

ENVIRONMENTAL ASSESSMENT

FOR

FOCUS Study Implementation at Pittsburgh Air Reserve Station

Draft



PREPARED BY:

U.S. Air Force

November 2024

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COVER SHEET

ENVIRONMENTAL ASSESSMENT

FOCUS STUDY IMPLEMENTATION

- a. Lead Agency: U.S. Air Force Reserve Command (AFRC)
Cooperating Agency: Federal Aviation Administration (FAA)
- b. Proposed Action: FOCUS Study Implementation at Pittsburgh Air Reserve Station
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- d. Designation: Draft Environmental Assessment (EA)

Abstract: The United State (U.S.) Air Force Reserve Command (AFRC; lead agency) proposes to implement 11 projects outlined in the Facilities Operations Capability and Utilization Survey (FOCUS) study at Pittsburgh Air Reserve Station (PARS) in order to meet training requirements and conduct airfield operations to support the 911th Airlift Wing (AW). The Federal Aviation Administration (FAA) is a Cooperating Agency for this Environmental Assessment (EA).

This EA evaluates the potential environmental impacts associated with two alternatives for this Proposed Action: the Preferred Alternative and the No Action Alternative. Under the Preferred Alternative, the AFRC would implement 11 projects originally identified in the FOCUS study: (1) renovate Building (B) 226 for Consolidated Wing Training Facility; (2) demolish B208, B209, and B210 and construct parking; (3) demolish B403 and construct parking; (4) demolish B405 and construct a communications facility; (5) repair two storm drains and outfalls; (6) demolish B206; (7) construct a munitions access road; (8) construct a B414 hangar access road and parking; (9) construct a liquid oxygen (LOX) storage facility; (10) construct a LOX storage equipment shelter; and (11) construct aerospace ground equipment (AGE) covered storage. Operation of the new communications facility would require approximately 27 new personnel at PARS; none of the other projects would involve changes in personnel or operations occurring at PARS. Under the No Action Alternative, no new construction, renovation, demolition, or increase in personnel would occur on the base.

The following environmental resources were analyzed in the EA: air quality, climate, noise, earth resources, water resources, biological resources, cultural resources, utilities, socioeconomic and environmental justice, transportation, and safety, health, and hazardous and toxic materials and waste. Resources that would not be meaningfully or measurably affected by the Proposed Action, including airspace, coastal resources, Department of Transportation Section 4(f) resources, farmlands, land use and zoning, and visual resources, were dismissed from detailed analysis. Based on the analysis presented in this EA, the AFRC has determined that with incorporation of best management practices, the Proposed Action would have no significant impacts on the human or natural environment.

This Draft EA and Draft Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) are available on the PARS 911th AW website at <https://www.pittsburgh.afrc.af.mil/>.

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TABLE OF CONTENTS

	<u>Page</u>
1.0 Purpose and Need	1
1.1 Introduction	1
1.2 Background.....	1
1.3 Purpose and Need.....	3
1.4 Interagency and Intergovernmental Coordination/Consultation	3
1.5 Public and Agency Review of the EA	4
2.0 Proposed Action and Alternatives	5
2.1 Proposed Action	5
2.1.1 Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF)	5
2.1.2 Demolish B208, B209, and B210 and Construct Parking	5
2.1.3 Demolish B403 and Construct Parking	6
2.1.4 Demolish B405 and Construct Communications Facility	6
2.1.5 Repair Storm Drains and Outfalls	6
2.1.6 Demolish B206.....	7
2.1.7 Construct Munitions Access Road	7
2.1.8 Construct B414 Hangar Access Road and Parking	7
2.1.9 Construct Liquid Oxygen (LOX) Storage Facility	8
2.1.10 Construct LOX Equipment Storage Shelter	8
2.1.11 Construct Aerospace Ground Equipment (AGE) Covered Storage.....	9
2.2 Screening of Alternatives.....	9
2.3 Evaluated Alternatives	11
2.3.1 Alternative 1 – Preferred Alternative	11
2.3.2 Alternative 2	13
2.3.3 No Action Alternative.....	13
2.4 Alternatives Eliminated from Further Consideration	14
2.4.1 Alternative to Renovating B226 for CWTF.....	14
2.4.2 Alternative to Demolishing B208, B209, and B210 and Construct Parking	14
3.0 Affected Environment and Environmental Consequences	15
3.1 Introduction	15
3.2 Air Quality	16
3.2.1 Affected Environment.....	16
3.2.1.1 National Ambient Air Quality Standards	16
3.2.1.2 Clean Air Act Conformity	16
3.2.1.3 Other Air Quality Considerations	18
3.2.2 Environmental Consequences	18
3.2.2.1 Alternative 1 – Preferred Alternative.....	18
3.2.2.2 Alternative 2	21
3.2.2.3 No Action Alternative	24
3.3 Climate.....	24
3.3.1 Affected Environment.....	25
3.3.2 Environmental Consequences	25
3.3.2.1 Alternative 1 – Preferred Alternative.....	26
3.3.2.2 Alternative 2	29
3.3.2.3 No Action Alternative	32
3.4 Noise.....	32
3.4.1 Affected Environment.....	34
3.4.2 Environmental Consequence.....	34
3.4.2.1 Alternative 1 - Preferred Alternative	34
3.4.2.2 Alternative 2	35
3.4.2.3 No Action Alternative	36
3.5 Earth Resources	36

3.5.1	Affected Environment.....	36
3.5.2	Environmental Consequences.....	40
3.5.2.1	Alternative 1 – Preferred Alternative.....	40
3.5.2.2	Alternative 2.....	41
3.5.2.3	No Action Alternative.....	41
3.6	Water Resources.....	41
3.6.1	Affected Environment.....	41
3.6.2	Environmental Consequences.....	44
3.6.2.1	Alternative 1 – Preferred Alternative.....	44
3.6.2.2	Alternative 2.....	45
3.6.2.3	No Action Alternative.....	45
3.7	Biological Resources.....	45
3.7.1	Affected Environment.....	46
3.7.2	Environmental Consequences.....	47
3.7.2.1	Alternative 1 – Preferred Alternative.....	47
3.7.2.2	Alternative 2.....	48
3.7.2.3	No Action Alternative.....	48
3.8	Cultural Resources.....	48
3.8.1	Affected Environment.....	49
3.8.2	Environmental Consequences.....	49
3.8.2.1	Alternative 1 – Preferred Alternative.....	50
3.8.2.2	Alternative 2.....	50
3.8.2.3	No Action Alternative.....	50
3.9	Utilities.....	50
3.9.1	Affected Environment.....	50
3.9.2	Environmental Consequences.....	51
3.9.2.1	Alternative 1 – Preferred Alternative.....	51
3.9.2.2	Alternative 2.....	52
3.9.2.3	No Action Alternative.....	52
3.10	Socioeconomics & Environmental Justice.....	52
3.10.1	Affected Environment.....	53
3.10.2	Environmental Consequences.....	56
3.10.2.1	Alternative 1 – Preferred Alternative.....	57
3.10.2.2	Alternative 2.....	57
3.10.2.3	No Action Alternative.....	57
3.11	Transportation.....	57
3.11.1	Affected Environment.....	58
3.11.2	Environmental Consequences.....	58
3.11.2.1	Alternative 1 – Preferred Alternative.....	58
3.11.2.2	Alternative 2.....	59
3.11.2.3	No Action Alternative.....	59
3.12	Safety, Health, and Hazardous and Toxic Materials and Waste.....	59
3.12.1	Affected Environment.....	60
3.12.2	Environmental Consequences.....	61
3.12.2.1	Alternative 1 – Preferred Alternative.....	61
3.12.2.2	Alternative 2.....	61
3.12.2.3	No Action Alternative.....	62
4.0	Cumulative Impacts.....	63
4.1	Introduction.....	63
4.2	Evaluation of cumulative effects.....	66
5.0	List of Preparers.....	69
5.1	Air Force and FAA Preparers.....	69
5.2	AECOM Preparers.....	69
6.0	References.....	71

LIST OF TABLES

Table 1: Performance Under Selection Standards (Alternative 1 – Preferred Alternative)	11
Table 2: Project Construction Duration	12
Table 3: Performance Under Selection Standards (Alternative 2).....	13
Table 4: Resources Dismissed from Detailed Analysis in the EA.....	15
Table 5: National Ambient Air Quality Standards.....	17
Table 6: Preferred Alternative Annual Construction and Operational Criteria Pollutant Emissions Summary (tons/year)	19
Table 7: Alternative 2 Annual Construction and Operational Criteria Pollutant Emissions Summary (tons/year)	21
Table 8: State and National Baseline GHG Emissions (Metric Tons/Year) – Preferred Alternative.....	25
Table 9: Preferred Alternative Annual GHG Emissions Summary (Metric Tons/Year)	26
Table 10: Total GHG Emissions (Metric Tons) Compared to State and National Baselines: 2025-2037 – Preferred Alternative	27
Table 11: Preferred Alternative SC-GHG ¹	28
Table 12: Alternative 2 Annual GHG Emissions Summary (Metric Tons/Year).....	30
Table 13: Total GHG Emissions (Metric Tons) Compared to State and National Baselines: 2025-2037 – Alternative 2	30
Table 14: Alternative 2 Social Cost of Greenhouse Gases ¹	31
Table 15: Common Sound Levels.....	33
Table 16: Construction Equipment Noise Levels (dBA) at Certain Distances from Source (feet).....	35
Table 17: Select Soil Characteristics for Proposed Action Area.....	37
Table 18: 2022 Socioeconomic Characteristics in the ROI	55
Table 19: 2022 Minority Population and Income Characteristics of the Environmental Justice ROI.....	56
Table 20: Reasonably Foreseeable Actions at PARS	63
Table 21: Potential Cumulative Impacts by Resource Area	66

LIST OF FIGURES

Figure 1: PARS Site Vicinity.....	2
Figure 2: Proposed Projects at PARS.....	10
Figure 3: Topography on PARS	38
Figure 4: Soil Map Units on PARS	39
Figure 5: Water Resources on PARS	43
Figure 6: Census Block Groups within Environmental Justice ROI	54
Figure 7: Past, Present, and Reasonably Foreseeable Actions at PARS	65

LIST OF APPENDICES

Appendix A: Consultation with Federal, State, and Local Agencies
Appendix B: National Historic Preservation Act Section 106 Consultation
Appendix C: Tribal Consultation
Appendix D: Early Notice of a Proposed Activity with the Potential to Impact Floodplains
Appendix E: Air Conformity Applicability Model (ACAM) Reports

ABBREVIATIONS AND ACRONYMS

AADT	Average Annual Daily Traffic	DAFI	Department of the Air Force Instruction
AASHTO	American Association of State Highway and Transportation Officials	DAFMAN	Department of the Air Force Manual
ACHD	Allegheny County Health Department	dB	Decibel
ACAM	Air Conformity Applicability Model	dBa	Weighted Decibel Scale
ACM	Asbestos Containing Material	DERP	DoD Environmental Restoration Program
AFCEC	Air Force Civil Engineer Command	DoD	Department of Defense
AFMAN	Air Force Manual	DoDI	DoD Instruction
AFRC	Air Force Reserve Command	EA	Environmental Assessment
AGE	Aerospace Ground Equipment	EIAP	Environmental Impact Analysis Process
AMC	Air Mobility Command	EISA	Energy Independence and Security Act
APE	Area of Potential Affects	EO	Executive Order
ARS	Air Reserve Station	FAA	Federal Aviation Administration
AT/FP	Antiterrorism/Force Protection	FEMA	Federal Emergency Management Agency
AW	Airlift Wing	FOCUS	Facilities Operations Capability and Utilization Survey
B	Building	FONPA	Finding of No Practicable Alternative
BASH	Bird/Wildlife Aircraft Strike Hazard	FONSI	Finding of No Significant Impact
BCC	Birds of Conservation Concern	FY	Fiscal Year
CAA	Clean Air Act	GHG	Greenhouse Gas
CEJST	Climate and Economic Justice Screening Tool	GOX	Gaseous Oxygen
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980	HTMW	Hazardous and Toxic Materials and Waste
CEQ	Council on Environmental Quality	HVAC	Heating, Ventilation, and Air Conditioning
CFR	Code of Federal Regulations	ICRMP	Integrated Cultural Resources Management Plan
CWA	Clean Water Act	IICEP	Interagency and Intergovernmental Coordination for Environmental Planning
CWTF	Consolidated Wing Training Facility	IPaC	Information for Planning and Consultation

IRP	Installation Restoration Program	PHMC	Pennsylvania Historical and Museum Commission
LBP	Lead-based paint	PNDI	Pennsylvania Natural Diversity Inventory
LID	Low Impact Development	PIT	Pittsburgh International Airport
LOD	Limits of Disturbance	PPC	Preparedness, Prevention, and Contingency
LOX	Liquid Oxygen	RCRA	Resource Conservation and Recovery Act
MBTA	Migratory Bird Treaty Act	ROI	Region of Influence
MMRP	Military Munitions Response Program	SC-GHG	Social Cost of Greenhouse Gases
MTMA	Moon Township Municipal Authority	SF	Square Feet
NAAQs	National Ambient Air Quality	SHPO	State Historic Preservation Office
NEPA	National Environmental Policy Act	SPCC	Spill Prevention, Control, and Countermeasure
NHPA	National Historic Preservation Act	SQG	Small Quantity Generator
NOA	Notice of Availability	SWPPP	Stormwater Pollution Protection Plan
NOx	Oxides of Nitrogen	T&E	Threatened and Endangered
NPDES	National Pollutant Discharge Elimination System	TO	Technical Order
NRHP	National Register of Historic Places	UFC	Unified Facilities Criteria
PA DEP	Pennsylvania Department of Environmental Protection	U.S.	United States
PA DCNR	Pennsylvania Department of Conservation and Natural Resources	USACE	U.S. Army Corps of Engineers
PARS	Pittsburgh Air Reserve Station	USC	U.S. Code
PennDOT	Pennsylvania Department of Transportation	USDA	U.S. Department of Agriculture
POL	Petroleum, Oils, and Lubricants	USEPA	U.S. Environmental Protection Agency
		USFWS	U.S. Fish and Wildlife Service

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1.0 PURPOSE AND NEED

1.1 INTRODUCTION

This Environmental Assessment (EA) assesses the potential environmental impacts associated with the United States (U.S.) Air Force Reserve Command's (AFRC; lead agency) proposal to implement 11 projects outlined in the Facilities Operations Capability and Utilization Survey (FOCUS) study for Pittsburgh Air Reserve Station (PARS) in order to provide suitable facilities necessary to achieve the 911th Airlift Wing's (911th AW) mission, and achieve more optimal configuration of those facilities (Proposed Action). These projects are federal actions subject to National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] §§ 4321, et seq.).

PARS is collocated with the Pittsburgh International Airport (PIT or the Airport) in Moon Township, Pennsylvania, approximately 10 miles northwest of the City of Pittsburgh (see **Figure 1**). Implementation of the FOCUS study would include improvements that may be subject to Airport Layout Plan (ALP), which would require approval from the Federal Aviation Administration (FAA) on behalf of the Allegheny County Airport Authority. ALP approval is also a federal action subject to NEPA. Therefore, the FAA is a Cooperating Agency for this EA; see **Appendix A** for Cooperating Agency status documentation. The Proposed Action would receive unconditional approval to be depicted on the PIT ALP pursuant to 49 USC §§ 40103(b), 44718, and 47107(a)(16). Determination and approval of the effect of this project on the safe and efficient utilization of navigable airspace would be made in accordance with 14 Code of Federal Regulations [CFR] Parts 77 and 157 and 49 USC § 44718.

