, DAF
Director

Attachment:

1. Housing Area A Environmental Assessment
2. Housing Area A Finding of No Significant Impact (FONSI)

EXECUTIVE SUMMARY

Purpose and Need

The purpose of the proposed action is to provide on base housing for officers and their families on Hill AFB, Utah, by replacing an aging fourplex housing unit (Building 1130) that has outlived its serviceable life.

Selection Criteria

On-base housing should:

- be located on base,
- provide a healthy and safe living environment,
- not conflict with the Hill AFB *Compatible Use Plan*, which dictates development zones applicable to maintaining facilities and building new structures on the base, and
- comply with federal, state, and local environmental regulations.

Scope of Review

The issues that were identified for detailed consideration are: air quality, water resources, cultural resources, and geology and soils.

Alternatives Considered

Alternative A (No Action Alternative) - Under the no action alternative, additional on-base housing units would not be provided. The fourplex would not be demolished. Off-base housing units would be rented for officers and their families. Neither the stated needs nor the selection criteria would be satisfied.

Alternative B (Proposed Action - Construct New Homes in Area A) - Demolish one fourplex housing unit and construct 26 housing units on Hill AFB. The new housing units would consist of 13 slab on grade two-story duplexes, each having four bedrooms, two and a half bathrooms, and a two-car garage.

Alternative C (Construct New Homes Near Pond 3) - Construct 26 housing units adjacent to Hill AFB Pond 3 and the Hill AFB Medical Clinic. There are environmental restrictions for this acreage.

Alternative D (Demolition Only) - Demolish the fourplex and do not construct new housing units.

Results of the Environmental Assessment

Two alternatives were considered in detail. The results of the environmental assessment are summarized in the following table.

Summary of Predicted Environmental Effects

Issue	Alternative A No Action	Alternative B Proposed Action - Construct New Homes in Area A
Air Quality	No effect.	None of the expected emissions associated with the proposed action meets or exceeds threshold values; the proposed action would not have a significant effect on air quality and a general conformity determination is not necessary. Design engineers would specify sub-structure vapor barriers to protect indoor air quality.
Water Resources	No effect.	During construction and operations, water quality would be protected by implementing stormwater management practices. Stormwater would be routed to existing connection points. Pre-development runoff volumes would be maintained.
Cultural Resources	No action would eventually have an adverse impact on historic properties. The existing duplex is deteriorating and will become increasingly unfeasible to maintain, thus detracting from the Historic District.	The project falls within the Hill Air Force Base (AFB) Historic Housing Area District and Cultural Landscape which has been determined eligible for the National Register of Historic Places. The proposed project will have adverse impacts to the District. Building 1130 has been determined eligible as a contributing element to the District and its demolition will have an adverse effect to the District. The demolition of Building 1130 was previously mitigated through a Memorandum of Agreement (MOA) with the Utah State Historic Preservation Office (SHPO) and all stipulations have been completed for this portion of the project. All remaining adverse effects would be mitigated in compliance with a 2026 MOA with the SHPO.
Geology and Soils	No effect.	To preclude effects from arsenic and from potential presence of per- and polyfluoroalkyl substances (PFAS), the entire area of the proposed action would be covered by structures, pavements, grass, and landscaping with mulch.

Identification of the Preferred Alternative

Hill AFB prefers Alternative B (the proposed action).

TABLE OF CONTENTS

1	Purpose of and Need for Action.....	1
1.1	Introduction.....	1
1.2	Purpose of the Proposed Action.....	2
1.3	Need for the Action.....	2
1.4	Relevant EISs, EAs, Laws, Regulations, Plans, and Other Documents	2
1.5	Decisions That Must Be Made.....	3
1.6	Scope of this Environmental Analysis.....	3
1.6.1	History of the Planning and Scoping Process	4
1.6.2	Issues Studied in Detail.....	4
1.6.3	Issues Eliminated From Further Study	4
1.7	Applicable Permits, Licenses, and Other Coordination Requirements.....	6
2.0	Alternatives, Including the Proposed Action.....	7
2.1	Introduction.....	7
2.2	Process Used to Develop the Alternatives	7
2.2.1	Alternative Selection Criteria	7
2.3	Description of Alternatives	8
2.3.1	Alternative A: No Action.....	8
2.3.2	Alternative B: Proposed Action - Construct New Homes in Area A	8
2.3.3	Alternative C: Construct New Homes Near Pond 3	10
2.3.4	Alternative D: Demolition Only	10
2.3.5	Alternatives Eliminated From Detailed Consideration.....	10
2.4	Summary Comparison of the Alternatives and Predicted Achievement of the Project Objectives	11
2.4.1	Summary Comparison of Project Alternatives	11
2.4.2	Predicted Achievement of Project Objectives	11
2.5	Identification of the Preferred Alternative.....	11
3.0	Affected Environment	12
3.1	Introduction.....	12
3.2	Description of Relevant Facilities and Operations	12
3.3	Description of Relevant Affected Issues.....	12
3.3.1	Air Quality	12
3.3.2	Water Resources	13
3.3.3	Cultural Resources	13
3.3.4	Geology and Soils	14
3.4	Description of Relevant Pre-Existing Environmental Factors.....	14
4.0	Environmental Consequences.....	16
4.1	Introduction.....	16
4.2	Predicted Effects to Relevant Affected Resources	16
4.2.1	Predicted Effects to Air Quality.....	16

4.2.2	Predicted Effects to Water Resources	17
4.2.3	Predicted Effects to Cultural Resources	18
4.2.4	Predicted Effects to Geology and Soils	20
4.3	Summary Comparison of Predicted Environmental Effects	22
5.0	List of Preparers	23
6.0	List of Persons and Agencies Consulted	24
7.0	References	25

LIST OF FIGURES

Figure 1:	Location of the Proposed Action on Hill AFB.....	1
Figure 2:	Boundary of the Proposed Action	9
Figure 3	Configuration of the Proposed Action.....	10
Figure 4:	Locations of Soil and Soil Gas Samples	15

LIST OF TABLES

Table 1:	Predicted Achievement of Project Objectives	11
Table 2:	Baseline Air Pollutants (tons/year).....	13
Table 3:	Summary Comparison of Predicted Environmental Effects.....	22

LIST OF APPENDICES

Appendix A:	Cultural Resources Documentation
-------------	----------------------------------

LIST OF ACRONYMS AND CHEMICAL TERMS

ACAM	Air Conformity Applicability Model
AFB	Air Force Base
AFCEC	Air Force Civil Engineer Center
AFCEE	Air Force Center for Environmental Excellence
AFOSH	Air Force Occupational Safety and Health
AICUZ	Air Installation Compatible Use Zone
bgs	below ground surface
BMP	Best Management Practices
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CRM	Cultural Resource Manager
CWA	Clean Water Act
DAQ	Division of Air Quality (Utah)
db	decibels
EA	Environmental Assessment
EIAP	Environmental Impact Analysis Process
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act
EO	Executive Order
EPA	Environmental Protection Agency (United States)
GCR	General Conformity Rule
IDT	Interdisciplinary Team
IRP	Installation Restoration Program
LID	Low Impact Development
mg/kg	milligrams per kilogram
MOA	Memorandum of Agreement
MSGP	Multi-sector General Permit
NAAQS	National Ambient Air Quality Standards
NDSD	North Davis Sewer District

NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NO _x	Oxides of Nitrogen
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
O ₃	Ozone
OSHA	Occupational Safety and Health Administration
PCBs	Polychlorinated Biphenyls
PFAS	Per- and Polyfluoroalkyl Substances
PFOS	Perfluorooctane Sulfonate
PM ₁₀	Particulates Equal to or Less Than 10 Microns in Diameter
PM _{2.5}	Particulates Equal to or Less Than 2.5 Microns in Diameter
RCRA	Resource Conservation and Recovery Act
RSL	Residential Screening Level
SHPO	State Historic Preservation Office (Utah)
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
SO _x	Oxides of Sulfur
SWPPP	Stormwater Pollution Prevention Plan
UAC	Utah Administrative Code
UDEQ	Utah Department of Environmental Quality
UPDES	Utah Pollutant Discharge Elimination System
USAF	United States Air Force
USC	United States Code
VOC	Volatile Organic Compound

1 PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

Hill Air Force Base (AFB) is located approximately 25 miles north of downtown Salt Lake City and seven miles south of downtown Ogden, Utah (Figure 1). Hill AFB is surrounded by several communities: Roy and Riverdale to the north; South Weber to the northeast; Layton to the south; and Clearfield, Sunset, and Clinton to the west. The base lies primarily in northern Davis County with a small portion located in southern Weber County.