The AFRC, with the FAA, prepared this EA in compliance with NEPA; the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 CFR Parts 1500-1508); the Air Force Environmental Impact Analysis Process (EIAP) (32 CFR Part 989); and FAA Orders 1050.1F, *Environmental Impacts: Policies and Procedures*, and 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

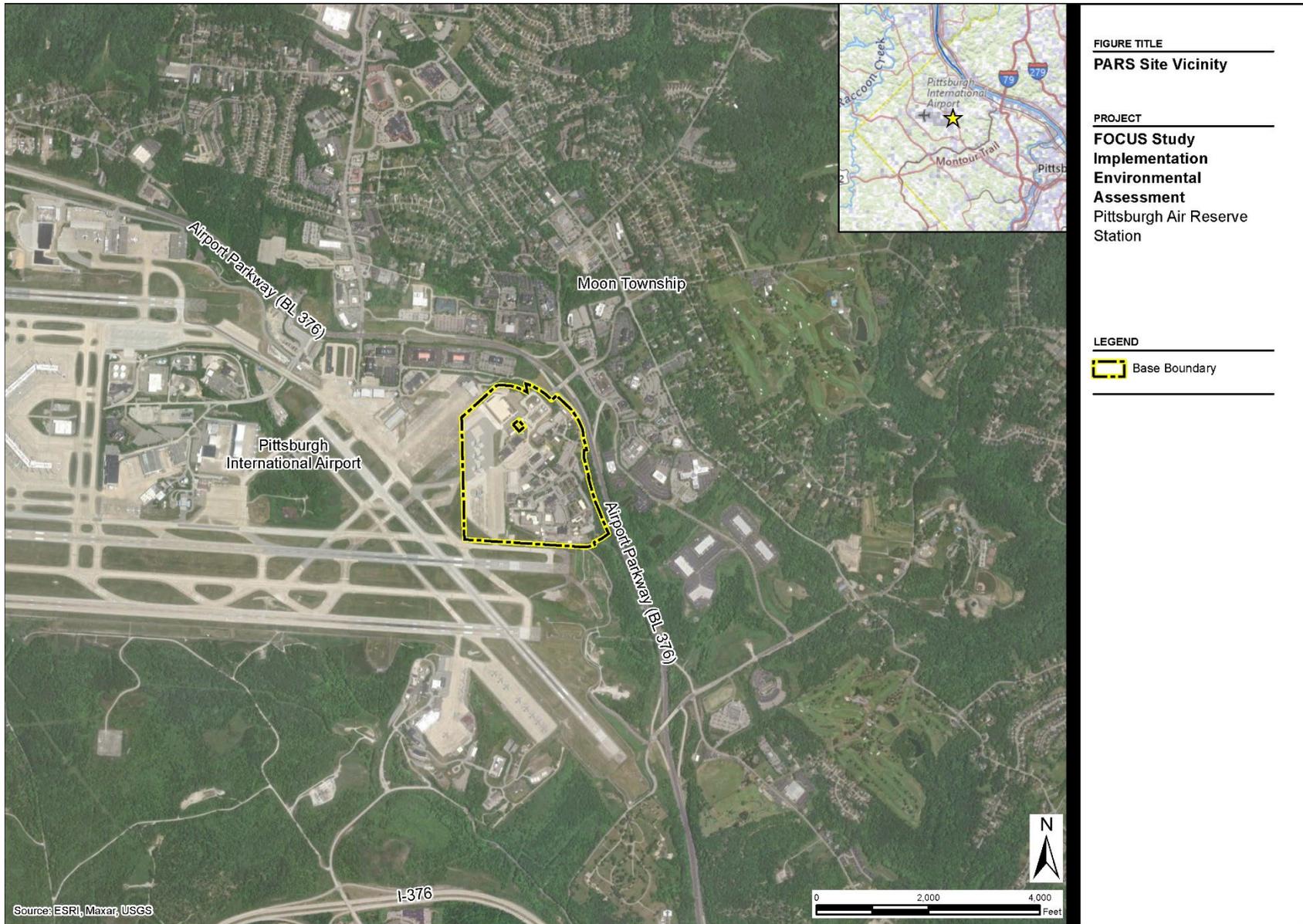
This Draft EA and Draft Finding of No Significant Impact (FONSI)/Finding of No Practicable Alternative (FONPA) are available on the PARS website at <https://www.pittsburgh.afrc.af.mil/>.

1.2 BACKGROUND

PARS is the home station of the AFRC's 911th AW, whose mission is to organize, recruit, and train Air Force Reserve personnel to provide strategic airlift of airborne forces, their equipment and supplies, and delivery of these forces and materials by air. The 911th AW is part of the 4th Air Force, and its 758th Airlift Squadron flies eight C-17A Globemaster III strategic airlift aircraft. If mobilization occurs, 911th AW units deploy as part of the Air Mobility Command (AMC). Additional tenant units at PARS include the Office of Special Investigations and the U.S. Navy. There are approximately 1,200 total Air Force Reserve members stationed at PARS. The base also employs approximately 350 Department of Defense (DoD) civilians and 100 contractors (PARS, 2024).

The FOCUS study was completed for the 911th AW in 2021 to document space utilization and evaluate the condition of AFRC facilities (AFRC, 2021). This effort consisted of a Facility Utilization Survey and a Facility Condition Assessment, which were used to develop a recommended project list to ensure that PARS facilities are properly configured and available to personnel to perform the mission efficiently and effectively. The plan outlines suggestions for organizational changes, new facility construction, additions, renovations, maintenance and repairs, and facility divestiture necessary to achieve the base's goals.

Figure 1: PARS Site Vicinity



The recommended project list was developed to address workspace deficiencies and degraded facility systems and components and included over 60 projects recommended for implementation over the next several years depending on need, planning requirements, and funding. This EA includes implementation of 11 of the facility projects described in the FOCUS study.

1.3 PURPOSE AND NEED

PARS currently lacks the infrastructure necessary to fully meet training requirements and conduct base operations. The Proposed Action would support the operational plans for the AFRC and the 911th AW. The *purpose* of the Proposed Action is to provide the 911th AW with the facilities and infrastructure necessary at PARS to meet current and future mission requirements, and fulfill the strategic vision of the base as presented in the FOCUS study. Facilities at PARS should be optimally configured to ensure they are suitable for the respective missions of the various units, and that activities are not constrained by outdated, deficient, or undersized facilities and buildings. The Proposed Action is *needed* because aging facilities and infrastructure are no longer able to support their originally planned uses, and existing buildings do not support sizes and layouts needed for mission operations, training activities, and airfield operations.

1.4 INTERAGENCY AND INTERGOVERNMENTAL COORDINATION/CONSULTATION

Interagency and intergovernmental cooperation is a federally mandated process for informing and coordinating with other governmental agencies regarding federal proposed actions. The Intergovernmental Cooperation Act of 1968 and Executive Order (EO) 12372, *Intergovernmental Review of Federal Programs*, require federal agencies to cooperate with and consider state and local views in implementing a federal proposal. Department of the Air Force Manual (DAFMAN) 32-7003, *Environmental Conservation*, requires the Air Force to facilitate agency coordination and implement scoping requirements under NEPA.

During the public scoping process, the AFRC coordinated with the following federal, state, and local agencies with jurisdiction by law or special expertise over the Proposed Action to inform the range of issues to be addressed in the EA.

- FAA
- U.S. Army Corps of Engineers (USACE)
Pittsburgh District
- U.S. Department of Agriculture (USDA)
Natural Resources Conservation Service (NRCS)
- U.S. Environmental Protection Agency (USEPA)
- U.S. Department of the Interior (DOI)
- U.S. Fish & Wildlife Service (USFWS)
- Pennsylvania Department of Conservation and Natural Resources (PA DCNR)
- Pennsylvania Department of Environmental Protection (PA DEP)
- Pennsylvania Department of Transportation (PennDOT)
- Pennsylvania Game Commission
- Allegheny County Executive/Allegheny County Health Department (ACHD)
- Allegheny County Airport Authority
- Moon Township Manager

Coordination letters and responses received are consolidated in **Appendix A** and discussed in **Section 3.0**, as appropriate. Additionally, the AFRC's consultation with the Pennsylvania Historical and Museum Commission (PHMC) (i.e., the PA State Historic Preservation Office [SHPO]) pursuant to Section 106 of the National Historic Preservation Act (NHPA) is included in **Appendix B**.

Consistent with the NHPA implementing regulations (36 CFR Part 800), EO 13175, *Consultation and Coordination with Indian Tribal Governments*, DoD Instruction (DODI) 4710.02, *Interactions with Federally Recognized Tribes*, Department of the Air Force Instruction (DAFI) 90-2002, *Interactions with Federally Recognized Tribes*, and AFMAN 32-7003, *Environmental Conservation*, the AFRC is also consulting with federally recognized tribes that are historically affiliated with the geographic region of PARS regarding the potential for the Proposed Action to affect properties of cultural, historical, or religious significance to the tribes. A record of this consultation is included in **Appendix C**.

1.5 PUBLIC AND AGENCY REVIEW OF THE EA

In accordance with CEQ, Air Force, and FAA NEPA regulations, the Draft EA and Draft FONSI/FONPA have been made available for a 30-day public review and comment period between December 2, 2024, and January 2, 2024. A Notice of Availability (NOA) for the Draft EA and Draft FONSI/FONPA was published for 30 days in the *Coraopolis Record* starting December 2, 2024.

The Draft EA and Draft FONSI/FONPA were published digitally on the PARS 911th AW website at <https://www.pittsburgh.afrc.af.mil/>. Printed copies of the Draft EA and Draft FONSI/FONPA are available for public review at the Moon Township Public Library, 1700 Beaver Grade Road #100, Coraopolis, PA 15108. During the Draft EA public review period, written comments may be emailed to 1st Lt. Marjorie Shurr, 911th AW, at marjorie.schurr@us.af.mil. A mailing address can be provided upon request.

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action involves 11 total projects from the FOCUS study. Each project is described in detail below and identified on **Figure 2**.

2.1.1 Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF)

The Proposed Action would renovate B226 to accommodate the 911th AW and training functions in a CWTF. B226 is currently occupied by the 911th Force Support Squadron, and the 911th AW functions are located in B316. The existing 911th AW facility in B316 lacks continuity, efficiency, and organization. Wing staff and training functions are scattered in substandard facilities around the base. Shortages of administrative office space to support these functions has forced the conversion of the dormitory buildings (B208, B209, and B210) to office space that is inefficient and expensive to maintain. Flow of information among 911th AW staff frequently crosses between various buildings, resulting in slow, inefficient communication and coordination.

Under the Proposed Action, PARS would undertake an approximately 29,000 square foot (SF) interior renovation of B226. The renovation would include the demolition of all interior non-load bearing walls and the construction of all supporting utilities, pavements, and landscaping, as well as interior and exterior communications infrastructure. The renovated facility would include office areas for multiple administrative functions, and an education and training center. The current 911th AW facility (B316) would be repurposed so that 911th Security Forces Squadron functions could be consolidated from various locations throughout the base. The facility would be designed in accordance with the DoD Unified Facilities Criteria (UFC) 1-200-01, DoD Building Code. Sustainable principles would also be integrated into the design, development, and construction of the project in accordance with UFC 1-200-02, High Performance and Sustainable Building Requirements.

2.1.2 DEMOLISH B208, B209, AND B210 AND CONSTRUCT PARKING

The Proposed Action would demolish co-located buildings B208, B209, and B210. These 1950s-era, former dormitory buildings have deteriorated, are expensive to maintain, and have excess and inefficiently utilized space. If not demolished, B210 would require an upgrade to address mold that has grown in the building because of excess condensation from heating and air conditioning pipes. B208 and B209 have also recently experienced flooding due to structural issues. Demolishing these facilities would reduce operations and maintenance costs and create space for additional parking. Demolishing B208, B209, and B210, which cumulatively total 39,000 SF, would also ensure that any new construction at PARS complies with the Air Force Construction Growth Offset policy, which requires all building square footage growth to be offset either by a disposal action (i.e., demolition or transfer) or by identifying facilities to be closed (Department of the Air Force Instruction [DAFI] 10-503, *Strategic Basing*).

Under the Proposed Action, PARS would disconnect all utilities and demolish these three wood frame buildings, including basement and foundation components. Due to the age of the buildings, asbestos containing materials (ACM) and lead-based paint are likely to be present. The buildings would be surveyed for ACM and lead prior to demolition, and demolition would include proper removal and off-site disposal of these materials by a licensed contractor in accordance with applicable laws and regulations. A survey of mold would also be conducted in order to determine if mold abatement is required prior to demolition. Following demolition, the site would be regraded, and an asphalt parking area would be constructed for the

new CWTF. Any disturbed unpaved areas would be graded and seeded. Current building functions would be moved to the CWTF prior to demolition.

2.1.3 DEMOLISH B403 AND CONSTRUCT PARKING

The Proposed Action would demolish B403, which currently provides office space for the 911th Financial Management section. B403 will ultimately require repairs as the facility ages. Demolishing the facility would reduce operations and maintenance costs and create space for additional parking while providing flexibility to ensure that new construction projects remain in compliance with the Air Force Construction Growth Offset policy.

Under the Proposed Action, PARS would demolish the approximately 5,400 SF building and its foundation components. The site would then be regraded, and an asphalt parking area would be constructed. Any disturbed unpaved areas would be graded and seeded. Current building functions would be moved to the CWTF prior to demolition.

2.1.4 DEMOLISH B405 AND CONSTRUCT COMMUNICATIONS FACILITY

The Proposed Action involves the construction of a new multi-story communications facility to replace the existing communications facility, B405. The 911th Communications Squadron at PARS is transitioning to a Cyber Squadron, which would involve adding about 27 new personnel. By standing up a new mission and becoming a Cyber Squadron, there would be a significant increase in training, including onsite training that would require a dedicated training area. The existing building has become overcrowded with personnel and there is inadequate storage for existing equipment, therefore it lacks the space to accommodate new personnel and fulfill training requirements. Additionally, the server room in B405 does not support the capacity necessary to fulfill current mission requirements, and the switch room does not have a fire suppression system. Other issues with the existing building include mold, leaking gutters, and inadequate air conditioning in workspaces and server rooms.

Under the Proposed Action, an approximately 23,000 SF building would be constructed for the 911th Communications Squadron, and the existing communications facility, B405, would be partially demolished. The new facility would include space for administrative staff, servers, and storage, as well as a loading dock, tempest vault, and conference and training areas. Heating, ventilation, and air conditioning (HVAC), electrical, lighting, plumbing, fire suppression systems, and interior and exterior communications systems would be included in the construction. The server areas would have a full backup HVAC system, and flooring would be raised in server rooms and system control spaces. The existing communications facility (B405) would be demolished, except for a portion of the building which would be left in place indefinitely to ensure that no system disruptions occur during the transfer of 911th Communications Squadron operations to the new facility. Prior to demolition, the Air Force would determine whether mold abatement is required. Following demolition, the remainder of the site would be converted into a parking area for the new communications facility.

2.1.5 REPAIR STORM DRAINS AND OUTFALLS

The Proposed Action involves replacing 360 feet of storm drain pipe to two outfalls and installing a new catch basin and manhole. The existing stormwater pipes are rusting and causing the ground above the pipes to deteriorate and become unstable. Additionally, the infiltration of the aboveground drainage system is causing severe erosion damage around the pipes, leading stormwater to backup and pool. If the storm drain pipes and outfalls are not repaired, soil will continue to erode from the surrounding area and the pipes will deteriorate further, causing ground instability and increased infiltration of foreign objects into the storm drain system.

Under the Proposed Action, two damaged metal corrugated pipes, one between outfall #3 and catch basin #3, and one between manhole #6 and outfall #5, would be replaced with new watertight plastic pipe. Near outfall #5, a new manhole and catch basin would be installed to collect stormwater from an existing concrete pipe. Approximately 800 SF of riprap would also be removed from outside outfall #5. Repair of the storm drains and outfalls would require a Clean Water Act (CWA) Section 401 Water Quality Certification and a Pennsylvania Chapter 105 General Permit to be obtained from PA DEP. Additionally, work may occur within the 1% annual chance flood hazard area (100-year floodplain) of Meeks Creek.

2.1.6 DEMOLISH B206

The Proposed Action involves the demolition of B206, a two-story stick framed building formerly used as a lodging facility. Demolition of the building would reduce operation and maintenance costs, as FOCUS study findings indicate that the building is beyond its lifecycle and the boiler and HVAC unit would need to be replaced to ensure continued operations. The building is in a closed, gated facility; therefore, it cannot be repurposed. Because the facility will remain unused, it is more likely to degrade and become hazardous and unsightly. Demolishing B206 would also provide flexibility for PARS to comply with the Air Force Construction Growth Offset policy by reducing the amount of facility square footage on the base.

Under the Proposed Action, the approximately 12,000 SF building would be demolished. Building utilities would be disconnected and all foundation components would be removed. The building's 5,700 SF parking lot would also be demolished, and the site would be regraded, seeded as a lawn, and stabilized.

2.1.7 CONSTRUCT MUNITIONS ACCESS ROAD

The Proposed Action would construct an access road between the munitions maintenance, inspection, and storage buildings for transporting munitions. The current mission requires daily maintenance and inspections of munitions and routine transportation to the airfield for loading munitions on aircraft. The available route that vehicles transporting munitions currently travel through at PARS is over eight times longer than the distance between the buildings due to lack of a direct access road, and the current mission requires up to eight trips each way per day. There is also a safety concern with personnel traversing the base on multiple roads to transport munitions and equipment to the airfield or to access storage buildings. The proposed access road would support the 911th Maintenance Squadron's mission by improving the efficiency of munitions transportation and mitigating risks from transporting munitions across the airfield and populated portions of the base.

Under the Proposed Action, an asphalt drive with concrete curbs and block retaining wall would be constructed between the munitions maintenance, inspection, and storage buildings. The Proposed Action would also include site clearing, preparation, and grading, and 200 feet of existing chain-link fence would be demolished. The demolished portion of the fence would be replaced with an electronically controlled sliding fence. The access road would be constructed at an appropriate slope for safe vehicle access and would meet UFC 3-201-01, *Civil Engineering*, and American Association of State Highway and Transportation Officials (AASHTO) standards as required in the design criteria for roadways.

2.1.8 CONSTRUCT B414 HANGAR ACCESS ROAD AND PARKING

The Proposed Action would replace an existing asphalt parking area with new asphalt access roadways and additional parking. There is inadequate paved parking area and no defined access road serving the B414 aircraft hangar from the main base. A direct route is needed for access between the main base area of PARS and B414 to transport personnel, aircraft parts, and equipment. Currently, vehicles coming to and from the main base to access the two-bay hangar make an acute turn at the intersection of Sabre Street and Parking Lot M. This turn is difficult to maneuver for large tractor trailer trucks and tugs and/or bobtails

towing transport trailers. The proposed access road would accommodate vehicles and trailers that require large turning radii by providing a more direct means of travel. Repairs to the parking area would ensure that enough parking for B414 is available, as some parking spaces would be eliminated by the new access road.

Under the Proposed Action, a new access roadway and retaining wall would be constructed. The access road would meet UFC 3-201-01, *Civil Engineering*, and AASHTO standards as required in the design criteria for roadways. The Proposed Action would include all necessary site clearing and preparation and striping over existing concrete sections of pavement for the new roadway leading to an existing gate along the northwest side of the hangar. A new security fence would be installed along the north and west sides of the hangar and the existing asphalt parking areas would be repaired. The project would also include the installation of necessary stormwater drainage for the roadway, a new dumpster enclosure, parking lot lighting, and landscaping.

2.1.9 CONSTRUCT LIQUID OXYGEN (LOX) STORAGE FACILITY

The Proposed Action would involve the construction of a new LOX storage facility in compliance with regulations. The LOX storage function is currently located in B5519 at PARS. The servicing location currently is not in compliance with Air Force Technical Order (TO) 00-25-172 and DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, and requires a waiver. The location is also not fully compliant with the National Fire Protection Association codes. Additionally, the LOX tanks are exposed to weather elements, which increases deterioration of the equipment and causes loss of product from wind and sun exposure. At the current location, the facility cannot be brought into compliance with Air Force standards and regulations and be properly protected from prevailing winds and sun.

Under the Proposed Action, a new LOX storage facility would be constructed that consists of three masonry and metal panel walls with an overhang, and is able to accommodate two, 3,000-gallon LOX tanks and associated equipment. The facility would be located in a grassy area 200 feet south of B414. The completed facility would be 2,000 SF and able to accommodate a service vehicle. All electrical and HVAC equipment would be explosion proof, and a red warning light would be installed to signal when servicing operations are in progress. Energy efficient lighting and an emergency telephone would be installed, and a water connection with a frost-free hose bib would be installed. All asphalt around the new site would be removed and replaced with concrete, and a stormwater box culvert would be installed for stormwater runoff capture. A temporary fence would be installed at the new site and eventually be replaced with a permanent fence with gates to allow access to the facility and to the adjacent aircraft parking apron.

This project would be executed concurrently with the LOX equipment storage shelter project (see **Section 2.1.10**), since the two projects were designed to accommodate each other, and to ensure the support equipment parking and service area would not be separated from the LOX storage area.

2.1.10 CONSTRUCT LOX EQUIPMENT STORAGE SHELTER

The Proposed Action would relocate and consolidate LOX carts and other equipment items that must be easily accessible from the aircraft parking apron. The current equipment parking area, located adjacent to B5519, is strictly used for parking LOX carts and is not fully compliance with DAFMAN 91-203. The equipment is left exposed to weather elements, which causes the same issues with deterioration and heat as described in **Section 2.1.9**. At the current location, the equipment cannot be properly protected without blocking access to B5519. Further, the existing pad is not sized correctly for the C-17 mission. The C-17 mission requires eight LOX carts and two Gaseous Oxygen (GOX) carts, while the current pad only allows five LOX carts and was never built for GOX carts. Additionally, LOX capacity on a C-17 is seven times greater than the C-130; therefore, the site will need to be accessed more frequently under the C-17 mission.

The proposed location would be easily and readily accessible directly from the aircraft parking apron, which cannot be accomplished at the existing location.

Under the Proposed Action, an approximately 1,385 SF, three-sided support equipment parking shelter would be constructed that is able to accommodate storage of sufficient LOX to support the C-17 mission, as well as a storage and servicing area. Grounding for LOX equipment servicing operations would be provided, and energy-efficient, explosion-proof lighting would be installed. For the parking area, the existing grass site would be replaced with concrete. Where permitted, the access road may be asphalt. The Proposed Action would also include the addition of airfield roadway striping to facilitate access to the storage location, with stop signs and safety signs to keep traffic from stopping within the aircraft taxi lane object free area. Similar to the LOX storage facility, the Proposed Action would include an underground stormwater detention system for stormwater runoff capture (see **Section 2.1.9**).

2.1.11 CONSTRUCT AEROSPACE GROUND EQUIPMENT (AGE) COVERED STORAGE

The Proposed Action would involve the construction of a new covered parking structure for AGE that are operational and ready to use. AGE is a mobile system that is towed out to aircraft awaiting servicing. AGE supplies electricity, hydraulic pressure, and air pressure to aircraft, ensuring they are operational and ready for flight. This structure would protect AGE from direct weather impacts and allow minor preparation work (i.e., battery charging) outside of the main indoor maintenance bay. Repaired and operational AGE is currently stored in the open with no protection from direct weather. Sun oxidation and water icing increases AGE maintenance, degrades the equipment prematurely, and results in additional maintenance costs.

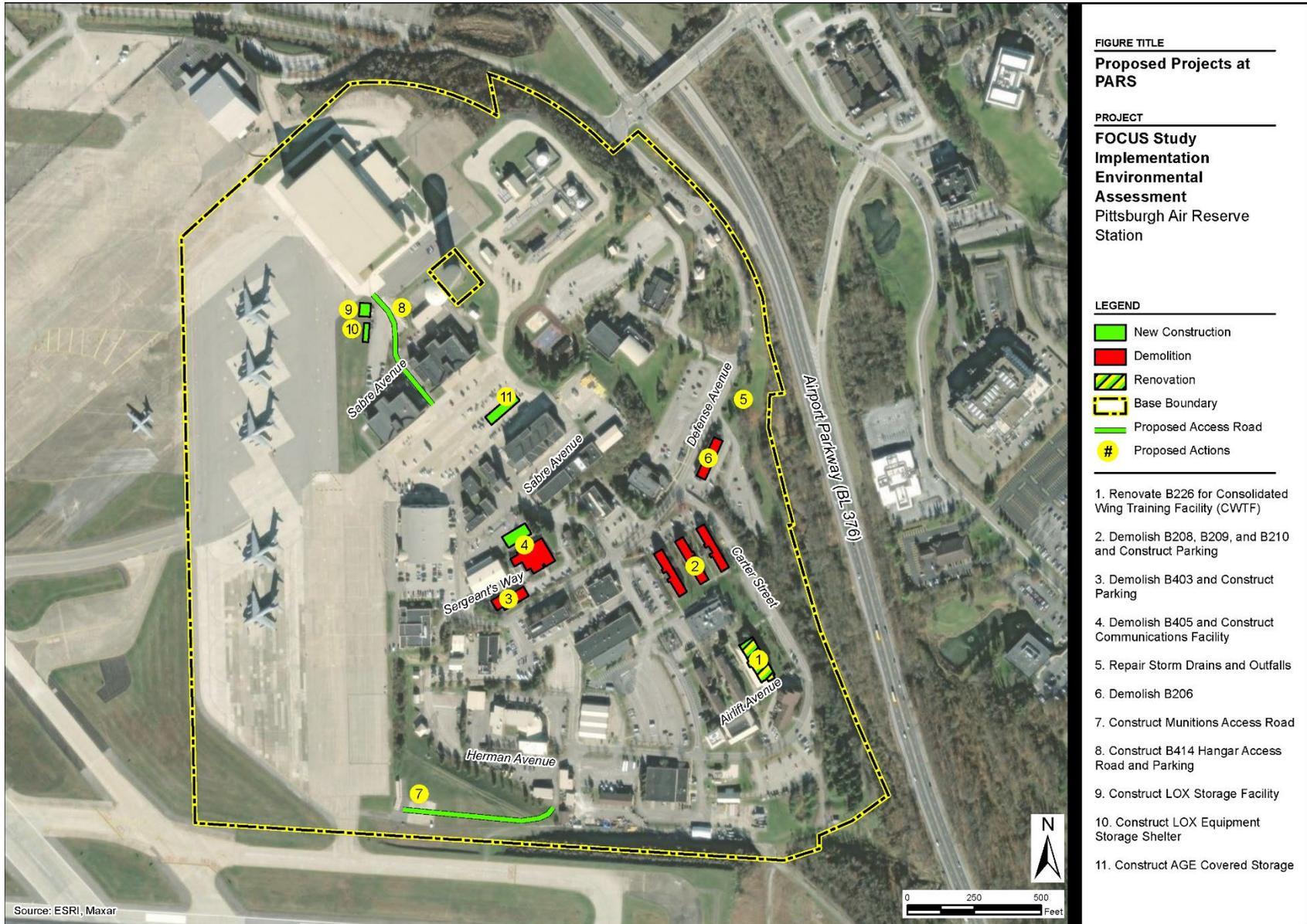
Under the Proposed Action, an 8,000-SF covered parking area would be constructed. Weatherproof lighting, switches, and maintenance power outlets would also be added to the structure. The structure would be designed to comply with DoD Antiterrorism/Force Protection (AT/FP) requirements per UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*.

2.2 SCREENING OF ALTERNATIVES

The AFRC developed selection standards to evaluate specific reasonable alternatives by which to implement the Proposed Action. “Reasonable alternatives” are those that could be utilized to meet the purpose of and need for the Proposed Action. The AFRC’s selection standards used to evaluate reasonable alternatives include the following:

1. **Standard 1 – Achieves Mission Requirements:** This standard measures how well each alternative would meet current and future mission requirements or the strategic vision of the base. The AFRC evaluated each alternative based on whether it would provide the necessary infrastructure to support the current and future mission requirements of the 911th AW.
2. **Standard 2 – Operational Efficiency:** This standard measures how well each alternative improves operational efficiency, including factors such as the protection of assets, ease of access for personnel and equipment, and optimization of workflow processes.
3. **Standard 3 – Health and Safety:** This standard measures how well each alternative would protect the health and safety of AFRC personnel. The ARFC evaluated each alternative based on whether it would comply with UFCs and Air Force standards and prevent any deterioration of assets that could create future hazards.

Figure 2: Proposed Projects at PARS



4. Standard 4 – Adherence to Construction Growth Offset Policy: This standard measures the potential for each project to facilitate adherence to the Air Force’s Construction Growth Offset policy, which requires all building square footage growth to be offset by a facility demolition, transfer, or closure.

2.3 EVALUATED ALTERNATIVES

2.3.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Under the Alternative 1, the Preferred Alternative, the 11 projects would be implemented as described in **Section 2.1** and shown in **Figure 2**. These projects are not dependent on each other and AFRC may choose to implement one or more without the others. These projects are AFRC directive actions that are analyzed together in this EA for efficiency and due to the similarities in their potential environmental impacts. Therefore, all 11 projects are fully analyzed as part of the Preferred Alternative in this EA.

All proposed projects meet Selection Standards #1, #2, #3, and #4 as described in **Table 1**.

Table 1: Performance Under Selection Standards (Alternative 1 – Preferred Alternative)

Project	Performance Under Selection Standards
Renovate B226 for CWTF	The renovation of B226 would provide space for training, consolidate Wing functions, and refresh an aged, energy inefficient facility.
Demolish B208, B209, B210 and Construct Parking	Demolishing B208, B209, B210 would reduce operation and maintenance costs, eliminate deteriorating buildings, and provide flexibility for PARS to comply with the Air Force Construction Growth Offset policy.
Demolish B403 and Construct Parking	Demolishing B403 would reduce operation and maintenance costs, eliminate deteriorating buildings, and provide flexibility for PARS to comply with the Air Force Construction Growth Offset policy.
Demolish B405 and Construct Communications Facility	Demolishing B405 would reduce operation and maintenance costs, eliminate deteriorating buildings, and provide flexibility for PARS to comply with the Air Force Construction Growth Offset policy. The construction of a communications facility would provide adequate space for 911th Communications Squadron staff and equipment and allow the server room’s capacity to be expanded to fulfill current requirements.
Repair Storm Drain and Outfalls	Repair of the stormwater pipes and outfalls would replace end of lifecycle assets and prevent soil erosion and loss of bank stability.
Demolish B206	Demolishing B206 would reduce operation and maintenance costs, eliminate deteriorating buildings, and provide flexibility for PARS to comply with the Air Force Construction Growth Offset policy.
Construct Munitions Access Road	Constructing a new munitions access road would ensure that the base meets Air Force and AASHTO safety standards and allow more operational efficiency.
Construct B414 Hangar Access Road and Parking	Constructing a B414 hangar access road would ensure that the base meets Air Force and AASHTO safety standards and allow more operational efficiency.
Construct LOX Storage Facility	The construction of a new LOX storage facility would prevent the deterioration of equipment and ensure that airfield operations comply with Air Force regulations.
Construct LOX Equipment Storage Shelter	The construction of a new LOX equipment storage shelter would prevent the deterioration of equipment and ensure that airfield operations comply with Air Force regulations.
Construct AGE Covered Storage	The construction of AGE covered storage would prevent the deterioration of equipment and ensure that airfield operations comply with Air Force regulations.