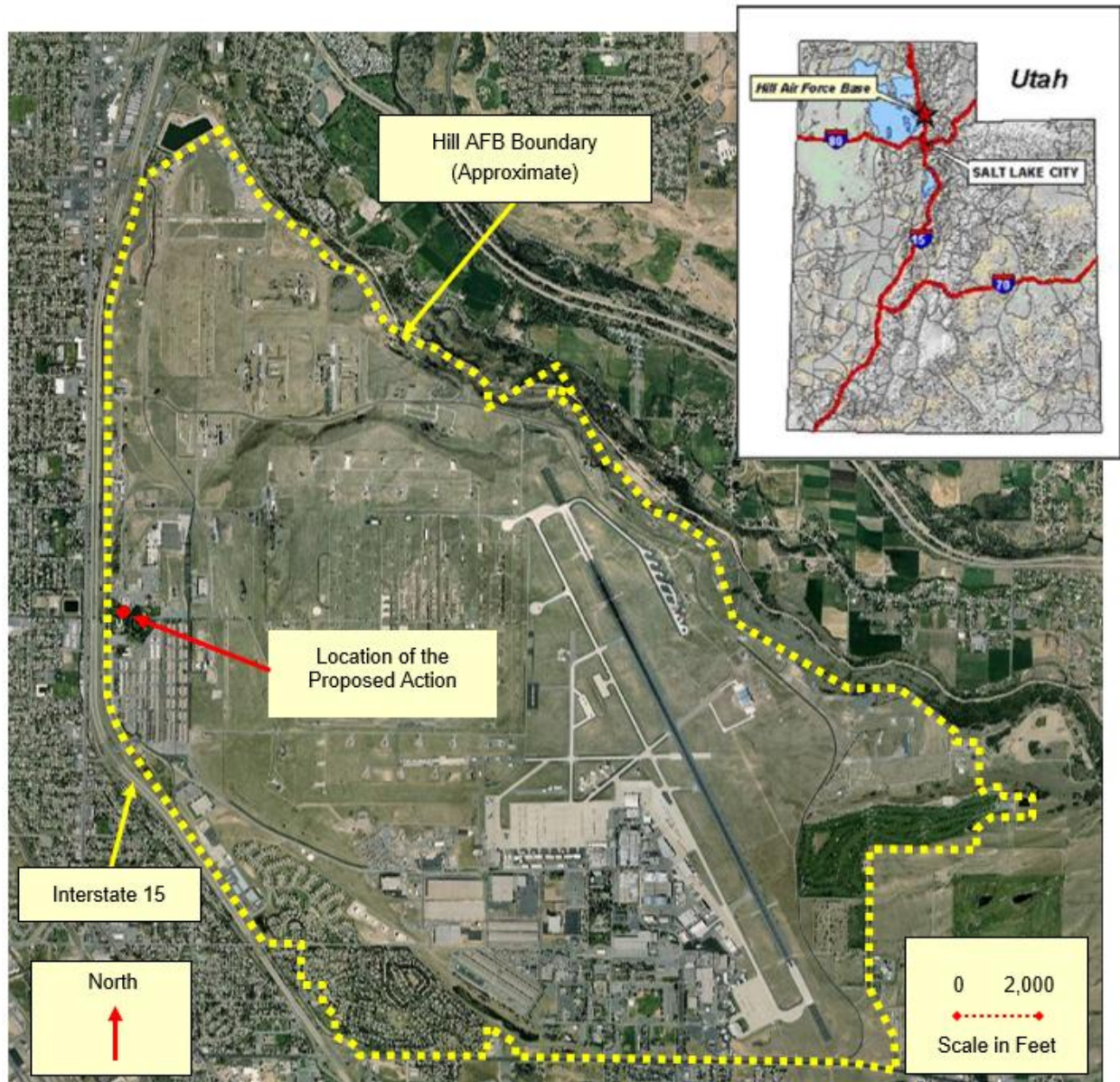


Figure 1: Location of the Proposed Action on Hill AFB

According to the Department of Defense (www.militaryonesource.mil), living on a military installation is a great opportunity to connect with other service members and military families and become part of a global service-oriented community. Installation living enables service members to be close to work and allows families to save money on rent and utilities. A big advantage to living on an installation is convenience. Everything from child care and medical treatment to libraries, playgrounds, recreational facilities, and grocery shopping are all available close to home.

1.2 Purpose of the Proposed Action

The purpose of the proposed action is to provide on base housing for officers and their families on Hill AFB, Utah, to replace an aging fourplex housing unit (Building 1130) that has outlived its serviceable life.

1.3 Need for the Action

The proposed action is needed to replace old and unserviceable housing units (Boyer 2024).

1.4 Relevant EISs, EAs, Laws, Regulations, Plans, and Other Documents

No relevant environmental impact statements (EISs) or environmental assessments (EAs) were identified.

The following federal, state, and local laws and regulations would apply to the proposed action:

- The National Environmental Policy Act (NEPA), Title 42 of the United States Code (USC) Section 4321 *et seq.*
- United States Air Force (USAF)-specific NEPA requirements contained in Title 32 of the Code of Federal Regulations (CFR) Part 989, Environmental Impact Analysis Process (EIAP).
- Safety guidelines of the Occupational Safety and Health Administration (OSHA).
- Relevant Air Force Occupational Safety and Health (AFOSH) standards.
- Utah's fugitive emissions and fugitive dust rules (Utah Administrative Code [UAC] Section R307-309).
- Utah's State Implementation Plan (SIP [UAC Section R307-110]), which complies with the General Conformity Rule of the Clean Air Act (CAA), Section 176 (c).
- Determining Conformity of Federal Actions to State or Federal Implementation Plans, 40 CFR Part 93.154.
- USAF *Conformity Guide*, 2010.
- The Resource Conservation and Recovery Act (RCRA), 42 USC Chapter 82, and regulations promulgated thereunder, 40 CFR Part 260 *et seq.*
- Federal facility agreement dated April 10, 1991, under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), 42 USC Section 9601 *et seq.*

- Air Force Instruction 32-7086 (Hill AFB Supplement), *Hazardous Material Management*, 2019.
- Utah hazardous waste management regulations contained in UAC Section R315, and the Hill AFB *Hazardous Waste Management Plan*.
- The Clean Water Act (CWA), 33 USC Section 1251 *et seq.*, and Utah statutes and regulations promulgated thereunder.
- The Energy Independence and Security Act (EISA) of 2007, Public Law No. 110-140, Sec. 438, Stormwater Runoff Requirements for Federal Development Projects.
- *Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities*, Utah Department of Environmental Quality (UDEQ) General Permit No. UTR000444, February, 2024.
- The National Historic Preservation Act (NHPA) of 1966, as amended 16 USC Section 470 *et seq.*

Five Hill AFB resource management plans apply to the proposed action:

- Hill AFB *Integrated Cultural Resources Management Plan* (Hill 2024a).
- Hill AFB *Integrated Natural Resources Management Plan* (Hill 2023).
- Hill AFB *Stormwater Management Plan*, (Hill 2024b).
- Hill AFB *Integrated Contingency Plan for Oil Spill Prevention and Emergency Response* (Hill 2024c).
- Hill AFB *Compatible Use Plan* (Hill 2021).

During the scoping process, no other documents were identified as being relevant to the proposed action.

1.5 Decisions That Must Be Made

Hill AFB must decide which of the following alternatives to implement:

- Do not construct new housing units and do not demolish one fourplex (no action),
- Construct 26 new housing units and demolish one fourplex (proposed action),
- Construct 26 new housing units at a different location, and
- Demolish the fourplex and do not construct new housing units.

1.6 Scope of this Environmental Analysis

The scope of the environmental analysis is to consider issues related to the proposed action and the reasonable alternatives identified within this document.

1.6.1 History of the Planning and Scoping Process

Scoping discussions were conducted by the 75th Civil Engineering Group, Environmental Quality Branch (75 CEG/CEIEA). Participants in the interdisciplinary team (IDT) included proponents of the proposed action, the EIAP manager, resource managers, and the authors of this document.

During the scoping process, the IDT considered and addressed the following issues as listed in Air Force Form 813 *Request for Environmental Impact Analysis*.

- Air Installation Compatible Land Use/Zone Use (AICUZ) (noise, accident potential, encroachment, etc.);
- Air Quality (emissions, attainment status, state implementation plan, etc.);
- Water Resources (drinking water, wastewater, quality, quantity, source, water features, etc.);
- Safety And Occupational Health (asbestos/lead-based paint/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.);
- Hazardous Materials/Waste (use/storage/generation, solid waste, toxic materials, etc.);
- Biological Resources (wetlands/floodplains, threatened or endangered species, etc.);
- Cultural Resources (burial sites, archaeological, historical, etc.);
- Geology And Soils (topography, minerals, geothermal, installation restoration program, seismicity, etc.);
- Socioeconomic (employment/population projections, school and local fiscal impacts, etc.); and
- Other (potential impacts not addressed above).

1.6.2 Issues Studied in Detail

The issues that have been identified for detailed consideration and are therefore presented in Sections 3 and 4 are:

- Air Quality (emissions, attainment status, state implementation plan, etc.).
- Water Resources (drinking water, wastewater, quality, quantity, source, water features, etc.).
- Cultural Resources (burial sites, archaeological, historical, etc.).
- Geology And Soils (topography, minerals, geothermal, installation restoration program, seismicity, etc.).