All proposed facilities would be designed and built in accordance with applicable AT/FP requirements in UFC 4-010-01, *DoD Minimum Antiterrorism Standards for Buildings*. The design of new and renovated facilities would also comply with requirements under UFC 1-200-02, *High Performance and Sustainable Building Requirements*. Facilities would use cost-effective sustainability strategies to reduce energy and water use and reduce waste in design materials and construction practices. A life-cycle cost assessment would be performed to evaluate the building massing, mechanical system options, and potential for renewable energy and water reuse systems.

The Preferred Alternative would comply with all federal and state laws and regulations, including consultation, permitting, and design requirements. For example, the projects involving new construction would comply with applicable requirements of Section 438 of the Energy Independence and Security Act (EISA), which requires federal projects to incorporate into the design, low impact development (LID) measures to maintain the pre-development hydrology of a site. Such measures could include, but would not be limited to, permeable pavement and water retention/erosion control basins. Construction activities would also be conducted in accordance with the applicable requirements of the USEPA and PA DEP National Pollutant Discharge Elimination System (NPDES) and associated permits to manage the quantity and quality of stormwater discharged from the project site and minimize the pollution and sedimentation of receiving water bodies. These regulatory compliance measures are discussed throughout the resource-specific impact analyses in **Section 3.0**.

Construction is anticipated to begin in fiscal year (FY) 2025. The duration of construction for each project is detailed in **Table 2**.¹

Table 2: Project Construction Duration

Project	Approximate Start Date	Approximate Duration
Renovate B226 for CWTF	August 2025	12 months
Demolish B208, B209, B210 and Construct Parking	January 2026	8 months
Demolish B403 and Construct Parking	January 2026	8 months
Demolish B405 and Construct Communications Facility	January 2026	9 months
Repair Storm Drain and Outfalls	March 2025	4 months
Demolish B206	January 2026	8 months
Construct Munitions Access Road	2028	8 months
Construct B414 Hangar Access Road and Parking	2028	8 months
Construct LOX Storage Facility	2029	12 months
Construct LOX Equipment Storage Shelter	2029	12 months
Construct AGE Covered Storage	2028	8 months

¹ The construction timeframes identified in **Table 2** are approximate and subject to change. Because project impacts can be greater if multiple construction projects are occurring simultaneously, the analysis in **Section 3.0** generally assumes all projects would occur at the same time in order to account for a worst-case scenario.

2.3.2 ALTERNATIVE 2

Under Alternative 2, nine of the projects would be implemented as described in the Preferred Alternative. However, instead of being demolished, B403 and B405 would be renovated to accommodate 911th Communications Squadron functions, which would be divided between the two facilities. Additional parking and a new communications facility would not be constructed. The HVAC system in B405 would be modified and upgraded, and the fire protection system and architectural features (flooring, windows, and doors) would be modernized to meet UFCs and Air Force safety standards.

Alternative 2 would meet all selection standards, as described in **Table 3**, however, 911th Communications Squadron operations would be less efficient than if they were consolidated into a new communications facility (as proposed under the Preferred Alternative), as some functions would need to be located separately from the building that contains the base’s communications equipment.

Table 3: Performance Under Selection Standards (Alternative 2)

Project	Performance Under Selection Standards
Renovate B226 for CWTF	Same as under Preferred Alternative; see Table 1 .
Demolish B208, B209, B210 and Construct Parking	Same as under Preferred Alternative; see Table 1 .
Renovate B403	No new parking or new square footage would be added. B403 would partially house the 911th Communication Squadron.
Renovate B405	The HVAC system in B405 would be modified and upgraded, and the fire protection system and architectural features (flooring, windows, and doors) would be modernized to meet UFCs and Air Force safety standards. No new square footage would be added. B405 would partially house the 911th Communication Squadron.
Repair Storm Drain and Outfalls	Same as under Preferred Alternative; see Table 1 .
Demolish B206	Same as under Preferred Alternative; see Table 1 .
Construct Munitions Access Road	Same as under Preferred Alternative; see Table 1 .
Construct B414 Hangar Access Road and Parking	Same as under Preferred Alternative; see Table 1 .
Construct LOX Storage Facility	Same as under Preferred Alternative; see Table 1 .
Construct LOX Equipment Storage Shelter	Same as under Preferred Alternative; see Table 1 .
Construct AGE Covered Storage	Same as under Preferred Alternative; see Table 1 .

2.3.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Certain 911th AW functions would continue to be located in multiple facilities spread throughout the base and B208, B209, and B210 would continue to age. B403 and B206 would remain in place to age, and the 911th Communications Squadron would continue to operate from the inadequate facilities in B405. Soil erosion near outfall #3 and outfall #6 would continue to progress as the stormwater pipes degrade. A munitions access road would not be constructed, and munitions would continue to be transported along an inefficient route through populated areas of the base. The B414 hangar

access road would not be constructed, and trucks and trailers would be forced to navigate a sharp turn off Sabre Avenue to access B414. The LOX tanks would remain in B5519 out of compliance with required policies, necessitating a waiver. The LOX storage tanks, LOX equipment, and AGE would each continue to be exposed to weathering. The No Action Alternative would meet Selection Standard #4 because no growth in building square footage would occur, however, it would not meet Selection Standards #1, #2, and #3 or the Proposed Action's purpose and need. The No Action Alternative is analyzed in this EA in accordance with CEQ regulations to provide a comparative baseline for the Preferred Alternative.

2.4 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

The AFRC initially considered additional alternatives to achieve the purpose of and need for the Proposed Action. The AFRC eliminated alternatives for renovating B226 for the CWTF and demolishing B208, B209, and B210 and construction parking from further consideration because they did not meet one or more of the selection standards (see **Section 2.2**), as described below.

No alternatives were identified for the other projects included in the Proposed Action. No additional suitable locations were identified for constructing the communications facility and no reasonable alternatives for B206 exist other than demolition. The storm drains and outfalls are end of lifecycle assets that are impacting the nearby ground, and no alternatives exists besides repair. No alternative routes were identified for the munitions access road or B414 hangar access road that would meet Air Force and AASHTO safety standards. Further, no additional options for constructing the LOX storage facility, LOX equipment storage shelter, or AGE covered storage would meet Air Force standards.

2.4.1 ALTERNATIVE TO RENOVATING B226 FOR CWTF

Under this alternative, PARS would demolish B209 and B210 to construct an approximately 36,000 SF CWTF for 911th AW functions instead of renovating B226 and constructing parking at the site of B208, B209, and B210. The new CWTF would include space for all administrative staff, training areas, storage space, a loading dock, and conference areas. B226 would not be renovated and would continue to age. PARS determined that it would be too costly to pursue a full building construction, so this alternative would not be operationally feasible. Therefore, this alternative did not meet Selection Standard #2 and was eliminated from further consideration.

2.4.2 ALTERNATIVE TO DEMOLISHING B208, B209, AND B210 AND CONSTRUCT PARKING

Under this alternative, PARS would renovate B208, B209, and B210 to better accommodate their current uses, and no consolidation of 911th AW functions would occur. However, renovation of these buildings was determined not to be feasible due to expenses associated with necessary mold remediation. 911th AW functions would also remain dispersed throughout the base and inefficient communication among staff would continue. Therefore, this alternative did not meet Selection Standards #1 or #2 and was eliminated from further consideration.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION

This chapter describes the affected environment and potential environmental consequences for resource areas that could be affected by the Proposed Action. The “Proposed Action Area” is used to refer to the total area where the 11 FOCUS study projects (the Proposed Action) would be implemented. Resources dismissed from detailed analysis in the EA, and the justification for their dismissal, are presented in **Table 4**.

Table 4: Resources Dismissed from Detailed Analysis in the EA

Environmental Resource	Justification
Airspace	Preliminary data does not depict the Proposed Action having any known impacts to or interfering with the surrounding airspace and airfield imaginary surfaces, but the project will be reviewed through the FAA’s Obstruction Evaluation/Airport Airspace Analysis review process prior to construction. The Proposed Action would not result in additional aircraft or aircraft operations. Additionally, the Proposed Action would not create any substantial bird/wildlife air strike hazard (BASH) risks. Therefore, the Proposed Action would have no known impacts on airspace and this resource is dismissed from further analysis in the EA.
Coastal Resources	Coastal resources include those natural resources that occur within coastal waters and adjacent shorelands. In accordance with the Coastal Zone Management Act (16 USC §§ 1451-1466) Section 307 and 15 CFR Part 930, Subpart C, federal agency activities affecting a land or water use or natural resource of a state’s coastal zone must be consistent to the maximum extent practicable with the enforceable policies of the state’s coastal management program. Allegheny County is located over 100 miles from the Lake Erie Coastal Zone and 250 miles from the Delaware Estuary, and is not hydrologically connected to either area. Therefore, the Proposed Action would have no impact on Pennsylvania’s coastal zones.
Department of Transportation Act, Section 4(f) Resources	Section 4(f) Resources include significant publicly owned parks, recreational areas, wildlife and waterfowl refuges, and public and private historic sites (properties listed on or eligible for listing on the National Register of Historic Places [NRHP]). Section 4(f) of the Department of Transportation Act of 1966 (49 USC § 303) applies to projects that receive funding from or require approval by an agency of the Department of Transportation. There are no parks, recreational areas, or wildlife or waterfowl refuges within 0.5 miles of the Proposed Action Area, and these types of resources would not be affected by any aspect of the Proposed Action.
Farmlands	Prime farmland is defined as land that is available for and has a combination of physical and chemical characteristics that are best suited for producing food, feed, forage, fiber, and oilseed crops (USDA, 2015). The Farmland Protection Policy Act of 1981 (7 USC §§ 4201 et seq.) states that federal agencies must “minimize the extent to which federal programs contribute to the unnecessary conversion of farmland to nonagricultural uses.” No prime farmland is located within or directly adjacent to the Proposed Action Area (NRCS, 2024). Therefore, the Proposed Action would have no potential to affect prime farmlands and this resource is dismissed from further analysis.
Land Use and Zoning	No encroachment issues would be created from the Proposed Action. The Proposed Action would occur entirely on-base and has no potential to affect off-base land. The Proposed Action is compatible with existing and future land uses on and in the vicinity of PARS outlined in the Installation Development Plan (AFRC, 2015). Further, no land would be converted from aeronautical to non-aeronautical use and no land would be re-leased under the Proposed Action. Therefore, there would be no impact on land use or zoning.

Environmental Resource	Justification
Visual Resources	PARS is shielded from off-base views by mature trees, a highway, and the Airport. While the Proposed Action includes vertical construction, vertical construction would replace existing structures in poor condition, thereby improving the visual landscape on-base. Therefore, there would be no impact on aesthetics and visual resources.

3.2 AIR QUALITY

Air quality conditions at a given location are a function of several factors including the quantity and type of pollutants emitted locally and regionally, as well as the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersal include wind speed and direction, atmospheric stability, climate and temperature, and topography.

The region of influence (ROI) for air quality is the Southwest Pennsylvania Intrastate air quality control region (AQCR). Air quality conditions within the ROI are described in terms of the Air Force's Installation Attainment Status spreadsheet maintained by the Air Force Civil Engineer Center (AFCEC) dated May 2024 and the relationship to air quality standards described in **Section 3.2.1.1** (AFCEC, 2023a)

3.2.1 AFFECTED ENVIRONMENT

3.2.1.1 NATIONAL AMBIENT AIR QUALITY STANDARDS

Under the Clean Air Act (CAA) and its amendments, the USEPA identifies air pollutants that cause or contribute to the endangerment of human health and/or environmental welfare and establishes air quality "criteria" that guide the establishment of air quality standards to regulate these pollutants (42 USC §§ 7408-7409). To date, the USEPA has established such criteria for six air pollutants: carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), particulate matter (PM) less than or equal to 2.5 micrometers in diameter (PM_{2.5}), particulate matter less than or equal to 10 micrometers in diameter (PM₁₀), and sulfur dioxide (SO₂). As a result, the USEPA created National Ambient Air Quality Standards (NAAQS) meant to safeguard public health (i.e., primary NAAQS) and environmental welfare (i.e., secondary NAAQS). Current NAAQS are presented in **Table 5**.

USEPA and state/local air quality control agencies monitor and evaluate outdoor air quality for compliance with the NAAQS. Areas where monitored outdoor air concentrations are below the NAAQS are considered in attainment of that NAAQS. If sufficient ambient air monitoring data are not available to decide, the area is instead deemed attainment/unclassifiable. Areas where monitored outdoor air concentrations exceed the NAAQS are designated by the USEPA as nonattainment areas. Nonattainment designations for some pollutants (e.g., O₃) can be further classified based on the severity of the NAAQS exceedances. Lastly, areas that have historically exceeded the NAAQS, but have since instituted controls and programs that have successfully remedied these exceedances are known as maintenance areas.

3.2.1.2 CLEAN AIR ACT CONFORMITY

The General Conformity Rule of the federal CAA mandates that the federal government does not engage, support, provide financial assistance for licensing or permitting, or approve any activity not conforming to the most recent USEPA-approved State Implementation Plan. This rule applies to all federal actions, except highway and transit actions, which are instead regulated by the Transportation Conformity Rule. This rule ensures that such emissions do not cause or contribute to air quality degradation, thus preventing the achievement of state and federal air quality goals. The Air Force's EIAP for air quality promulgated at 32 CFR 989.30 requires that NEPA documents such as this EA address General Conformity applicability.

Table 5: National Ambient Air Quality Standards

Pollutant	Averaging Time	Level	Form
CO	8-hour	9 ppm	Not to be exceeded more than once per year
	1-hour	35 ppm	
Pb	Rolling 3-month average	0.15 µg/m ³	Not to be exceeded
NO ₂	1-hour	100 ppb	98th percentile of 1-hour daily maximum concentrations, 3-year average
	Annual	53 ppb	Annual mean
O ₃	8-hour	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, 3-year average
PM	PM _{2.5} Annual (primary)	9.0 µg/m ³	Annual mean, 3-year average
	PM _{2.5} Annual (secondary)	15.0 µg/m ³	Annual mean, 3-year average
	PM _{2.5} 24-hour	35 µg/m ³	98th percentile, 3-year average
	PM ₁₀ 24-hour	150 µg/m ³	Not to be exceeded more than once per year, 3-year average
SO ₂	1-hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, 3-year average
	3-hour	0.5 ppm	Not to be exceeded more than once per year

Notes: ppb = parts per billion; ppm = parts per million; µg/m³ = micrograms per cubic meter of air.
Source: (USEPA, 2024c)

For federal actions located in areas that are in nonattainment of a NAAQS or designated as maintenance, annual net emissions for a Proposed Action are compared against General Conformity *de minimis* thresholds, representing numerical thresholds under which a project is not considered to cause or contribute to continued violation of the NAAQS in nonattainment/maintenance areas, and therefore General Conformity is not further applicable. Unlike nonattainment or maintenance criteria pollutants, General Conformity *de minimis* levels have not been established for attainment criteria pollutant emissions. According to the Air Force Civil Engineer Center’s (AFCEC) Air Force’s Installation Attainment Status spreadsheet, PARS is considered in marginal nonattainment of the 2008 8-hour O₃ NAAQS, in moderate nonattainment of the 2012 PM_{2.5} annual NAAQS, and in maintenance for the 2006 PM_{2.5} 24-hour NAAQS (beginning 02 October 2015). PARS is considered in attainment of all other current NAAQS (AFCEC, 2023a). Additionally, Pennsylvania is located within the Ozone Transport Region, within which there are unique *de minimis* thresholds for the O₃ precursors oxides of nitrogen (NO_x) and volatile organic compounds (VOC) (40 CFR § 81.457). Therefore, the following General Conformity *de minimis* thresholds apply to the Proposed Action (40 CFR § 93.153):

- O₃ precursors: NO_x – 100 tons per year, VOC – 50 tons per year
- PM_{2.5}: 100 tons per year
- PM_{2.5} precursors: SO₂, NO_x, VOC, ammonia (NH₃) – 100 tons per year

On February 7, 2024, USEPA signed a final rule, revising the PM_{2.5} primary annual NAAQS from 12 µg/m³ to 9.0 µg/m³. The primary 24-hour PM_{2.5} NAAQS was retained at 35 µg/m³. The State of Pennsylvania is expected to recommend new attainment status designations based on the revised NAAQS in 2025, and USEPA is expected to promulgate NAAQS area designations in 2026 (PA DEP, 2024). Because PARS is

located in an area that is already considered in nonattainment for PM_{2.5}, the existing *de minimis* thresholds of 100 tons per year for PM_{2.5}, SO₂, NO_x, VOC, and NH₃, will continue to apply under any area designation action under the revised PM_{2.5} NAAQS.

3.2.1.3 OTHER AIR QUALITY CONSIDERATIONS

PARS maintains air quality Minor Source Operating Permit number 0868-OP23, administered by the ACHD. Under the permit, PARS is considered a minor source of PM₁₀, NO_x, CO, SO₂, VOC, and hazardous air pollutants (pollutants that are typically emitted in relatively small quantities and that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects). The permit does not require emissions reporting; however, it does require tracking and semi-annual reporting of stationary sources at PARS, including fuel combustion in natural gas external combustion units (i.e., space heating equipment), diesel fuel dispensation, fuel cell maintenance activity, paint booth and abrasive blasting booth activity, and emergency generator activity. The most recent report was submitted to ACHD on January 25, 2024. All operating levels are currently within permit limits. The current permit was issued on March 27, 2023, and expires on March 26, 2028.

Removal and abatement of ACM in Allegheny County, Pennsylvania, is regulated by the ACHD under Allegheny County Ordinance Number 16782 and ACHD's Rules and Regulations Article XXI, *Air Pollution Control*. All asbestos sampling, abatement, and removal at PARS must be performed by a county-licensed asbestos abatement contractor and must comply with all applicable provisions contained in Article XXI.

3.2.2 ENVIRONMENTAL CONSEQUENCES

Air quality is affected by stationary sources (e.g., boilers, emergency generators, and industrial processes), mobile sources (e.g., motor vehicles, construction equipment, and aircraft), and area sources (e.g., vehicle and aircraft fuel transfer, storage, and dispensing). Current USAF guidance provides methodology for performing an Air Quality EIAP Level II, Quantitative Assessment, which is an insignificance assessment that can determine if an action poses an insignificant impact on air quality (Solutio Environmental, 2023). An air quality impact is considered insignificant if the action does not cause or contribute to exceedance of one or more of the NAAQS. The USAF defines "insignificance indicators" for each criteria pollutant according to current air quality conditions. In accordance with the EIAP, the greatest annual (calendar year) emissions for each pollutant of concern form the basis of the analysis. In areas the USAF considers as clearly attainment (i.e., where all criteria pollutant concentrations are currently less than 95 percent of applicable NAAQS), the insignificance indicators are 250 tons per year (i.e., the USEPA's Prevention of Significant Deterioration threshold), except for Pb, which is 25 tons per year. For nonattainment or maintenance pollutants, the General Conformity *de minimis* thresholds are used where needed as conservative insignificance indicators for NEPA assessment (Solutio Environmental, 2023).

3.2.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

The Preferred Alternative would primarily involve mobile sources of emissions related to construction and demolition activities, including fuel combustion in construction vehicles and equipment (e.g., backhoes, bulldozers), material delivery and debris hauling vehicles, and construction employee commute vehicles, as well as fugitive emissions of VOC from asphalt paving and PM from windblown dust on construction sites. Ongoing, long-term annual operational emissions would result from fuel combustion in space heating equipment at newly constructed or expanded facilities and 27 new personnel manning the newly constructed communications facility. For the purposes of the air quality analysis, it is assumed that one additional emergency generator would also be installed under the Preferred Alternative. The nature and magnitude of the Preferred Alternative are expected to create only localized air quality impacts to the area surrounding the construction sites within the ROI.

Construction and operational emissions were estimated using the USAF's Air Conformity Applicability Model (ACAM) (Version 5.0.23a). The Record of Conformity Analysis for the Preferred Alternative is included in **Appendix E**. These emissions are “netted” on an annual basis. Construction is expected to begin in August 2025 and continue through December 2029, with no construction currently scheduled for CY 2027 (see **Table 2**). As previously discussed, the greatest annual (calendar year) emissions for each pollutant of concern form the basis of the air quality impact analysis. However, to be conservative, because the construction implementation schedule could change, all proposed construction was modeled in a single calendar year (i.e., the analysis used CY 2025) to develop a worst-case construction emissions scenario.

After construction is completed, emissions from the Preferred Alternative are expected to include only operational emissions. The Preferred Alternative is expected to reach a “steady state” (e.g., when the action is fully implemented and there is no net increase or decrease in emissions attributed to the action from the previous year) in the second year of operations after construction is completed. Annual operations of all additional space heating equipment and space heating equipment removed from existing building demolition were also modeled in ACAM. **Table 6** shows estimated net emissions during the construction period, annual operation of the fully implemented Preferred Alternative, and the steady state.

Table 6: Preferred Alternative Annual Construction and Operational Criteria Pollutant Emissions Summary (tons/year)

Pollutant	Action Emissions	Insignificance Indicator	Exceedance?	General Conformity Threshold	Exceedance?
<i>Construction</i>					
VOC	0.706	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No
NO_x	2.304	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No
CO	3.193	250	No	N/A	No
SO_x (PM _{2.5} Precursor)	0.006	100	No	100	No
PM₁₀	1.269	250	No	N/A	No
PM_{2.5}	0.085	100	No	100	No
Pb	0.000	25	No	N/A	No
NH₃ (PM _{2.5} Precursor)	0.013	100	No	100	No
<i>Operations Year 1</i>					
VOC	0.043	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No
NO_x	-0.152	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No

Pollutant	Action Emissions	Insignificance Indicator	Exceedance?	General Conformity Threshold	Exceedance?
CO	0.404	250	No	N/A	No
SO _x (PM _{2.5} Precursor)	0.008	100	No	100	No
PM ₁₀	-0.006	250	No	N/A	No
PM _{2.5}	-0.006	100	No	100	No
Pb	0.000	25	No	N/A	No
NH ₃ (PM _{2.5} Precursor)	0.007	100	No	100	No
<i>Steady State</i>					
VOC	0.043	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No
NO _x	-0.152	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No
CO	0.404	250	No	N/A	No
SO _x (PM _{2.5} Precursor)	0.008	100	No	100	No
PM ₁₀	-0.006	250	No	N/A	No
PM _{2.5}	-0.006	100	No	100	No
Pb	0.000	25	No	N/A	No
NH ₃ (PM _{2.5} Precursor)	0.007	100	No	100	No

Source: ACAM Version 5.0.23a

Notes: N/A = Not Applicable

As shown in **Table 6**, construction of the Preferred Alternative would cause short-term, direct, adverse impacts on overall air quality. Emissions of construction-related and operational criteria pollutants would be well below applicable insignificance indicators for all pollutants and well below General Conformity *de minimis* thresholds for VOCs, NO_x, SO_x, PM_{2.5}, and NH₃ (a precursor to PM_{2.5}). Therefore, these impacts would be insignificant, and no further analysis is required. Overall, construction emissions resulting from the Preferred Alternative would result in a *short-term, less-than-significant adverse impact* on air quality in the ROI. Because less space heating would be required, full implementation of the Preferred Alternative is expected to result in a slight decrease in annual operational emissions compared to the No Action Alternative and current conditions, for NO_x, PM₁₀, and PM_{2.5}. Annual operational emissions of VOCs, CO, SO_x, and NH₃ are expected to increase minimally due to the anticipated installation and operation of an additional emergency generator and the addition of 27 personnel manning the new communications facility. Operational emissions from the Preferred Alternative would result in a *long-term, ongoing, beneficial impact* on air quality in the ROI for NO_x, PM₁₀, and PM_{2.5}, and a *long-term, ongoing, less-than-significant adverse impact* on air quality for VOCs, CO, SO_x, and NH₃ in the ROI.

Best management practices (BMPs) would be implemented during construction to reduce potential impacts on air quality, including having no visible emissions such as dust or wind-blown soil. These control measures could include applying water or using other stabilization measures on areas of bare soil or soil piles and covering dump trucks that transport materials that could become airborne. Additionally, contractors would be required to maintain construction equipment in accordance with manufacturers' specifications to reduce exhaust emissions. Installation and operation of space heating equipment and emergency generators would be required to comply with all applicable permitting requirements.

Any required removal and disposal of ACM would be performed by a licensed asbestos abatement contractor in accordance with ACHD's Rules and Regulations Article XXI. Any newly installed emergency generators or natural gas-combusting heating equipment installed under the Preferred Alternative would be added to PARS's air quality permit and subject to performance standards and tracking and reporting requirements included in the permit, as applicable.

3.2.2.2 ALTERNATIVE 2

Alternative 2 would primarily involve the same sources of emissions related to construction and demolition activities as the Preferred Alternative. Similar to the Preferred Alternative, Alternative 2 would include operational emissions from space heating in newly constructed building spaces. However, no new emergency generators are anticipated to be installed under Alternative 2, and Alternative 2 would not introduce additional personnel at PARS, as the new communications facility would not be constructed. The nature and magnitude of Alternative 2 are expected to create only localized air quality impacts to the area surrounding the construction sites within the ROI.

Construction and operational emissions were estimated using ACAM (Version 5.0.23a) in the same manner as for the Preferred Alternative. The Record of Conformity Analysis for the Preferred Alternative is included in **Appendix E**. As with the Preferred Alternative, construction is expected to begin in August 2025 and continue through December 2029, with no construction currently scheduled for CY 2027. Unlike the Preferred Alternative, Alternative 2 would not include new construction for the 911th Communications Squadron. Therefore, operational emissions from Alternative 2 would include only emissions from operation of a proposed emergency generator, as emissions from any new space heating equipment would be offset by emissions reductions from removed space heating equipment, and no new personnel would be added. As with the Preferred Alternative, all proposed construction for Alternative 2 was modeled in a single calendar year (CY 2025) to develop a worst-case construction emissions scenario, which forms the basis of the air quality impact analysis.

As with the Preferred Alternative, emissions from Alternative 2 are expected to include only operational emissions upon completion of construction activities. Alternative 2 is expected to reach a "steady state" in the second full year of operations following full implementation of all construction projects. **Table 7** shows estimated net emissions during the construction period, annual operation of the fully implemented Alternative 2, and the steady state.

Table 7: Alternative 2 Annual Construction and Operational Criteria Pollutant Emissions Summary (tons/year)

Pollutant	Action Emissions	Insignificance Indicator	Exceedance?	General Conformity Threshold	Exceedance?
<i>Construction</i>					
VOC	0.400	As O ₃ Precursor: 50	No	As O ₃ Precursor: 50	No

Pollutant	Action Emissions	Insignificance Indicator	Exceedance?	General Conformity Threshold	Exceedance?
		As PM _{2.5} Precursor: 100		As PM _{2.5} Precursor: 100	
NO_x	2.069	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No
CO	2.792	250	No	N/A	No
SO_x (PM _{2.5} Precursor)	0.005	100	No	100	No
PM₁₀	0.878	250	No	N/A	No
PM_{2.5}	0.076	100	No	100	No
Pb	0.000	25	No	N/A	No
NH₃ (PM _{2.5} Precursor)	0.009	100	No	100	No
<i>Operations Year 1</i>					
VOC	-0.007	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No
NO_x	-0.207	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No
CO	-0.178	250	No	N/A	No
SO_x (PM _{2.5} Precursor)	0.003	100	No	100	No
PM₁₀	-0.012	250	No	N/A	No
PM_{2.5}	-0.012	100	No	100	No
Pb	0.000	25	No	N/A	No
NH₃ (PM _{2.5} Precursor)	0.000	100	No	100	No
<i>Steady State</i>					
VOC	-0.007	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 50 As PM _{2.5} Precursor: 100	No
NO_x	-0.207	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No	As O ₃ Precursor: 100 As PM _{2.5} Precursor: 100	No
CO	-0.178	250	No	N/A	No
SO_x	0.003	100	No	100	No

Pollutant	Action Emissions	Insignificance Indicator	Exceedance?	General Conformity Threshold	Exceedance?
(PM _{2.5} Precursor)					
PM₁₀	-0.012	250	No	N/A	No
PM_{2.5}	-0.012	100	No	100	No
Pb	0.000	25	No	N/A	No
NH₃ (PM _{2.5} Precursor)	0.000	100	No	100	No

Source: ACAM Version 5.0.23a

Notes: N/A = Not Applicable

As shown in **Table 7**, construction of Alternative 2 would cause short-term, direct, adverse impacts on overall air quality. Emissions of construction-related and operational criteria pollutants would be well below applicable insignificance indicators for all pollutants and well below General Conformity *de minimis* thresholds for VOCs, NO_x, SO_x, PM_{2.5}, and NH₃ (a precursor to PM_{2.5}). Therefore, these impacts would be insignificant, and no further analysis is required. Overall, construction emissions resulting from Alternative 2 would result in a *short-term, less-than-significant adverse impact* on air quality in the ROI. Because less space heating would be required, full implementation of Alternative 2 is expected to result in a slight decrease in annual operational emissions compared to the No Action Alternative and current conditions, for all criteria pollutants, except for a slight increase in annual SO_x emissions. Operational emissions from Alternative 2 would result in a *long-term, ongoing, beneficial impact* on air quality in the ROI for all pollutants except SO_x, for which Alternative 2 would result in a *long-term, ongoing, less-than-significant adverse impact* on air quality in the ROI. The same BMPs would be implemented during construction to reduce potential impacts on air quality as under Alternative 1. Any required removal and disposal of ACM would also be conducted in the same manner as under Alternative 1.

The Preferred Alternative includes demolition of existing B403 and B405 and construction of a replacement communications facility and parking lot, while Alternative 2 includes renovation of both existing buildings and no new construction. PARS may choose to partially implement either alternative with respect to these buildings, either demolishing B403 and constructing a parking lot while renovating B405, or renovating B403 while demolishing B405 and constructing a new communications facility. Both of these scenarios were modeled in ACAM as well. Construction and operational emissions resulting from both scenarios would not be notably different from emissions resulting from either the Preferred Alternative or Alternative 2. Implementation of either one of these scenarios would cause lower or equal construction emissions of all criteria pollutants and precursors than the Preferred Alternative. However, annual operating emissions with the renovation of B403 and demolition of B405 would be slightly higher for VOCs, CO, and SO_x compared to the Preferred Alternative due to ongoing space heating emissions from the continued operation of B403, which would be eliminated under the Preferred Alternative. For the same reasons, the emissions reductions of NO_x, PM₁₀, and PM_{2.5} would be slightly less under this scenario than under the Preferred Alternative. If B403 were demolished while B405 is renovated, all criteria pollutant and precursor operational emissions would decrease compared to the No Action Alternative and existing conditions, and the resulting annual operational emissions decreases would be the greatest of all potential implementation scenarios.