1.6.3 Issues Eliminated From Further Study

The issues that were not carried forward for detailed consideration in Sections 3 and 4 are:

- AICUZ (noise, accident potential, encroachment, etc.).

The proposed action is located in an area that experiences less than 65 decibels (db) of sound pressure from aircraft using the Hill AFB runway (*Proposed Base*

Housing Area A, Hill 2025a). The location of the proposed action is compatible with the Hill AFB Community District, and is compliant with the Hill AFB *Compatible Use Plan* (Flores 2025). There are no conflicts from the planning standpoint (Flores 2025). The scoping discussions did not identify any other issues related to AICUZ.

- Safety And Occupational Health (asbestos/lead-based paint/radiation/chemical exposure, explosives safety quantity distance, bird/wildlife aircraft hazard, etc.).

Prior to its demolition, the fourplex would be evaluated for the presence of asbestos, lead-based paint, mercury thermostats, and fluorescent lights. Any necessary removal would be accomplished in compliance with standards dictated by federal and state regulations and Hill AFB environmental managers. Contractors would comply with all relevant regulations from OSHA. The scoping discussions did not identify any other issues related to safety and occupational health.

- Hazardous Materials/Waste (use/storage/generation, solid waste, toxic materials, etc.).

Contractors would comply with all relevant regulations from OSHA and the Environmental Protection Agency (EPA) related to hazard abatement, hazard communication, training, personal protective equipment, site controls, and the storage, testing, transport, and disposal of waste materials. The scoping discussions did not identify any other issues related to hazardous materials and waste.

- Biological Resources (wetlands/floodplains, threatened or endangered species, etc.).

The proposed action would not affect endangered species, as the area is developed (Brown 2025). To eliminate conflicts with migratory nesting birds, vegetation would not be removed from April through August in locations where such birds are present. Revegetation would be coordinated with the Hill AFB natural resources and cultural resources managers (see the tree plan discussion in Section 4.2.3.2). The scoping discussions did not identify any other issues related to biological resources.

- Socioeconomic (employment/population projections, school and local fiscal impacts, etc.).

The proposed action would create temporary opportunities for local construction workers. The scoping discussions did not identify any other issues related to socioeconomics.

- Other (potential impacts not addressed above).

The scoping discussions did not identify any other issues related to potential impacts not addressed above.

1.7 Applicable Permits, Licenses, and Other Coordination Requirements

Obtaining, modifying, and/or complying with the following permits would be required to implement the proposed action.

- The Hill AFB Title V Operating Permit No. 1100007004 (UDEQ 2022). See Section 4.2.1 for additional details.
- Utah's MSGP for Storm Water Discharges Associated with Industrial Activity, Permit No. UTR000444 (UDEQ 2024). See Section 4.2.2 for additional details.
- North Davis Sewer District Ordinances (NDSD 2024). See Section 4.2.2 for additional details.

The proponents would coordinate with the Hill AFB industrial wastewater treatment plant manager (75 CES/CEMI) to discuss program requirements related to constructing and operating the proposed action.

2.0 ALTERNATIVES, INCLUDING THE PROPOSED ACTION

2.1 Introduction

This section describes each of the alternatives considered. It documents the process used to develop the alternatives and lists the selection criteria. It presents a comparison matrix of the predicted achievement of project objectives for each of the various alternatives. This section also identifies the Air Force's preferred alternative.

2.2 Process Used to Develop the Alternatives

As discussed in Section 1, Hill AFB proposes to demolish one fourplex housing unit and construct 26 housing units on Hill AFB. The proposed facilities would address the purpose discussed in Section 1.2 and the need stated in Section 1.3.

Hill AFB planners, engineers, and Facility Board explored other alternatives. The feasibility of developing other locations as well as only performing demolition were compared to the selection criteria. The option to take no action was also considered.

2.2.1 Alternative Selection Criteria

The selection standards are developed by the Proponent, in consultation with the Environmental Planning Function, in order to establish the minimum acceptable criteria to meet the Purpose and Need of the proposed action under 32 CFR 989.8(c). The two types of criteria discussed are:

Functional Criteria - Functional criteria describe the capabilities or characteristics that must be present in the proposed action and all action alternatives to meet the project objectives. For example, a functional criterion for a project to build an engine repair facility might be that it is located no further than 1.5 miles from the hangar where the aircraft engines are removed.

Environmental Criteria - These criteria focus on regulatory concerns. The proposed action and all other action alternatives must meet federal, state, and local environmental regulations.

If an alternative is developed that does not meet the minimum functional and environmental criteria, it is not considered a reasonable alternative.

Based on the above guidance and the project-specific purpose and need, the following selection criteria were used to develop the proposed action and alternatives. The additional housing units for Hill AFB officers and their families should:

- Be located on base (for the reasons stated above). This is a functional criterion.
- Provide a healthy and safe living environment. This is a functional and environmental criterion.
- Not conflict with the Hill AFB *Compatible Use Plan* (Flores, 2025), which dictates development zones applicable to maintaining facilities and building new structures on the base. Segregating land uses prevents residential conflicts with warehouses, explosive clear

zones, offices, and commercial space. It provides a buffer between residential and other land uses, and it promotes the safety of military personnel and their children, civilian employees, contractors, and base visitors. This is a functional criterion.

- Comply with federal, state, and local environmental regulations. This is a standard environmental criterion for all Hill AFB actions.

2.3 Description of Alternatives

2.3.1 Alternative A: No Action

Under the no action alternative, additional on-base housing units would not be provided. The fourplex would not be demolished. Off-base housing units would be rented for officers and their families. The purpose in Section 1.2, the need in Section 1.3, and the selection criteria in Section 2.2.1 would all fail to be satisfied. Additionally, no action would eventually have an adverse impact on historic properties. The existing duplex is deteriorating and will become increasingly unfeasible to maintain, thus detracting from the Historic District. However, the no action alternative is required to be carried forward for detailed consideration in order to provide a baseline for comparison and analysis.

2.3.2 Alternative B: Proposed Action - Construct New Homes in Area A

Demolish one fourplex housing unit and construct 26 housing units on Hill AFB. The boundary of the proposed action is shown in Figure 2. Figure 3 shows the locations of facilities that would be constructed as part of the proposed action.

The new housing units would consist of 13 slab on grade two-story duplexes, each having four bedrooms, two and a half bathrooms, and a two-car garage. The housing units have been designed to match the look and feel of the current structures within the District. The intended architectural site plan and renderings of the proposed duplex units are included in drawings provided to Hill AFB by Boyer Hill Military Housing (Hill 2025b).