Emissions of construction-related and operational criteria pollutants under both of these additional scenarios would be well below applicable insignificance indicators for all pollutants and well below General Conformity *de minimis* thresholds for VOCs, NO_x, SO_x, PM_{2.5}, and NH₃ (a precursor to PM_{2.5}). Therefore, these impacts would be insignificant, and no further analysis is required. The Record of Conformity Analysis for each of these additional scenarios is included in **Appendix E**.

3.2.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Therefore, there would be no temporary increase in criteria pollutant emissions from construction and no long-term decrease or increase in operational emissions. The No Action Alternative would have *no impact* on air quality.

3.3 CLIMATE

Greenhouse gases (GHGs) are compounds that contribute to the greenhouse effect. The greenhouse effect is a natural phenomenon where gases trap heat within the lowest portion of the earth's atmosphere, causing heating at the surface of the earth. Climate change refers to a general transformation in the average climate conditions of the earth. The heating effect of GHG emissions in the atmosphere is considered the probable cause of the global warming observed over the last 50 years (74 FR 66496). GHGs occur in the atmosphere both naturally and because of human activities, such as the burning of fossil fuels. The primary long-lived GHGs directly emitted by human activities are carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. GHG concentrations in the atmosphere have increased substantially since 1750 as a result of human activities. Scientists have identified human activity that generates GHG emissions as a significant contributor to climate change (IPCC, 2021).

Global warming and climate change can affect many aspects of the environment, and are the result of aggregate GHG emissions globally. The USEPA has signed an endangerment finding regarding GHGs under Section 202(a) of the CAA, which finds that the current and projected concentrations of the six key well-mixed GHGs – CO₂, CH₄, N₂O, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride – in the atmosphere threaten the public health and welfare of current and future generations (EPA, 2010).

GHGs are regulated under Section 202 of the CAA. CO₂, CH₄, and N₂O account for more than 97 percent of U.S. total GHG emissions (AFCEC, 2023b). CO₂ is the primary GHG emitted during fossil fuel combustion, while smaller amounts of CH₄ and N₂O are also emitted. Each GHG is assigned a global warming potential (GWP). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO₂, which has a value of one. The CO₂-equivalent (CO₂e) rate is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emissions rate representing all GHGs. This EA considers CO₂e as the representative GHG emission.

EO 13990, *Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis*, requires an accounting of the full costs of GHG emissions from federal projects, as identified in terms of the “social cost of GHGs” (SC-GHG) for CO₂, CH₄, and N₂O. EO 14008, *Tackling the Climate Crisis at Home and Abroad*, further strengthens EO 13990 by implementing objectives, including requiring federal agencies to develop and implement Climate Action Plans, to reduce GHG emissions and bolster resilience to the impacts of climate change. EO 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*, transforms how the federal government builds, buys, and manages its assets and operations, by supporting the growth of America's clean energy and clean technology industries and accelerating progress toward achieving a net-zero, carbon pollution-free electricity sector by 2035. Specifically, it sets government-wide sustainability goals, which include 100 percent carbon pollution-free electricity by 2030.

In January 2023, the CEQ published, “National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change.” This guidance instructs federal agencies to consider in their NEPA reviews: 1) the potential effects of a proposed action on climate change, including by assessing both GHG emissions and reductions from the proposed action; and 2) the effects of climate change on a proposed action and its environmental impacts. It also recommends contextualizing GHG emissions using

baseline emissions, and determining the SC-GHG from a proposed action where feasible as a means of comparing the GHG impacts of the alternatives (CEQ, 2023b). The SC-GHG is an estimate of the monetized damages associated with incremental increases in GHG emissions, such as reduced agricultural productivity, human health effects, property damage from increased flood risk, and the value of ecosystem services (Interagency Working Group on Social Cost of Greenhouse Gases, 2021).

With respect to GHGs, the ROI for climate is global due to the global mixing and accumulation of GHGs in the atmosphere. With respect to the effects of climate change, the ROI includes the Proposed Action Area and the immediate vicinity within 0.5 mile, which is the area in which the Proposed Action could have environmental impacts.

3.3.1 AFFECTED ENVIRONMENT

Pittsburgh, Pennsylvania, which is the closest city to PARS with recent data, has a mild and moderate climate with considerable precipitation throughout the year. The average high temperature is 83 degrees Fahrenheit (°F) in July, which is the hottest month, and the average low temperature is 21°F in January, which is the coldest month. Pittsburgh has average annual precipitation of 34.83 inches per year. The wettest month of the year is July, with an average rainfall of approximately 3.35 inches (NWS, 2024).

Pennsylvania has warmed more than 0.5°F in the last century. Heavy rainstorms are more frequent, and the frequency of very hot days (i.e., days that exceed 90 percent of the daily temperatures recorded between 1991 and 2020) is increasing. In the coming decades, the changing climate is likely to increase flooding, harm ecosystems, disrupt farming, and increase some risks to human health. Long-term climate areas of concern that could affect PARS include increasing temperatures and changing precipitation patterns, which are likely to increase the intensity of precipitation events and floods during spring and winter, as well as increase summer droughts; impacts to human health associated with increased temperatures, such as ground level O₃ formation and increases in the length and severity of the pollen season for plants such as ragweed; and the risk of transmission of certain diseases from insects such as ticks and mosquitoes (USEPA, 2016).

Because climate change is the result of aggregate global GHG emissions, ACAM (Version 5.0.23b) provides projected national and state GHG emissions as baselines by which to compare the Preferred Alternative's projected total emissions. **Table 8** shows projected baseline GHG emissions in Pennsylvania and the U.S., for the Preferred Alternative's construction period, the first year of fully implemented annual operations, and the steady state years, which are representative of future operational annual emissions for the following GHG and climate change analyses.

Table 8: State and National Baseline GHG Emissions (Metric Tons/Year) – Preferred Alternative

Year	CO ₂	CH ₄	N ₂ O	CO _{2e}
Pennsylvania: Each Analysis Year (2025 - 2037)	215,665,398	1,479,944	23,177	217,168,519
U.S.: Each Analysis Year (2025 - 2037)	5,136,454,179	25,626,912	1,500,708	5,163,581,798

Source: ACAM Version 5.0.23a (note: totals reflect rounding in ACAM)

3.3.2 ENVIRONMENTAL CONSEQUENCES

The USAF has adopted the Prevention of Significant Deterioration threshold of 75,000 tons per year of CO_{2e} (or 68,039 metric tons per year) as an indicator or "threshold of insignificance" for GHG emissions.

This indicator does not define a significant impact (e.g., GHG emissions above this rate are not inherently significant); however, it provides a threshold to identify actions that are insignificant (*de minimis*, too trivial or minor to merit consideration) (AFCEC, 2023b).

A climate change impact would be significant if it would substantially increase the vulnerability of the ROI, or nearby properties, to the effects of climate change.

3.3.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

The Preferred Alternative would result in a temporary increase in GHG emissions related to construction activities, including fuel combustion in construction vehicles and equipment (e.g., backhoes, bulldozers), material delivery and debris hauling vehicles, and construction employee commute vehicles. Long-term annual operational emissions would result from fuel combustion in newly installed space heating equipment serving expanded and constructed facilities and 27 additional personnel manning the newly constructed communications facility, included in the Preferred Alternative. For the purpose of GHG and climate change analysis, it is assumed that one additional emergency generator would also be installed under the Preferred Alternative.

Construction and operational GHG emissions were estimated using ACAM (Version 5.0.23a). The GHG Emissions Report for the Preferred Alternative is included in **Appendix E**, based on the same implementation schedule described in **Section 3.2.2.1**. **Table 9** shows estimated net annual and net total GHG emissions from construction and operation of the Preferred Alternative. ACAM also provides a long-term analysis for cumulative GHG emissions that captures both construction and operational emissions, spanning from 2025 through 2037. A comparison of these emissions relative to state and national GHG emission baselines between 2025 and 2037 is provided in **Table 10**.

Annual operations of net space heating requirements and new employee commuting activities were modeled in ACAM. Upon completion of all construction activities, GHG emissions from the Preferred Alternative are expected to include only operational emissions. **Table 9** shows estimated net emissions during the construction period (conservatively modeled in a single calendar year), annual operation of the fully implemented Preferred Alternative, and the steady state.

Table 9: Preferred Alternative Annual GHG Emissions Summary (Metric Tons/Year)

Year	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold (CO ₂ e)	Exceedance
Construction	584	0.02190708	0.01694522	590	68,039	No
Operations Year 1	-190	-0.00194462	-0.00373836	-190	68,039	No
Steady State	-190	-0.00194462	-0.00373836	-190	68,039	No

Source: ACAM Version 5.0.23a

Table 10: Total GHG Emissions (Metric Tons) Compared to State and National Baselines: 2025-2037 – Preferred Alternative

	CO ₂	CH ₄	N ₂ O	CO ₂ e
State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
Preferred Alternative	-1,701	-0.001428	-0.027915	-1,686
Percent of Pennsylvania Totals	-0.00006066%	-0.00000001%	-0.00000926%	-0.00005974%
Percent of U.S. Totals	-0.00000255%	0.00000000%	-0.00000014%	-0.00000251%

Source: ACAM Version 5.0.23a

Note: Table reflects total GHG emissions for the construction period (conservatively assuming all construction in CY 2025) and 12 operations years (through CY 2037).

To provide context for the impact of these emissions, the SC-GHG of the Preferred Alternative is disclosed and compared to state and national SC-GHG in the construction period, two representative operational years (first year of full operations and steady state year), and CY 2037 in **Table 11**. Long-term analysis for SC-GHG, that captures both construction and operational emissions, spanning from 2025 through 2037, is included in **Appendix E**. ACAM uses SC-GHG derived from the Interagency Working Group on Social Cost of Greenhouse Gases *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates Under Executive Order 13990*. Using a 2.5 percent discount factor, the SC-GHG per metric ton in 2020 U.S. dollars for CO₂ is \$83 in 2025, \$84 in 2026, \$86 in 2027, \$87 in 2028, \$88 in 2029, \$89 in 2030, \$91 in 2031, and \$99 in 2037; for CH₄ is \$2,200 in 2025, \$2,300 in 2026, \$2,300 in 2027, \$2,400 in 2028, \$2,500 in 2029, \$2,500 in 2030, \$2,600 in 2031, and \$3,000 in 2037; and for N₂O is \$30,000 in 2025, \$30,000 in 2026, \$31,000 in 2027, \$32,000 in 2028, \$32,000 in 2029, \$33,000 in 2030, \$33,000 in 2031, and \$37,000 in 2037 (Interagency Working Group on Social Cost of Greenhouse Gases, 2021).

As shown in **Table 9**, construction of the Preferred Alternative would cause *minor, short-term, direct GHG emissions increases* during the construction period and *minor, long-term, direct CO₂e emissions decreases* during facility operations. GHG emissions would increase as result of 27 additional personnel manning the newly constructed communications facility. However, less space heating would be required, so associated decreases in CO₂e emissions would be greater than the CO₂e increases from addition of personnel, resulting in a net decrease of CO₂e emissions. Overall, the operation of the Preferred Alternative would cause a *minor, long-term, direct CO₂e emissions decrease* during facility operations.

Emissions of construction-related and operational GHGs in each year would be well below applicable insignificance indicators. Therefore, the Preferred Alternative's impacts on climate change would be *less-than-significant*, and no further analysis is required. Over the course of the GHG analysis study years, the Preferred Alternative would result in a net SC-GHG benefit, resulting in a savings of approximately \$161,790 of SC-GHG during this timeframe relative to the existing conditions and the No Action Alternative. Because the SC-GHG per ton of GHG emissions increases each year, the total construction-related SC-GHG could be slightly higher if construction is completed over multiple years. If construction were to occur between CY 2025 and CY 2029, the total construction related SC-GHG is estimated to be approximately \$87,730 and the total operational SC-GHG savings for CY 2030 through 2041 is estimated to be approximately \$224,190, for a total SC-GHG savings of approximately \$136,460.

Table 11: Preferred Alternative SC-GHG¹

Preferred Alternative Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2025)	\$48.49	\$0.05	\$0.51	\$49.05
Operations Year 1 (2026)	-\$16.00	\$0.00	-\$0.11	-\$16.11
Steady State (2027)	-\$16.38	\$0.00	-\$0.12	-\$16.50
2037	-\$18.85	-\$0.01	-\$0.14	-\$19.00
Pennsylvania Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2025)	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
Operations Year 1 (2026)	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
Steady State (2027)	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16
U.S. Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2025)	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
Operations Year 1 (2026)	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
Steady State (2027)	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29
Total SC-GHG CY 2025 through CY 2037 (\$1,000/Year)				
Location	CO₂	CH₄	N₂O	Total
Preferred Alternative	-\$160.78	-\$0.01	-\$1.00	-\$161.79
Pennsylvania	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
U.S.	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05

Preferred Alternative SC-GHG Percent of Totals				
Location	CO ₂	CH ₄	N ₂ O	Total
Pennsylvania	-0.00006307%	-0.00000003%	-0.00000996%	-0.00005141%
U.S.	-0.00000265%	0.00000000%	-0.00000015%	-0.00000213%

1. The SC-GHG is measured in 2020 U.S. Dollars, using a 2.5 percent discount factor.
Source: ACAM Version 5.0.23a (note: totals reflect rounding in ACAM)

Although the storm drain and outfall repairs would partially occur within a 100-year floodplain, the Preferred Alternative would not contribute to any loss with regard to flood control capacity. Portions of the existing corrugated metal pipes within the floodplain would be replaced with plastic pipe, and riprap outside of outfall #5 that is located within the floodplain would be removed. No new impervious surfaces or structures would be constructed within the floodplain. While climate change in Pennsylvania is expected to increase the intensity of precipitation events and floods during spring and winter, the Preferred Alternative is not expected to cause significant impacts to floodplains, and only passive stormwater management features would be constructed in the floodplain. Therefore, the Preferred Alternative is neither expected to cause significant climate change related impacts to floodplains, nor be significantly impacted by more intense flooding events related to climate change. Because the Preferred Alternative would not significantly impact air quality, the potential climate change impacts to additional O₃ formation would not be significant. Potential increases in disease transmission from insects and the length and severity of pollen season would not have significant impacts on the Preferred Alternative.

3.3.2.2 ALTERNATIVE 2

Alternative 2 would result in the same temporary increase in GHG emissions related to construction activities, including fuel combustion in construction vehicles and equipment, as the Preferred Alternative. Similar to the Preferred Alternative, long-term annual operational emissions would result from fuel combustion in newly installed space heating equipment serving expanded and constructed facilities included in Alternative 2. However, no new emergency generators are anticipated to be installed, and no new personnel would be added under Alternative 2.

Construction and operational GHG emissions were estimated using ACAM in the same manner as for the Preferred Alternative. The GHG Emissions Report for Alternative 2 is included in **Appendix E**, based on the same implementation schedule described in **Section 3.2.2.2**. **Table 12** shows estimated net annual and net total GHG emissions from construction and operation of Alternative 2. A comparison of operational emissions relative to state and national GHG emission baselines between 2025 and 2037 is provided in **Table 13**.

Annual operations of net space heating requirements were modeled in ACAM. As with the Preferred Alternative, emissions from Alternative 2 are expected to include only operational emissions upon completion of construction activities and to reach a “steady state” one calendar year later. **Table 12** shows estimated net emissions during the construction period (conservatively modeled to be completed in a single calendar year), annual operation of the fully implemented Preferred Alternative, and the steady state. Overall, Alternative 2 would result in a slightly lower GHG emissions rate for the construction period. Similarly, Alternative 2 would result in a greater annual and total GHG emissions reduction during operations, than the Preferred Alternative.