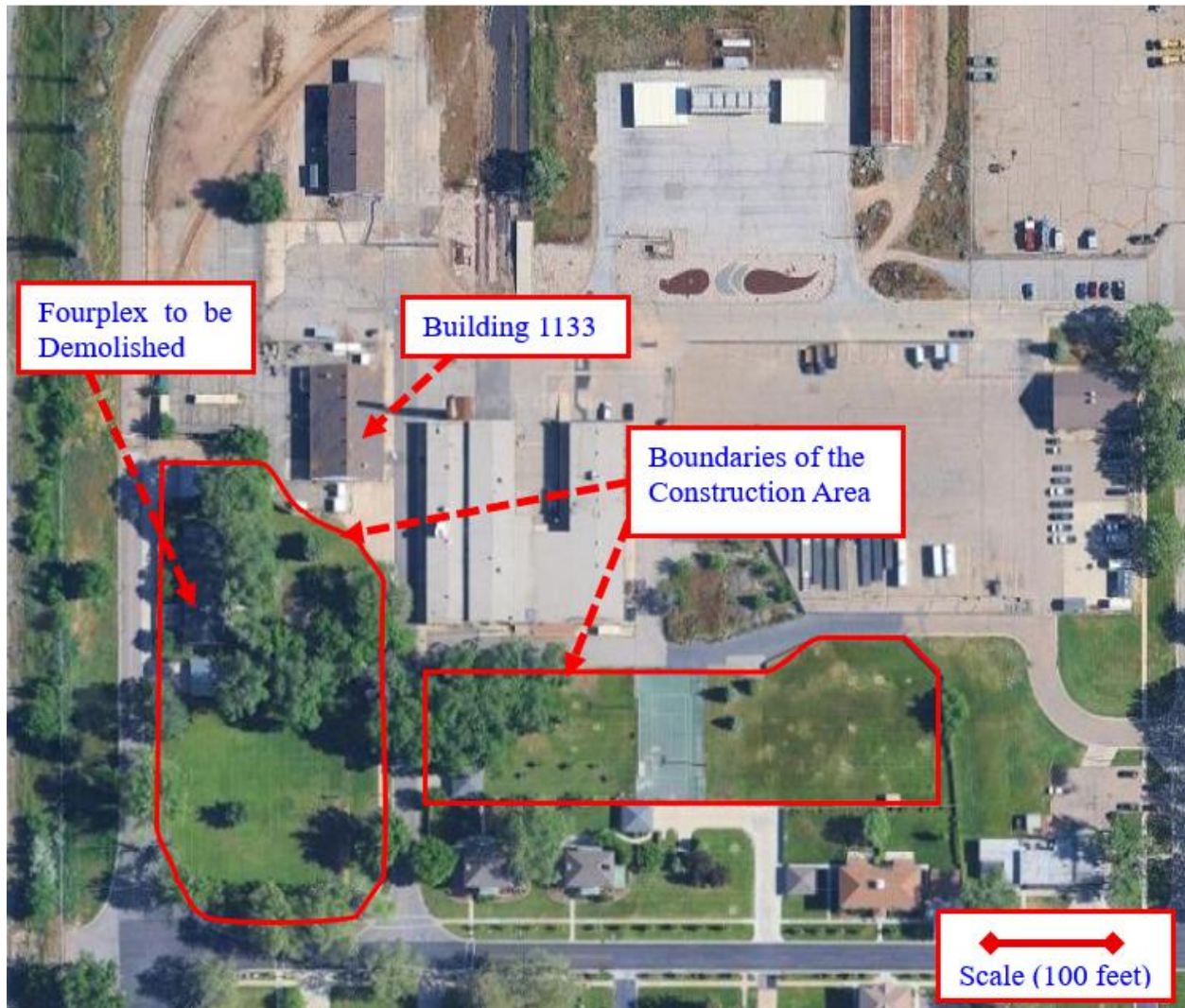
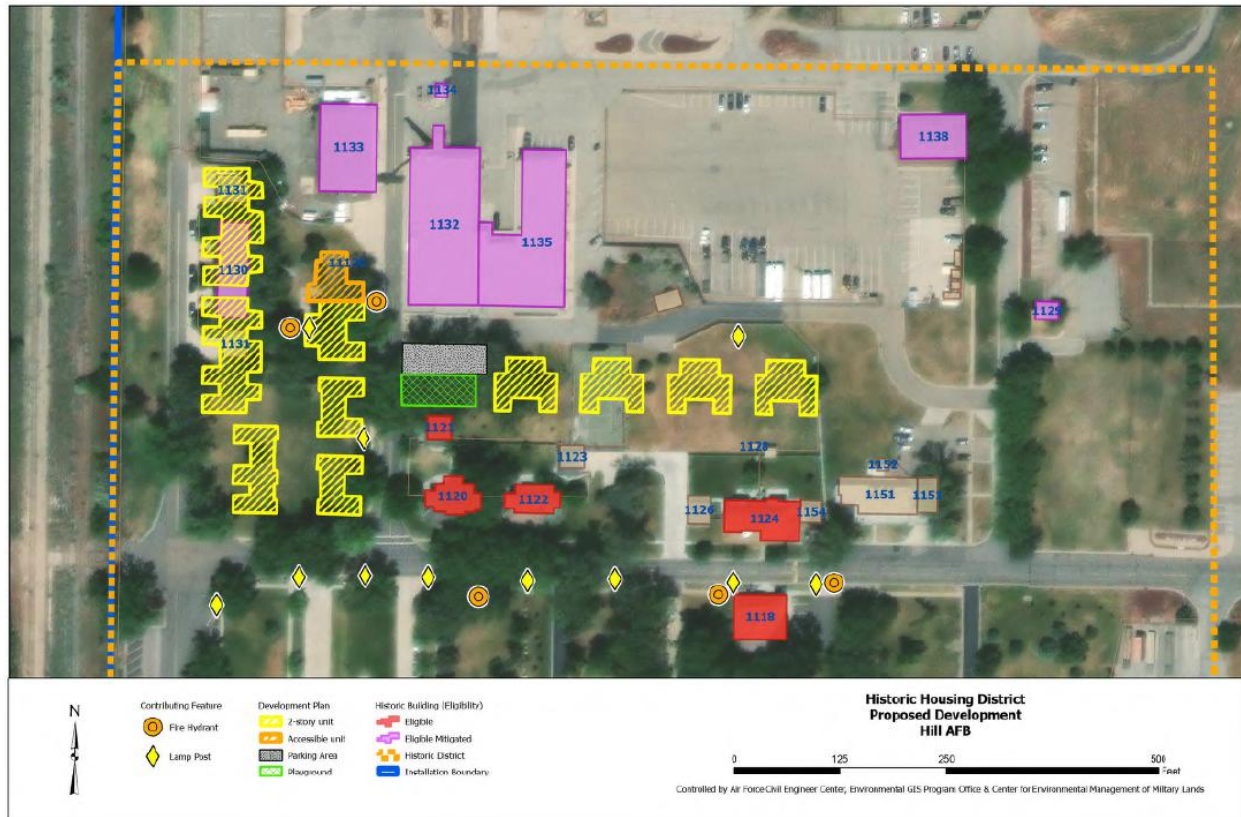


Figure 2: Boundary of the Proposed Action



Source: Hill 2025b

Figure 3 Configuration of the Proposed Action

2.3.3 Alternative C: Construct New Homes Near Pond 3

Construct 26 housing units adjacent to Hill AFB Pond 3 and the Hill AFB Medical Clinic. Results from sediment and surface water samples collected in Pond 3 show detections of per- and polyfluoroalkyl substances (PFAS), including perfluorooctane sulfonate (PFOS), above project screening levels. The groundwater in the area is also known to be contaminated with PFAS above screening levels (Hill 2025c). Accordingly, there are environmental restrictions for this acreage. This alternative does not meet the selection criteria; it was not carried forward for detailed consideration.

2.3.4 Alternative D: Demolition Only

Demolish the fourplex and do not construct new housing units. This alternative does not meet the purpose and need or the selection criteria; it was not carried forward for detailed consideration.

2.3.5 Alternatives Eliminated From Detailed Consideration

As stated above in Sections 2.3.3 and 2.3.4, the alternatives to construct new homes near Pond 3 (Alternative C) and to only perform demolition (Alternative D) were eliminated due to not meeting the selection criteria.

2.4 Summary Comparison of the Alternatives and Predicted Achievement of the Project Objectives

2.4.1 Summary Comparison of Project Alternatives

Considering implementation of Alternatives A, B, C, and D, only Alternative B (the proposed action) would fully satisfy the purpose as stated in Section 1.2 and the selection criteria from Section 2.2.1.

2.4.2 Predicted Achievement of Project Objectives

	Alternatives from Section 2.3			
	A No Action	B Proposed Action	C Construct Homes Near Pond 3	D Demolition Only
Purpose of the Proposed Action from Section 1.2				
Provide on base housing for officers and their families	No	Yes	Yes	No
Selection Criteria from Section 2.2.1				
Be located on base	No	Yes	Yes	Yes
Provide a healthy and safe living environment	No	Yes	No	No
Not conflict with the <i>Compatible Use Plan</i>	Yes	Yes	Yes	Yes
Comply with federal, state, and local environmental regulations	Yes	Yes	No	Yes

Table 1: Predicted Achievement of Project Objectives

2.5 Identification of the Preferred Alternative

Hill AFB prefers Alternative B (the proposed action).

3.0 AFFECTED ENVIRONMENT

3.1 Introduction

Section 3 of this document discusses the existing conditions of the potentially affected environment, establishing a resource baseline against which the effects of the various alternatives can be evaluated. It presents relevant facilities and operations, environmental issues, and pre-existing environmental factors due to human activities in the vicinity of the proposed action or the alternative locations.

Issues considered during scoping meetings, but eliminated from detailed consideration are discussed in Section 1.6.3.

3.2 Description of Relevant Facilities and Operations

The existing fourplex housing unit (Building 1130) does not meet current safety standards for plumbing and safety codes and is far below military housing standards (Boyer 2024). This Boyer Hill report concluded *inspection deficiencies render the home obsolete and necessitate demolition*. The deficiencies included fire hazards, water issues creating potential for mold, pests, and structural damage, outdated plumbing, and lack of egress safety. No other relevant facilities or operations were identified.

3.3 Description of Relevant Affected Issues

3.3.1 Air Quality

The CAA requires EPA to set National Ambient Air Quality Standards (NAAQS) for six criteria pollutants. Hill AFB is located within Davis and Weber Counties, an area designated by EPA as a "**Serious**" **Nonattainment** area for both the 8-hour ozone (O₃) and annual fine particulate matter equal to or less than 2.5 microns in diameter (PM_{2.5}).

In addition to these classifications, the counties have the following designations (EPA 2025):

- **Davis County:** 1-hour O₃ (Maintenance), and
- **Weber County:** Carbon Monoxide (CO) and fine particulate matter equal to or less than 10 microns in diameter (PM₁₀) (Maintenance).

Due to the type and scale of its operations, Hill AFB is regulated as a **major stationary source** of air pollutants. As such, the installation operates in accordance with a federally enforceable Title V Operating Permit, which consolidates all applicable air quality requirements into a single document. Specific emissions units at the installation are also subject to federal regulations including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs).

To address its contribution to regional air pollutants, particularly to PM_{2.5} and ozone precursors, Hill AFB is currently undertaking a major modernization project to replace its large industrial

boilers. These boilers represent the single largest stationary source of nitrogen oxides (NO_x) on the installation. The ongoing project has completed removal of the old boilers and is now replacing them with modern, ultra-low NO_x units, which will result in a significant and permanent reduction of NO_x emissions.

Table 2 presents the annual emission estimates for criteria pollutants and volatile organic compounds (VOCs) for Hill AFB during calendar year 2024 (Hill 2025d). The estimated annual emissions from stationary sources for the base were:

Location	CO	NO _x	PM ₁₀	PM _{2.5}	SO _x	VOC
Hill AFB	95.81	79.26	17.17	11.11	0.648	119.24

Note: Oxides of sulfur (SO_x)

Table 2: Baseline Air Pollutants (tons/year)

3.3.2 Water Resources

In areas of Hill AFB that are not heavily developed, runoff is allowed to infiltrate into the ground through overland flow or surface ditches, discharging to large unoccupied areas. In developed areas, stormwater is typically conveyed to 14 retention or detention ponds within Hill AFB boundaries.

No surface water bodies are present within the area occupied by the proposed action. Based on a review of the Hill AFB *Stormwater Management Plan* (Hill 2024b), storm drains convey surface runoff from this area of Hill AFB to Pond 6, which is a detention pond that discharges to Fife's Ditch, a concrete structure used for off-base irrigation purposes.

Depth to groundwater is approximately 150 feet below ground surface (bgs) in the vicinity of the proposed action (Hill 2015a). Groundwater contamination approximately 300 feet to the north of the proposed action is cross gradient (Hill 2015b). Groundwater contamination approximately 600 feet to the southwest of the proposed action is down gradient (Hill 2015a). Groundwater contamination approximately 900 feet to the south of the proposed action is cross gradient (Hill 2015a).

Drinking water in this location is provided by Hill AFB. Wastewater in this location flows to the North Davis Sewage Treatment Plant, which is owned and operated by North Davis Sewer District.

3.3.3 Cultural Resources

Cultural resources are any place, site, building, structure, object, or collection of these that was built or used by people. Some cultural resources, such as traditional cultural properties and sacred sites, may be a place without any visible evidence of human use or modification.

Housing Area A is part of the National Register eligible Hill AFB Historic Housing Area District and Cultural Landscape (the District) in relation to its role during World War II and the Cold War. The District is composed of ten historic buildings and associated cultural landscape elements. Building 1130 has been determined individually eligible for listing on the National Register of Historic Places (NRHP) and is a contributing feature of the District (Hill 2015c). Many landscape features within the District are contributing elements including but not limited to lampposts, fire hydrants, and trees. The space created by the landscape design is also a contributing element to the District.

3.3.4 Geology and Soils

The Wasatch Front Regional Council (WFRC 2003) published an assessment of geologic hazards for Davis County, Utah, including the portion of Hill AFB that includes the alternatives discussed in this document. The Davis County earthquake hazard map shows this area of Hill AFB to be outside of known fault zones. The Davis County liquefaction potential map shows this area of Hill AFB to be in the zone labeled as very low risk. The Davis County landslide hazard map shows this area of Hill AFB to be outside of known landslide risk zones.

Thirteen soil samples were collected at soil boring locations shown in Figure 4 (Hill West 2025). Each sample was analyzed for RCRA metals and for polychlorinated biphenyls (PCBs).

Arsenic was identified at concentrations ranging from 2.38 milligrams per kilogram (mg/kg) in the sample collected from boring B-1, to 25.0 mg/kg in the soil sample collected from boring B-13. Arsenic concentrations exceeded EPA's residential screening level (RSL) of 0.68 mg/kg in all soil samples. The background level for arsenic in the vicinity of the proposed action (approximately 3,000 feet to the north at Operable Unit 5) is 9.76 mg/kg (MWH 2003). Arsenic concentrations exceeded the local background level at borings B-2, B-4, B-9, B-12, and B-13.

All other RCRA metals were either not detected or concentrations were reported below their respective RSLs. PCBs were not detected in any of the soil samples.

Three soil gas samples were collected at soil boring locations shown in Figure 4 (Hill West 2025). Each sample was analyzed for VOCs. No presence of VOCs was identified at or above their RSLs.

3.4 Description of Relevant Pre-Existing Environmental Factors

During scoping discussions, no pre-existing environmental factors (e.g., geologic, hurricanes, tornados, floods, droughts) were identified for the proposed action.

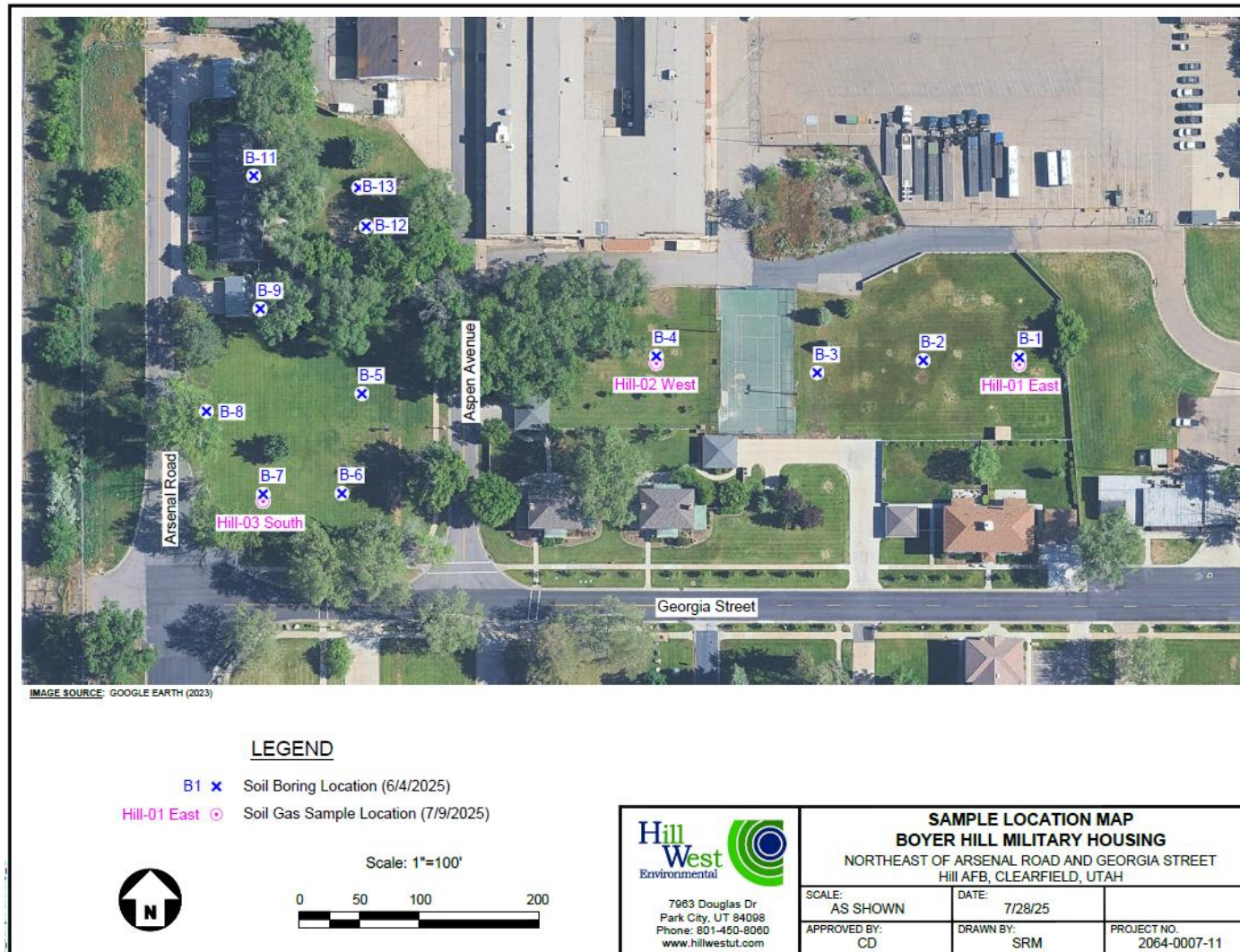


Figure 4: Locations of Soil and Soil Gas Samples

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

Consistent with Section 102 of NEPA, this section discusses reasonably foreseeable effects to the resources that were identified for detailed analysis in Section 1.7.2, and for which existing conditions were presented in Section 3.3. For each of these resources, reasonably foreseeable effects are comprised of direct effects and indirect effects. The following analyses are presented:

- reasonably foreseeable effects of no action (Alternative A); and
- reasonably foreseeable effects of the proposed action (Alternative B).