Table 12: Alternative 2 Annual GHG Emissions Summary (Metric Tons/Year)

Year	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold (CO ₂ e)	Exceedance
Construction	497	0.01913415	0.01276552	501	68,039	No
Operations Year 1	-249	-0.00463948	-0.00470752	-249	68,039	No
Steady State	-249	-0.00463948	-0.00470752	-249	68,039	No

Source: ACAM Version 5.0.23a

Table 13: Total GHG Emissions (Metric Tons) Compared to State and National Baselines: 2025-2037 – Alternative 2

	CO ₂	CH ₄	N ₂ O	CO ₂ e
State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
Preferred Alternative	-2,488	-0.03654	-0.043725	-2,483
Percent of Pennsylvania Totals	-0.00008876%	-0.00000019%	-0.00001451%	-0.00008796%
Percent of U.S. Totals	-0.00000373%	-0.00000001%	-0.00000022%	-0.00000370%

Source: ACAM Version 5.0.23a

Note: Table reflects total GHG emissions for the construction period (conservatively assuming all construction in CY 2025)years (CY 2025 through CY 2029) and 12 operations years (through CY 2037)(CY 2030 through CY 2041).

To provide context for the impact of these emissions, the SC-GHG of Alternative 2 is disclosed and compared to state and national SC-GHG in the construction period, two representative operational years (first year of full operations and steady state year), and CY 2037 in **Table 14**. Long-term analysis for SC-GHG, that captures both construction and operational emissions, spanning from 2025 through 2037, is included in **Appendix E**. The unit SC-GHG values for each year are the same as described for the Preferred Alternative.

As shown in **Table 12**, construction of Alternative 2 would cause *minor, short-term, direct GHG emissions increases* during the construction period and *minor, long-term, direct GHG emissions decreases* during facility operations because less space heating would be required. Emissions of construction related and operational GHGs in each year would be well below applicable insignificance indicators. Therefore, Alternative 2's impacts on climate change would be *less-than-significant*, and no further analysis is required. Over the course of the GHG analysis study years, the Preferred Alternative would result in a net SC-GHG benefit, resulting in a savings of approximately \$233,790 of SC-GHG during this timeframe. Alternative 2 would provide approximately \$72,000 greater SC-GHG savings than the Preferred Alternative. If construction were to occur between CY 2025 and CY 2029, the total construction related SC-GHG is estimated to be approximately \$42,580 and the total operational SC-GHG savings for CY 2030 through 2041 is estimated to be approximately \$291,530, for a total SC-GHG savings of approximately \$248,950.

Potential impacts of climate change on Alternative 2 would be the same as described for the Preferred Alternative.

Table 14: Alternative 2 Social Cost of Greenhouse Gases¹

Alternative 2 Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2026)	\$41.25	\$0.04	\$0.38	\$41.68
Operations Year 1 (2026)	-\$20.90	-\$0.01	-\$0.14	-\$21.05
Steady State (2027)	-\$21.40	-\$0.01	-\$0.15	-\$21.55
2037	-\$24.63	-\$0.01	-\$0.17	-\$24.82
Pennsylvania Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2025)	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
Operations Year 1 (2026)	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
Steady State (2027)	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16
U.S. Annual SC-GHG (\$1,000/Year)				
Year	CO₂	CH₄	N₂O	Total
Construction (2025)	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
Operations Year 1 (2026)	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
Steady State (2027)	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29
Total SC-GHG CY 2025 through CY 2037 (\$1,000/Year)				
Location	CO₂	CH₄	N₂O	Total
Alternative 2	-\$232.17	-\$0.10	-\$1.52	-\$233.79
Pennsylvania	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
U.S.	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05

Alternative 2 SC-GHG Percent of Totals				
Location	CO ₂	CH ₄	N ₂ O	Total
Pennsylvania	-0.00009108%	-0.00000021%	-0.00001510%	-0.00007429%
U.S.	-0.00000382%	-0.00000001%	-0.00000023%	-0.00000308%

2. The SC-GHG is measured in 2020 U.S. Dollars, using a 2.5 percent discount factor.
Source: ACAM Version 5.0.23a (note: totals reflect rounding in ACAM)

As noted in **Section 3.2.2.2**, the emissions from Alternative 2 would vary slightly depending on whether PARS implements either or both of the B403/parking lot and B405/communications facility projects. Both scenarios were modeled in ACAM. Construction and operational GHG emissions resulting from both scenarios would not be notably different from emissions resulting from either the Preferred Alternative or Alternative 2. If B403 is demolished and replaced with a parking lot while B405 is renovated, the construction emissions would total approximately 470 metric tons of CO₂e, compared to 590 and 501 metric tons of CO₂e for the Preferred Alternative and Alternative 2, respectively. This implementation scenario would result in an annual operating GHG emissions decrease of approximately 277 metric tons of CO₂e, compared to an annual decrease of 190 and 249 metric tons of CO₂e for the Preferred Alternative and Alternative 2, respectively. From CY 2025 through CY 2037 this scenario would result in a net SC-GHG reduction of \$265,390. This would result in the lowest overall GHG emissions rate and greatest SC-GHG benefit of the Proposed Action implementation options available.

However, if B403 is renovated while B405 is demolished and a new communications facility is constructed, the total construction period emissions would total approximately 300 metric tons of CO₂e. This implementation scenario would result in an annual operating GHG emissions decrease of approximately 162 metric tons of CO₂e. From CY 2025 through CY 2037 this scenario would result in a net SC-GHG reduction of \$154,230. This would result in the highest overall GHG emissions rate and lowest SC-GHG benefit of the Proposed Action implementation options available.

Emissions of construction-related and operational GHGs would be well below applicable insignificance indicators in every analysis year. Therefore, these impacts would be insignificant, and no further analysis is required. The Record of Conformity Analysis for each of these alternative scenarios is included in **Appendix E**.

3.3.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished; therefore, there would be no temporary increase in GHG emissions from construction or operations. Additionally, no long-term reduction in GHG emissions or SC-GHG benefits would result. The No Action Alternative would have *no impact* on climate change.

3.4 NOISE

Sound is vibrations in the air, which are known as compression waves. Just like a pebble dropped into a pond creates ripples, the compression waves, formed of air molecules pressed together, radiate from a source and decrease with distance. If these vibrations reach a human eardrum at a sufficient rate and intensity, we perceive it as sound. When the sound is unwanted, we refer to it as noise. Generally, sound becomes noise to a listener when it interferes with normal activities. Sound within the range of human hearing is measured on a logarithmic scale, known as the decibel (dB). The human ear does not hear all frequencies equally; the A-weighted decibel scale (dBA) is used to reflect the selective sensitivity of human

hearing (USEPA, 1974). Normal speech has a sound level of approximately 60 dBA. Sound levels above 120 dBA begin to be perceived as uncomfortable, while sound levels between 130 and 140 dBA are considered painful (Cowan, 1994). The common sound levels encountered in daily life are shown in **Table 15**.

Unwanted sound is often referred to as noise. The two most common types of noise are point sources and line sources. Point source noise is usually associated with one or more sound sources that generally remain in one place for extended periods of time, such as with most construction activities, and are described within an area having the largest dimension that is much smaller than the distance from this acoustical point source to a receptor of interest. A construction site is typically considered a point source. Line source noise is generated by moving objects along a linear corridor, such as highway traffic (FTA, 2018).

Natural factors such as topography, vegetation, temperature, and relative humidity can further reduce noise over distance. Acoustically “hard” sites (i.e., sites with a smooth reflective surface along the direct sound path between the source and the receiver, such as paved parking lots or bodies of water) offer little or no ground attenuation due to acoustical absorption. “Soft” sites, on the other hand, are porous ground surface conditions characterized by loose soils, fresh-fallen snow, grass, or scattered bushes and trees that yield an excess ground attenuation value (i.e., over and above what geometric divergence already provides) of 1.5 dBA per doubling of distance (Crocker, 2007).

A large object in the direct path between a noise source and a receiver can significantly attenuate noise levels at that receiver location. The amount of attenuation provided by this “shielding” depends on the size of the object and the frequencies of the noise levels—the lower the frequency, and hence the larger the wavelength, the less noise reduction the barrier provides. Natural terrain features such as hills and dense woods, as well as fabricated features such as buildings and walls, can significantly alter noise levels. Linear occlusion (i.e., a break in the line of sight between a noise source and receiver) due to natural terrain can generally reduce noise levels at the receiver up to 10 dBA for relatively close-range receivers (WSDOT, 2020).

Table 15: Common Sound Levels

Sound Source	Sound Pressure Level (dBA)
Air Raid Siren at 50 feet	120
Maximum Levels at Rock Concerts (Rear Seats)	110
On Sidewalk by Passing Heavy Truck or Bus	90
On Sidewalk by Typical Highway	80
On Sidewalk by Passing Automobiles with Mufflers	70
Typical Urban Area	60-70
Typical Suburban Area	50-60
Quiet Suburban Area at Night	40-50
Typical Rural Area at Night	30-40
Isolated Broadcast Studio	20
Audiometric (Hearing Testing) Booth	10
Threshold of Hearing	0

Source: (Cowan, 1994)

The ROI for noise includes areas within 0.2 mile of PARS. At this distance (approximately 1,000 feet), most noise emitted from construction equipment attenuates to background levels of around 60 dBA.

3.4.1 AFFECTED ENVIRONMENT

The ambient noise level in the vicinity of PARS includes noise associated with existing operations at PARS, Pittsburgh International Airport facilities and aircraft, and traffic in the surrounding area (such as along Airport Parkway). Modeling of noise generated from operations at PARS was conducted in 2015 in support of the C-130 to C-17 aircraft conversion. The average decibel level at PARS was found to range from approximately 65 dB to 75 dB, depending on proximity to the airfield (AFRC, 2017). Mature trees and varied terrain border PARS to the north, south, and east, and aircraft runways are located to the west. PARS would be considered a “hard” site that offers little acoustical absorption due to the amount of paving and roadways on the base, although shielding is provided by the numerous buildings within PARS and the tree line to the north and east of the base.

Sensitive receptors typically include residential dwellings, schools, hospitals, and other noise-sensitive land uses. Sensitive receptors nearest to PARS include the Ready to Play Childcare Center (approximately 0.1 mile east of PARS; within the ROI), the Moon Township Public Library (approximately 0.25-mile northeast of PARS), and residences on Beaver Grade Road (approximately 0.3 mile from PARS). Each of these sensitive receptors are buffered from noise originating at PARS by major roadways, trees, and other structures.

Moon Township maintains a noise ordinance that specifies the maximum permissible duration of certain noise levels for residential, non-residential, and industrial land uses. PARS is located within the Township’s airport zoning district, which is classified as non-residential use in the Township’s zoning ordinance. Per the noise ordinance, “at no point on or beyond the boundary of any lot containing a non-residential use shall the exterior noise level located on such lot exceed 65 dBA for more than eight hours during a twenty-four-hour period” (Township of Moon, 2023). Further, the Township construction code requires that operation of heavy construction and excavation machinery associated with work requiring a building permit be prohibited when it is determined that the noise is sufficient to disturb the general public between the hours of 9:00 p.m. to 7:00 a.m., Monday through Saturday, all-day Sunday, and federal holidays. Exceptions may be made for emergency work and in cases approved by the Township Building Code Official (Township of Moon, 2023).

3.4.2 ENVIRONMENTAL CONSEQUENCE

A noise impact would be significant if it would 1) cause unsafe noise conditions for nearby receptors during construction, or 2) substantially affect normal operations of noise-sensitive receptors during operation of the Proposed Action.

3.4.2.1 ALTERNATIVE 1 - PREFERRED ALTERNATIVE

Construction activities associated with the Preferred Alternative would result in a temporary increase in noise levels within the vicinity of the proposed project sites. Noise from demolition activities, construction equipment operation, and on-road construction vehicles traveling to and from the proposed project sites have the potential to affect noise levels on-base and in the near vicinity. Backhoes, excavators, graders, loaders, and trucks would be the primary source of noise for each project. Noise impacts would be the greatest at each proposed project site and would decrease with distance. **Table 16** provides sound levels typical of construction equipment up to a distance of 2,500 feet (approximately 0.5 mile). These noise levels would continue to attenuate at further distances from the proposed project sites.

Proposed demolition and construction activities are anticipated to be completed for each proposed project within 4 to 12 months (see **Table 2**). Proposed projects would be loudest during building demolition, site grading, and paving. The nearest sensitive receptor is approximately 0.1 mile (about 700 feet) from the Proposed Action Area. Specifically, the demolition of B206, B208, B209, B210; storm drain/outfall repair; and B226 renovation activities are all within 0.2 mile of this receptor; this work is all anticipated to occur early in the implementation schedule and would be complete by the end of 2026 (see **Table 2**). Construction noise levels would mostly dissipate to levels 69 dBA or less (see **Table 16**), with the exception of noise generated by a bulldozer, which would be consistent with typical ambient noise levels in an urban area (see **Table 15**).

Table 16: Construction Equipment Noise Levels (dBA) at Certain Distances from Source (feet)

	0	50	100	200	400	1,000	1,700	2,500
Heavy Truck	95	84-89	78-93	72-77	66-71	58-63	54-59	50-55
Dump Truck	108	88	82	76	70	62	58	54
Concrete Mixer	108	85	79	73	67	59	55	51
Jackhammer	108	88	82	76	70	62	58	54
Scraper	93	80-89	74-82	68-77	60-71	54-63	50-59	46-55
Bulldozer	107	87-102	81-96	75-90	69-84	61-76	57-72	53-68
Generator	96	76	70	64	58	50	46	42
Crane	104	75-88	69-82	63-76	55-70	49-62	45-48	41-54
Loader	104	73-86	67-80	61-74	55-68	47-60	43-56	39-52
Grader	108	88-91	82-85	76-79	70-73	62-65	58-61	54-57
Pile driver	105	95	89	83	77	69	65	61
Forklift	100	95	89	83	77	69	65	61

Source: (Tipler, 1976)

No construction work with noise sufficient to disturb the public would occur between the hours of 9:00 p.m. and 7:00 a.m., or on Sundays and federal holidays in accordance with the Moon Township construction code. Additionally, noise would not exceed 65 dBA for more than eight hours during a 24-hour period, in accordance with the Moon Township noise ordinance. Noise reduction BMPs, such as the use of mufflers on construction equipment and vehicles, would minimize noise impacts during implementation of the Proposed Action. Therefore, the temporary construction activities under the Preferred Alternative would result in *short-term, less-than-significant adverse impacts* to the overall noise environment.

Following completion of construction, operation of the new facilities and parking lots would be consistent with existing conditions and changes to the noise environment would be negligible and not discernable on-base or to nearby sensitive receptors. Therefore, operations under the Preferred Alternative would have *no impact* to the overall noise environment.

3.4.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Alternative 2 would have fewer noise impact than Alternative 1, because renovation activities would produce less noise than demolition, paving, and construction. As such, Alternative 2 would also result in *short-term, less-than-significant adverse impacts* to the existing noise environment during the construction phase of the Proposed Action, but impacts would be slightly less than

under Alternative 1. Alternative 2 would have *no long-term impacts* to the overall noise environment, the same as for Alternative 1.

3.4.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction, or renovations would occur on the base and no buildings would be demolished. Therefore, there would be *no impact* to the existing noise environment.

3.5 EARTH RESOURCES

Earth resources analyzed in this EA include geology, topography, and soils. Geology refers to surface and subsurface materials and processes, as well as their seismic tendencies and stability. Topography pertains to changes in both the elevation and terrain of a certain area. Soils are typically described in terms of their type, physical characteristics, and types of land use. The ROI for earth resources includes the geology, topography, and soils that lie within the boundaries of PARS.