4.2 Predicted Effects to Relevant Affected Resources

4.2.1 Predicted Effects to Air Quality

4.2.1.1 Alternative A: No Action

Under the no action alternative, the conditions described in Section 3.3.1 would continue. The no action alternative would have no other direct effects, and no indirect effects.

4.2.1.2 Alternative B: Proposed Action - Construct New Homes in Area A

Direct Effects

The Air Force's Air Conformity Applicability Model (ACAM) was used to calculate air quality effects of the proposed action. The analysis was performed in accordance with Air Force Manual 32-7002, *Environmental Compliance and Pollution Prevention*; the *Environmental Impact Analysis Process* (EIAP, 32 CFR 989); the *General Conformity Rule* (GCR, 40 CFR 93 Subpart B); and *USAF Air Quality Environmental Impact Analysis Process Guide*.

The ACAM calculations included emissions from:

- Demolition.
- Grading, Trenching, Construction, Coatings, Paving.
- Operations (Heating).

None of the expected emissions associated with the proposed action meets or exceeds the GCR threshold values established at 40 CFR 93.153 (b); therefore, the proposed action would have an insignificant effect on air quality and a general conformity determination is not necessary. These activities are either transient or area source and thus not subject to New Source Review. They will not be included in the Hill AFB Title V Permit.

With respect to air quality, the proposed action would have no other direct effects.

Indirect Effects

Although contaminants are not known to exist, design engineers would specify sub-structure vapor barriers to preclude entry through foundations of any such contaminants (organic vapors, radon gas, per- and polyfluoroalkyl substances (PFAS), or PFAS precursors). Additionally, passive ventilation systems (convertible to active systems if necessary) would be installed to route any sub-slab vapors that do exist through the roof via vertical pipes.

During scoping and the detailed analysis, no other indirect effects related to air quality were identified for the proposed action.

4.2.2 Predicted Effects to Water Resources

4.2.2.1 Alternative A: No Action

Under the no action alternative, the conditions described in Section 3.3.2 would continue. The no action alternative would have no other direct effects, and no indirect effects.

4.2.2.2 Alternative B: Proposed Action - Construct New Homes in Area A

Direct Effects

The licensed professional engineers designing the proposed action supplied the following information (Ensign 2025).

- Construction

A construction stormwater pollution prevention plan (SWPPP) would be prepared in accordance with the Utah Pollutant Discharge Elimination System (UPDES) Construction General Permit. The SWPPP would include best management practices (BMPs) for erosion and sediment control, and would be submitted to 75 CEG/CEIE for review and approval prior to construction, as required by Hill AFB and state regulations.

- Stormwater Routing

The proposed stormwater system would collect runoff from both impervious and pervious surfaces within Area A and route flows through a series of storm drain inlets and underground piping to existing stormwater infrastructure at designated connection points.

- No Increase in Volume

The stormwater management design would maintain pre-development hydrology for the site, ensuring there would be no net increase in stormwater runoff volume from the proposed action. This would be achieved by utilizing low impact development (LID) practices and/or detention as required by EISA Section 439 and Hill AFB stormwater requirements.

With respect to water resources, the proposed action would have no other direct effects.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to water resources were identified for the proposed action.

4.2.3 Predicted Effects to Cultural Resources

4.2.3.1 Alternative A: No Action

Under the no action alternative, the conditions described in Section 3.3.3 would continue. Additionally, no action would eventually have an adverse impact on historic properties. The existing duplex is deteriorating and will become increasingly unfeasible to maintain, thus detracting from the Historic District. The no action alternative would have no other direct effects, and no indirect effects.

4.2.3.2 Alternative B: Proposed Action - Construct New Homes in Area A

Direct Effects

Demolition of Building 1130 will have an adverse effect to the District, but was previously mitigated through a 2015 memorandum of agreement (MOA- Hill 2015d). All stipulations were completed. In addition, a 2014 project by Boyer Hill Military Housing to develop a master tree plan for the District (Hill 2014) resulted in the development of a cultural landscape study which details which structural, infrastructure, and natural design elements were contributing elements of the District. If changes to landscaping are not similar to those currently existing within the District and as defined within the Cultural Landscape Report, they do not meet the Secretary of Interior Standards and will constitute an adverse effect to historic properties.

The Hill AFB cultural resource program manager (CRM) has identified (Hill 2025e) effects to the District from the proposed action. Constructing 26 new housing units with modern design to the District would constitute an adverse effect to the Historic Property and Cultural Landscape. Although the new housing units have been designed to match the look and feel of the current structures within the District, they will still add a more modern and more clustered feel, heavily impacting the contributing landscape design and historic viewshed. The visual and spatial design of the area are contributing elements to the District and would be adversely impacted. Demolishing two historic fire hydrants and two historic lampposts, which are contributing elements, will have an additional adverse effect.

Hill AFB will comply with the following stipulations as noted within the 2026 MOA (Appendix A and SHPO 2026) to mitigate the adverse effects to the Historic District.

- **1) MITIGATION RESPONSIBILITIES:** Within thirty (30) days of the date the MOA is executed by all Parties, Boyer Hill will donate to the Aerospace Foundation of Utah the sum of twenty-two thousand and 00/100 Dollars (\$ 22,000.00) (the "Donation") to be used to assist Hill AFB and the Hill Aerospace Museum to conduct detailed photogrammetry scans of the District, including both Historic Housing Areas A & B, and to develop a virtual tour of the District to be housed at the Museum and on the Museum website. All costs of the photogrammetry scan and exhibit development are the responsibility of Boyer Hill as the

project proponent and will be dispersed through the Donation. No ground disturbing work included within the undertaking can proceed until Stipulation 2 is complete and it is verified by Hill AFB and the Museum that the files meet all requirements for Stipulations 2 and 3.

- **2) PHOTOGRAMMETRY SCANNING:** A series of photogrammetry scans shall be taken of the District to include the housing exteriors, landscape design and features, and historic district features; including but not limited to, lamp posts, trees, sidewalks, fire hydrants, and grassy areas. The scans will be created through the use of professional, high-resolution 8K 360 degree panorama cameras, high-resolution stitched image spherical panoramas, LiDAR and Photogrammetry Scans and Gaussian Splat modeling. A single technology solution or combination of these techniques will be utilized depending on the location, accessibility and needs. The use of drones is prohibited on Hill AFB and therefore, that technology cannot be used to capture this imagery/data.

The photogrammetry scans shall be provided to the Hill AFB cultural resource program for their records in a format agreed upon by Hill AFB CRM and Hill AFB Real Property in coordination with the photogrammetry firm. All final products will be the property of the Air Force for utilization and disbursement.

- **3) PUBLIC OUTREACH:** The Museum in coordination with Hill AFB shall develop an exhibit from the photogrammetry scans. The exhibit shall be a static display that is fabricated per the requirements outlined in DAFI 84-103, Department of the Air Force Heritage Program, and the Hill Aerospace Museum Brand Guide, and shall incorporate a virtual tour via a touchscreen Elo® (or like product) of Historic Housing Areas A & B of the District into the exhibit structure. This display shall educate the public on the history of the District as well as highlight its communities and unique character. The virtual tour will also be shared on the Museum's website to be visible to the wider public and will utilize 3DVista software to be compatible with the Museum's existing systems.

The exhibit and virtual tour shall be designed by Hill Aerospace Museum and coordinated with the Hill AFB CRM. Coordination shall continue throughout implementation of the exhibit until the parties have completed all agreed-upon actions.

All such projects will go through security screening prior to release to ensure no sensitive material is released. All final products will be the property of the Air Force for utilization and disbursement.

- **4) HISTORIC HOUSING FEATURE RELOCATION:** Boyer Hill will relocate the two historic lampposts that will be impacted by the new development. These shall be moved to a nearby location within the District and maintain operability. See Attachment 3 for relocation positions of the lamps which has been coordinated with the Hill AFB CRM.
- **5) UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL DEPOSITS:** Hill AFB has determined that the undertaking will have no effect on any known subsurface archaeological cultural resources materials considered historic properties by 36 CFR § 800.16(l)(1), or on materials protected by Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act. However, should unanticipated discoveries of archaeological deposits become evident during any time of the

Undertaking, the provisions outlined in Attachment 5, Standard Operating Procedure Unanticipated Discovery of Archaeological Deposits, shall be implemented.

If any historic properties were to be found during construction, ground-disturbing activities in the immediate vicinity would cease, the Hill AFB cultural resources program manager would be notified, and unanticipated discovery of archaeological deposits procedures would be implemented with direction from the Hill AFB cultural resources program manager in accordance with Standard Operating Procedure 5 in the *Hill AFB Integrated Cultural Resources Management Plan* (Hill 2024a).

Consulting tribes have verified that they are not interested in receiving Section 106 consultation on project undertakings on Hill AFB proper. However, a copy of the draft EA will be forwarded to consulting tribes for their review and comment per Executive Order 13175, *Consultation and Coordination With Indian Tribal Governments*.

With respect to cultural resources, there are no other direct effects. Any changes to the scope of the proposed action would require additional review and consultation and would be assessed separately from this action.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to cultural resources were identified for the proposed action.

4.2.4 Predicted Effects to Geology and Soils

4.2.4.1 Alternative A: No Action

Under the no action alternative, the conditions described in Section 3.3.4 would continue. The no action alternative would have no other direct effects, and no indirect effects.

4.2.4.2 Alternative B: Proposed Action - Construct New Homes in Area A

Direct Effects

The scoping discussions did not identify any issues related to topography, minerals, geothermal, or seismic resources.

Excavations would be necessary to install: footings; foundations; pavements; and buried utilities consisting of electrical, natural gas, water, wastewater, and communications systems. Discussions related to preventing soil erosion (stormwater pollution prevention) are addressed under water resources effects (Section 4.2.2 of this document).

As stated in Section 3.3.4, arsenic concentrations exceed EPA's RSL in the area where the proposed action would be constructed. There are no regulations that require sampling for PFAS (Burt 2025). No sampling for PFAS was conducted. To preclude effects from arsenic and from potential presence of PFAS, the entire area of the proposed action would be covered by structures, pavements, grass, and landscaping with mulch. No exposed soil surfaces would exist.

Arsenic is not a volatile contaminant. Potential effects due to volatile contaminants are addressed in Section 4.2.1.2 (indirect effects to air quality).

If unusual odors or soil discoloration were to be observed during any excavation or trenching necessary to complete the proposed action, the soil would be stored on plastic sheeting and the remedial manager from the Hill AFB Environmental Restoration Branch (AFCEC/CZOM-IRP) would be notified. Any soil determined to be hazardous would be eventually labeled, transported, treated, and disposed in accordance with federal and state regulations. No soil would be taken off base without prior 75 CEG/CEIE written approval.

With respect to geology and soils, the proposed action would have no other direct effects.

Indirect Effects

During scoping and the detailed analysis, no indirect effects related to geology and soils were identified for the proposed action.

4.3 Summary Comparison of Predicted Environmental Effects

This section only applies to the alternatives considered in detail.

Issue	Alternative A No Action	Alternative B Proposed Action - Construct New Homes in Area A
Air Quality	No effect.	None of the expected emissions associated with the proposed action meets or exceeds threshold values; the proposed action would not have an insignificant effect on air quality and a general conformity determination is not necessary. Design engineers would specify sub-structure vapor barriers to protect indoor air quality.
Water Resources	No effect.	During construction and operations, water quality would be protected by implementing stormwater management practices. Stormwater would be routed to existing connection points. Pre-development runoff volumes would be maintained.
Cultural Resources	No action would eventually have an adverse impact on historic properties. The existing duplex is deteriorating and will become increasingly unfeasible to maintain, thus detracting from the Historic District.	The project falls within the Hill Air Force Base (AFB) Historic Housing Area District and Cultural Landscape which has been determined eligible for the National Register of Historic Places. The proposed project will have adverse impacts to the District. Building 1130 has been determined eligible as a contributing element to the District and its demolition will have an adverse effect to the District. The demolition of Building 1130 was previously mitigated through a Memorandum of Agreement (MOA) with the Utah State Historic Preservation Office (SHPO) and all stipulations have been completed for this portion of the project. All remaining adverse effects would be mitigated in compliance with a 2026 MOA with the SHPO.
Geology and Soils	No effect.	To preclude effects from arsenic and from potential presence of PFAS, the entire area of the proposed action would be covered by structures, pavements, grass, and landscaping with mulch.

Table 3: Summary Comparison of Predicted Environmental Effects

5.0 LIST OF PREPARERS

Streamline Consulting, LLC

Randal B. Klein, PE, Project Manager, (801) 451-7872

Civil Engineer Group, Environmental Quality Branch, 75 CEG/CEIEA

Stephen Vlaming, EIAP Manager, (801) 777-2783

Boyer Hill Military Housing, LC

Danny Davis, President, (801) 651-5500

6.0 LIST OF PERSONS AND AGENCIES CONSULTED

Civil Engineer Group, Environmental Quality Branch, 75 CEG/CEIE

Anya Kitterman, Cultural Resource Manager, (801) 586-2464

Nicholas Brown, Natural Resources Manager, (801) 777-7652

Randall Judd, Water Quality and Tanks Program Manager, (801) 777-1866

Civil Engineer Group, 75 CEG

Judy Flores, Installation Community Planner, (801) 777-2613

Air Force Civil Engineer Center, AFCEC/CZOM Hill Section

Lindsay Burt, Remedial Project Manager, (801) 775-3301

Jarrod Case, PE, Environmental Engineer, (801) 777-3943

7.0 REFERENCES

Boyer 2024: *Housing Inspection Report Building 1130 Four-Plex Units A, B, C, & D*, Boyer Hill Military Housing, December, 2024.

Brown 2025: *Area A Housing Layout* e-mail, Nicholas Brown, April, 2025.

Burt 2025: *Area A Housing Project* e-mail, Lindsay Burt, April, 2025.

CFR: *Code of Federal Regulations*, US Government Printing Office, Office of the Federal Register, current versions, which are located at:

<https://www.ecfr.gov/cgi-bin/ECFR?page=browse>

29 CFR 1910, *Occupational Safety And Health Standards*

32 CFR 989, *Environmental Impact Analysis Process*

40 CFR 265, *Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*

40 CFR 93.154, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*

Ensign 2025: *Stormwater System for Area A*, Ensign Engineering, May, 2025.

EPA 2025: https://www3.epa.gov/airquality/greenbook/anayo_ut.html , EPA, July, 2025.

Flores 2025: *Proposed Base Housing, Area A* e-mail, Judy Flores, April, 2025.

Hill 2014: *Hill AFB Housing Area A & B Tree Master Plan*, Hill AFB, 2014.

Hill 2015a: *Final Operable Unit 10 - Site SS109 (Zone 1200) Record of Decision*, Hill AFB, September, 2015.

Hill 2015b: *Final Operable Unit 9 Record of Decision*, Hill AFB, September, 2015.

Hill 2015c: *Cultural Landscape Assessment for Historic Housing Areas A & B Hill Air Force Base, Utah Project No. U15HL0474m*, Hill AFB, October, 2015.

Hill 2015d: *Memorandum Of Agreement (MOA) Among Hill Air Force Base, Boyer Hill Military Housing L.C. and the Utah State Historic Preservation Officer Pursuant to 36 CFR § 800 Regarding the Demolition of Building 1130 Hill Air Force Base, Utah Agreement Number H-577*, Hill AFB, June, 2015.

Hill 2023: *Integrated Natural Resources Management Plan*, Hill AFB, December, 2023.

Hill 2024a: *Integrated Cultural Resources Management Plan*, Hill AFB, June, 2024.

Hill 2024b: *Stormwater Management Plan*, August, 2024.

Hill 2024c: *Integrated Contingency Plan for Oil Spill Prevention and Emergency Response*, Hill AFB, October, 2024.

Hill 2025a: *Proposed Base Housing Area A (Noise Contours)*, Hill AFB, April, 2025.

Hill 2025b: *Historic Housing Area A – Housing Expansion Design Updates & MOA Development Initiation*, Hill AFB, June, 2025.

Hill 2025c: *E-Mail Regarding Pond 3 Sediment and Water*, Hill AFB, November, 2025.

Hill 2025d: *Main Base 2024 Annual Criteria and Hazardous Air Pollutant Emissions Inventory*, Hill AFB, March, 2025.

Hill 2025e: *Historic Housing Area A - Housing Expansion*, Hill AFB, April, 2025.

Hill West 2025: *Boyer Hill Military Housing Project, Soil and Soil Gas Assessment Report*, Hill West Environmental, July, 2025.

MWH 2003: *Final Remedial Investigation Report for Operable Unit 5, Volume I*, MWH Americas, Inc., September, 2003.

NDSD 2024: *North Davis Sewer District Ordinances*, NDSD, 2024.

SHPO 2026: *Memorandum of Agreement Among Hill Air Force Base; Boyer Hill Military Housing L.C.; Hill Aerospace Museum and the Utah State Historic Preservation Office Pursuant to 36 CFR § 800 Regarding the Effects of the Construction on 26 Housing Units Within Hill Air Force Base Historic Housing Area A, Hill Air Force Base, Davis County, Utah, State Historic Preservation Office (Utah)*, January, 2026.

UDEQ 2022: *Title V Operating Permit 100007004*, UDEQ, June, 2022.

UDEQ 2024: *Multi-Sector General Permit (MSGP) for Storm Water Discharges Associated with Industrial Activities*, General Permit No. UTR000444, UDEQ, February, 2024

WFRC 2003: *Natural Hazard Pre-Disaster Mitigation Plan, Utah's Wasatch Front*, WFRC, December, 2003.

APPENDIX A
CULTURAL RESOURCES DOCUMENTATION

**MEMORANDUM OF AGREEMENT AMONG HILL AIR FORCE BASE;
BOYER HILL MILITARY HOUSING L.C.; HILL AEROSPACE MUSEUM AND
THE UTAH STATE HISTORIC PRESERVATION OFFICE
PURSUANT TO 36 CFR § 800 REGARDING THE
EFFECTS OF THE CONSTRUCTION ON 26 HOUSING UNITS WITHIN
HILL AIR FORCE BASE HISTORIC HOUSING AREA A
HILL AIR FORCE BASE, DAVIS COUNTY, UTAH**

RECITALS

WHEREAS, Hill AFB (AFB) and Boyer Hill Military Housing L.C. (Boyer Hill) propose the replacement of historic landscaping and historic features with 26 new housing units in Historic Housing Area A (hereinafter, the Undertaking) which is part of the Hill Field Historic Housing District (the District); and

WHEREAS, the landscape including trees, open space, sidewalks, viewshed, and design have been designated as contributing elements to the District which is eligible for listing on the National Register of Historic Places (NRHP) (Attachment 1); and

WHEREAS, historic features including fire hydrants and lamp posts have been determined eligible for listing on the NRHP as contributing elements to the District; and

WHEREAS, Boyer Hill and Hill AFB have determined the current quantity of Senior Enlisted homes does not meet the current need and additional homes are required; and

WHEREAS, Boyer Hill will redesignate a portion of existing Officer housing for Senior Enlisted personnel and new homes will be constructed to support the relocation and reallocation of Officer housing; and

WHEREAS, Boyer Hill and Hill AFB have selected structural designs, colors, materials and features to convey the historic look and feel of the District (Attachment 2) to help minimize impact, but cannot fully avoid the modern look and feel of new building styles; and

WHEREAS, the proposed project will significantly impact the historic landscape and viewshed of the District; and

WHEREAS, Hill AFB has determined the Undertaking will have an adverse effect on historic properties as defined in 36 CFR § 800.16 (i) and (l)(1); and

WHEREAS, Hill AFB has consulted with the Utah State Historic Preservation Office ("the SHPO") in accordance with 36 CFR§ 800.6 (b);

NOW, THEREFORE, Hill AFB, Boyer Hill, Hill Aerospace Museum (the Museum) and the SHPO agree that the Undertaking shall be implemented in accordance with the following stipulations to mitigate the adverse effect caused by the Undertaking.

STIPULATIONS

1. MITIGATION RESPONSIBILITIES: Within thirty (30) days of the date this MOA is executed by all Parties, Boyer Hill will donate to the Aerospace Foundation of Utah the sum of Twenty-two Thousand and 00/100 Dollars (\$ 22,000.00) (the "Donation") to be used to assist Hill AFB and the Hill Aerospace Museum to conduct detailed photogrammetry scans of the District, including both Historic Housing Areas A & B, and to develop a virtual tour of the District to be housed at the Museum and on the Museum website. All costs of the photogrammetry scan and exhibit development are the responsibility of Boyer Hill as the project proponent and will be dispersed through the Donation. No ground disturbing work included within the undertaking can proceed until Stipulation 2 is complete and it is verified by Hill AFB and the Museum that the files meet all requirements for Stipulations 2 and 3.

2. PHOTOGRAMMETRY SCANNING: A series of photogrammetry scans shall be taken of the District to include the housing exteriors, landscape design and features, and historic district features; including but not limited to, lamp posts, trees, sidewalks, fire hydrants, and grassy areas. The scans will be created through the use of professional, high-resolution 8K 360 degree panorama cameras, high-resolution stitched image spherical panoramas, LiDAR and Photogrammetry Scans and Gaussian Splat modeling. A single technology solution or combination of these techniques will be utilized depending on the location, accessibility and needs. The use of drones is prohibited on Hill AFB and therefore, that technology cannot be used to capture this imagery/data.

The photogrammetry scans shall be provided to the Hill AFB cultural resource program for their records in a format agreed upon by Hill AFB CRM and Hill AFB Real Property in coordination with the photogrammetry firm. All final products will be the property of the Air Force for utilization and disbursement.

3. PUBLIC OUTREACH: The Museum in coordination with Hill AFB shall develop an exhibit from the photogrammetry scans. The exhibit shall be a static display that is fabricated per the requirements outlined in DAFI 84-103, *Department of the Air Force Heritage Program*, and the Hill Aerospace Museum Brand Guide, and shall incorporate a virtual tour via a touchscreen Elo® (or like product) of Historic Housing Areas A & B of the District into the exhibit structure. This display shall educate the public on the history of the District as well as highlight its communities and unique character. The virtual tour will also be shared on the Museum's website to be visible to the wider public and will utilize 3DVista software to be compatible with the Museum's existing systems.

The exhibit and virtual tour shall be designed by Hill Aerospace Museum and coordinated with the Hill AFB cultural resource manager (CRM). Coordination shall continue throughout implementation of the exhibit until the parties have completed all agreed-upon actions.

All such projects will go through security screening prior to release to ensure no sensitive material is released. All final products will be the property of the Air Force for utilization and disbursement.

4. **HISTORIC HOUSING FEATURE RELOCATION:** Boyer Hill will relocate the two historic lampposts that will be impacted by the new development. These shall be moved to a nearby location within the District and maintain operability. See Attachment 3 for relocation positions of the lamps which has been coordinated with the Hill AFB CRM.

5. **UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL DEPOSITS:** Hill AFB has determined that the undertaking will have no effect on any known subsurface archaeological cultural resources materials considered historic properties by 36 CFR § 800.16(l)(1), or on materials protected by Native American Graves Protection and Repatriation Act and the Archaeological Resources Protection Act. However, should unanticipated discoveries of archaeological deposits become evident during any time of the Undertaking, the provisions outlined in Attachment 5, Standard Operating Procedure Unanticipated Discovery of Archaeological Deposits, shall be implemented.

6. **DISPUTE RESOLUTION:** Should the SHPO, Boyer Hill, the Museum or Hill AFB object in writing to any actions proposed pursuant to this MOA, Hill AFB shall consult with the SHPO within thirty (30) days to resolve the objection. If Hill AFB determines that the objection cannot be resolved, Hill AFB shall:

a. Forward all documentation relevant to the dispute, including Hill AFB's proposed resolution, to the Advisory Council on Historic Preservation (ACHP). The ACHP shall provide Hill AFB with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, Hill AFB shall prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP, signatories, and concurring parties, and provide them with a copy of this written response. Hill AFB will then proceed according to its final decision.

b. If the ACHP does not provide advice regarding the dispute within the thirty (30) day time period, Hill AFB may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, Hill AFB shall prepare a written response that takes into account any timely comments regarding the dispute from the signatories and concurring parties to the MOA. Hill AFB will provide them and the ACHP a copy of such written response.

c. Hill AFB's responsibilities to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute shall remain unchanged.

7. **AMENDMENTS:** This MOA may be amended when such an amendment is agreed to in writing by all signatories. The amendment will be effective on the date a copy signed by all of the signatories is filed with the ACHP.

8. **TERMINATION:** If any Party to this MOA determines that its terms will not or cannot be carried out, that Party shall immediately consult with the other Parties to attempt to develop an amendment in accordance with Stipulation 6, above. If within thirty (30) days (or another period agreed to by all Parties) an amendment cannot be reached, any Party may then terminate the MOA upon written notification to the other Parties.

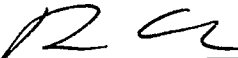
Once the MOA is terminated, and prior to work continuing on the Undertaking, Hill AFB must either (a) execute an MOA pursuant to 36 CFR § 800.6 or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. Hill AFB shall notify the Parties as to the course of action Hill AFB will pursue.

9. EFFECTIVE DATE and DURATION: This MOA shall become effective upon the date of the last approving signature. If, after three (3) years, any of the stipulations of this MOA have not been fulfilled, Hill AFB will notify the SHPO and determine whether the MOA needs to be revised.

Execution of this MOA by Hill AFB, Boyer Hill, the Museum and the Utah SHPO, and implementation of its terms, is evidence that Hill AFB has taken into account the Undertaking's effects on historic properties and has mitigated the adverse effect.

SIGNATORIES:


HILL AIR FORCE BASE

By:  Date: 13 JAN 26
DANIEL L. CORNELIUS, Colonel, USAF
Installation Commander

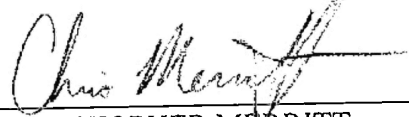
BOYER HILL MILITARY HOUSING L.C.

By:  Date: 12/18/2025
MICHAEL D. DAVIS
President, Boyer Hill Military Housing L.C.

HILL AEROSPACE MUSEUM

By:  Date: 1/5/2026
AARON CLARK
Director, Hill Aerospace Museum

UTAH STATE HISTORIC PRESERVATION OFFICE

By:  Date: 1/14/26
CHRISTOPHER MERRITT
State Historic Preservation Officer