3.5.1 AFFECTED ENVIRONMENT

Geology: PARS is located in the Appalachian Plateau Province, which is primarily composed of sedimentary rock such as sandstones, conglomerates, and shales that have been cut by streams to form the region's mountainous terrain (NPS, 2018). The U.S. Geological Survey (USGS) 2023 update of the Seismic Hazard Map shows the area is at low risk of seismic hazard (i.e., hazard level 2 out of 7) (USGS, 2024).

Topography: The area around PARS is characterized by level stream valleys with steep sided slopes (AFRC, 2015). Elevations at PARS range from 1,030 to 1,150 feet above mean sea level, and there are steep slopes (slopes with a grade of approximately 30 percent or greater) located throughout the base. The steepest areas on the base are located to the east, adjacent to Meeks Creek (see **Figure 3**).

Soils: PARS generally contains moderately deep, well-drained soils and urban lands that are underlain by gray shale on uplands. Most native soils have been reconfigured through cut and fill and are now classified within the modern soil taxonomy as Urban Lands. A marginal amount of hydric soil² is located on the eastern edge of the base (see **Table 17** and **Figure 4**).

² Hydric soils are defined as soils that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part. Under natural conditions, these soils are able to support the growth of hydrophytic vegetation. The presence of hydric soils is one of the criteria used to identify and delineate wetlands.

Table 17: Select Soil Characteristics for Proposed Action Area

Map Unit Name	Acres	Landform / Description
UCB: Urban land-Culleoka complex, gently sloping	4.5	Found on hills and uplands. Parent material consists of fine-loamy residuum. Depth to a restrictive layer (bedrock) is 20 to 40 inches. Well-draining and does not meet hydric soil criteria.
UCD: Urban land-Culleoka complex, moderately steep	1.0	Found on hillslopes and uplands. Parent material consists of fine-loamy residuum. Depth to a restrictive layer (bedrock) is 20 to 40 inches. Well-draining and does not meet hydric soil criteria.
At: Atkins silt loam, 0 to 3 percent slopes, frequently flooded	<0.1	Found in floodplains on alluvial plains. Parent material consists of recent fine-loamy alluvium over old fine-silty alluvium. Depth to a restrictive layer is greater than 60 inches. Meets hydric soil criteria.

Sources: (NRCS, 2024)

Figure 3: Topography on PARS

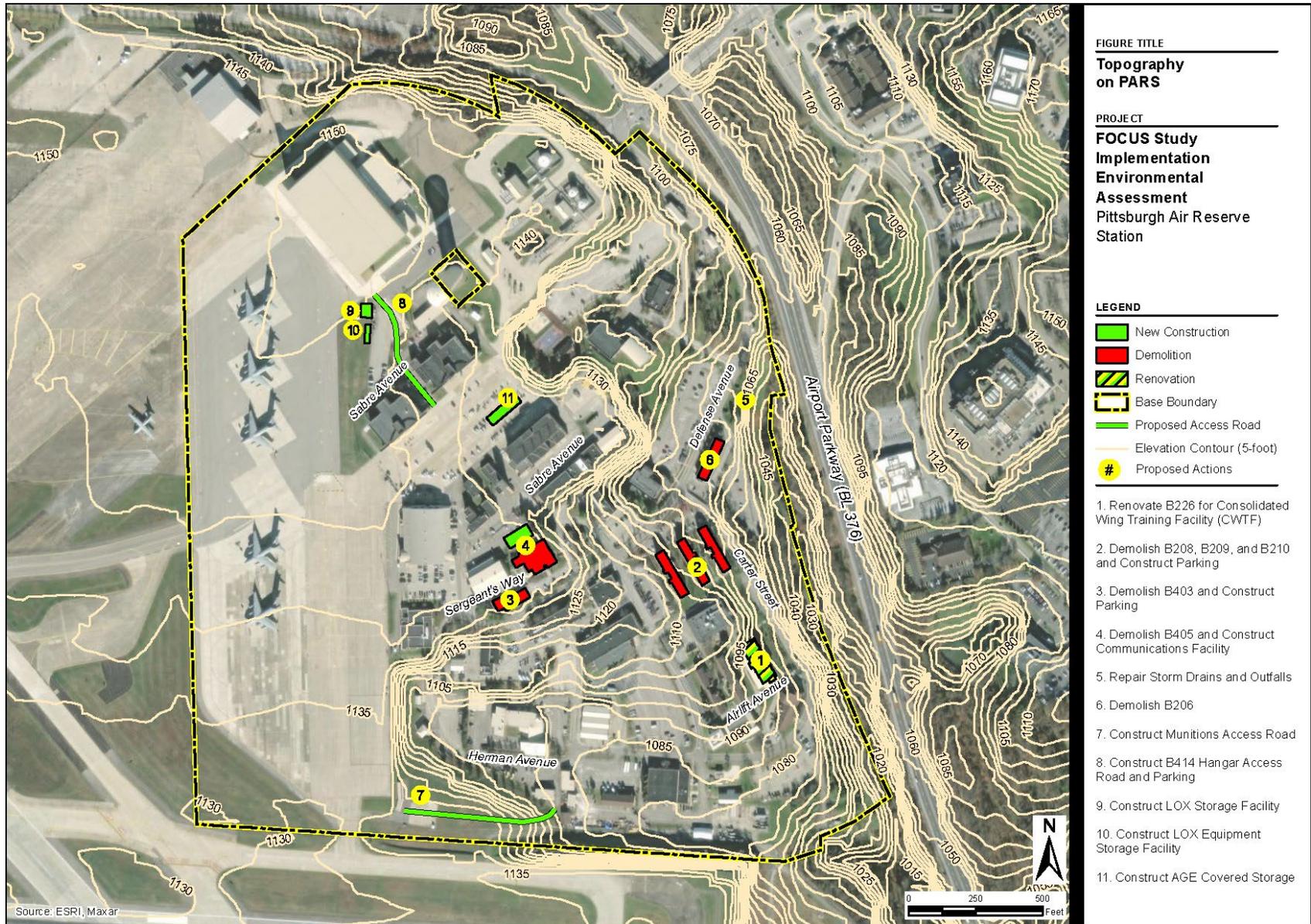
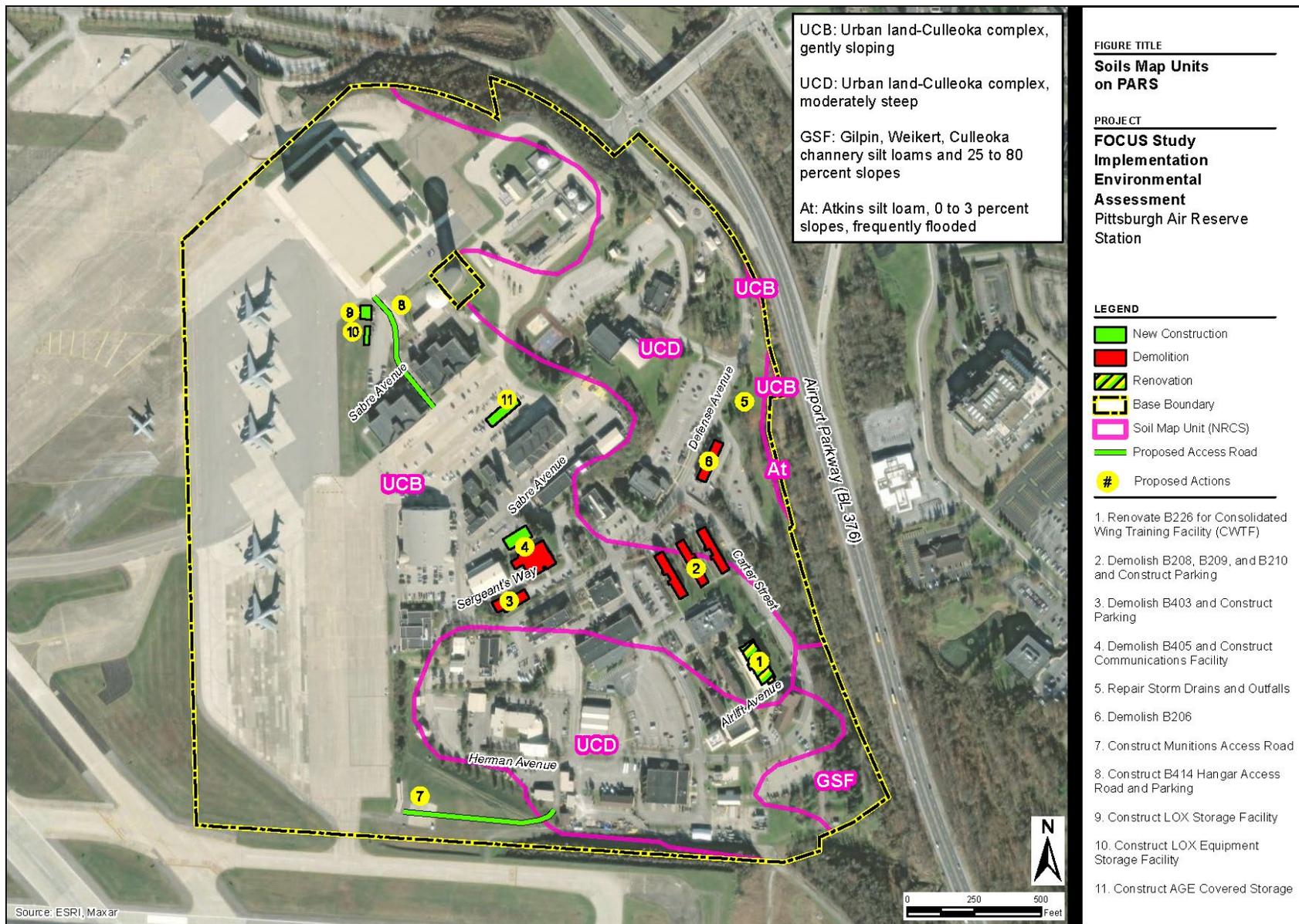


Figure 4: Soil Map Units on PARS



3.5.2 ENVIRONMENTAL CONSEQUENCES

An earth resources impact would be significant if it would expose people or structures to major geological hazards or substantially increase potential occurrences of erosion or sedimentation.

3.5.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Geology: During construction, ground disturbance and soil removal activities would occur during the demolition of the foundations of B208, B209, B210, B403, B405, and B206 and the construction of the foundation of the communications facility. Since depth to bedrock is generally known to be 20 inches or greater below ground surface, bedrock may be encountered during excavation for the foundation of the communications facility. However, potential excavation impacts on underlying bedrock would be minimal. Further, no geologic hazards or seismic events are expected to interfere with, or pose an operational risk to, construction activities, nor would construction activities exacerbate the local risk of a seismic event occurring. Therefore, *long-term, less-than-significant adverse impacts* to geology may occur under the Preferred Alternative.

Topography: Although the proposed project sites are generally flat, minor grading would be necessary for construction of paved surfaces, including the parking lots at B208, B209, B210 and B403, the munitions access road, and the B414 hangar access road. Grading of the B208, B209, B210 and B403 sites would not meaningfully impact the topography of the ROI, as grading would primarily involve leveling sites following the demolition of existing structures. Grading for the munitions access road would require constructing a retaining wall for the roadway in order to navigate a slope. Therefore, *long-term, negligible impacts* to topography would occur under the Preferred Alternative.

Soils: In total, construction activities from the Preferred Alternative would disturb approximately 5.5 acres of soil. Following the demolition of B208, B209, B210, B403, B405, and B206, the soil would be regraded and stabilized. Construction of the communications facility, munitions access road, and B414 hangar access road would each also require site clearing and grading. Disturbed soils may be temporarily susceptible to runoff and erosion during these activities. The demolition of B208, B209, and B210 and construction of parking and the construction of the hangar access road and parking would likely exceed one acre of land disturbance, therefore PARS would obtain a PAG-02 General NPDES permit for discharges of stormwater associated with construction activities from PA DEP, pursuant to the Clean Water Act (CWA) (33 USC § 1251 et seq). As part of these permits, a Stormwater Pollution Prevention Plan (SWPPP) would be developed and implemented for the respective project, which would identify potential sources of pollutants, describe pollution prevention activities (i.e., BMPs) to be implemented on the site, and establish erosion and sediment controls to manage stormwater discharges and minimize sedimentation to the extent practicable. Implementation of the erosion and sediment control measures specified in the SWPPP and applicable NPDES permits would minimize potential impacts to soil runoff and erosion. Potential impacts on soils may also occur if petroleum products or other liquids associated with construction equipment were accidentally spilled or released. Potential safety, health, and hazardous and toxic materials and waste (HTMW) impacts are discussed further in **Section 3.12**.

Replacing the damaged pipe leading to outfall #3 and outfall #5 would require the existing pipe to be excavated, resulting in temporary soil disturbance. However, repairing the storm drains and outfalls would have a *beneficial* effect on soils, as the new pipe would prevent further erosion and loss of ground stability around the existing degraded metal pipe in the long-term.

Any new construction or renovation projects disturbing more than 5,000 SF of land would be designed to ensure the pre-development hydrology of the sites would be maintained pursuant to Section 438 of EISA. This would be accomplished through site grading, the use of LID features, such as stormwater management

features, and site revegetation to prevent erosion. Implementation of these measures would manage long-term soil erosion and sedimentation in unpaved areas during operation of all new facilities; paved areas would have no potential for long-term impacts to soils. Overall, the Preferred Alternative would result in *short-term, less-than-significant adverse impacts* to soils. There would be *no long-term impacts* to soils.

3.5.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Alternative 2 would have fewer impacts to earth resources than Alternative 1, as less ground-disturbing construction would occur under Alternative 2. In total, approximately 5 acres of ground disturbance would occur under Alternative 2 and the geology and soil impacts associated with demolishing and regrading the B403 and B405 sites would not occur. There would be *no impacts* to geology as no excavation would be required for the foundation of the communications facility. Alternative 2 would result in *long-term, negligible impacts* to topography and *short-term, less-than-significant adverse impacts* to soils.

3.5.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. The related soil disturbance and removal associated with the Proposed Action would not occur. Therefore, there would be *no impact* to geology or topography associated with the No Action Alternative. However, the storm drains and outfalls would not be repaired and soil erosion near outfall #3 and outfall #6 would continue to progress as the stormwater pipes degrade, resulting in further soil erosion. Therefore, there would be *long-term, less-than-significant adverse impacts* to soils associated with the No Action Alternative.

3.6 WATER RESOURCES

Water resources analyzed in this EA include surface water (including stormwater), wetlands, floodplains, and groundwater. Surface water resources comprise lakes, rivers, and streams and are important for a variety of ecological, economic, recreational, aesthetic, and human health reasons. Wetlands are areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal conditions do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE, 1987). Wetlands serve a variety of functions including flood control, groundwater recharge, maintenance of biodiversity, wildlife habitat, recreational opportunities, and maintenance of water quality. Floodplains are belts of low, level ground on one or both sides of a stream channel and are subject to either periodic or infrequent inundation by flood water. A 100-year floodplain has a 1 percent chance of inundation in any given year. Groundwater can be defined as subsurface water resources that are interlaid in layers of rock and soil and recharged by surface water seepage. Groundwater is important for its use as a potable water source, agricultural irrigation, and industrial applications.

The ROI for surface waters, wetlands, and floodplains includes the boundaries of the proposed project sites, as well as the down-gradient waterbodies receiving stormwater runoff within 0.5 miles of PARS. The ROI for groundwater includes the portion of the groundwater basin that underlies PARS.

3.6.1 AFFECTED ENVIRONMENT

Surface Water: There are no natural surface water features present within the interior of PARS. Stormwater on the base is primarily transported through existing conveyance systems, which drain in a southeasterly direction towards an unnamed tributary of McClaren's Run known as Meeks Creek (AFRC, 2015), a

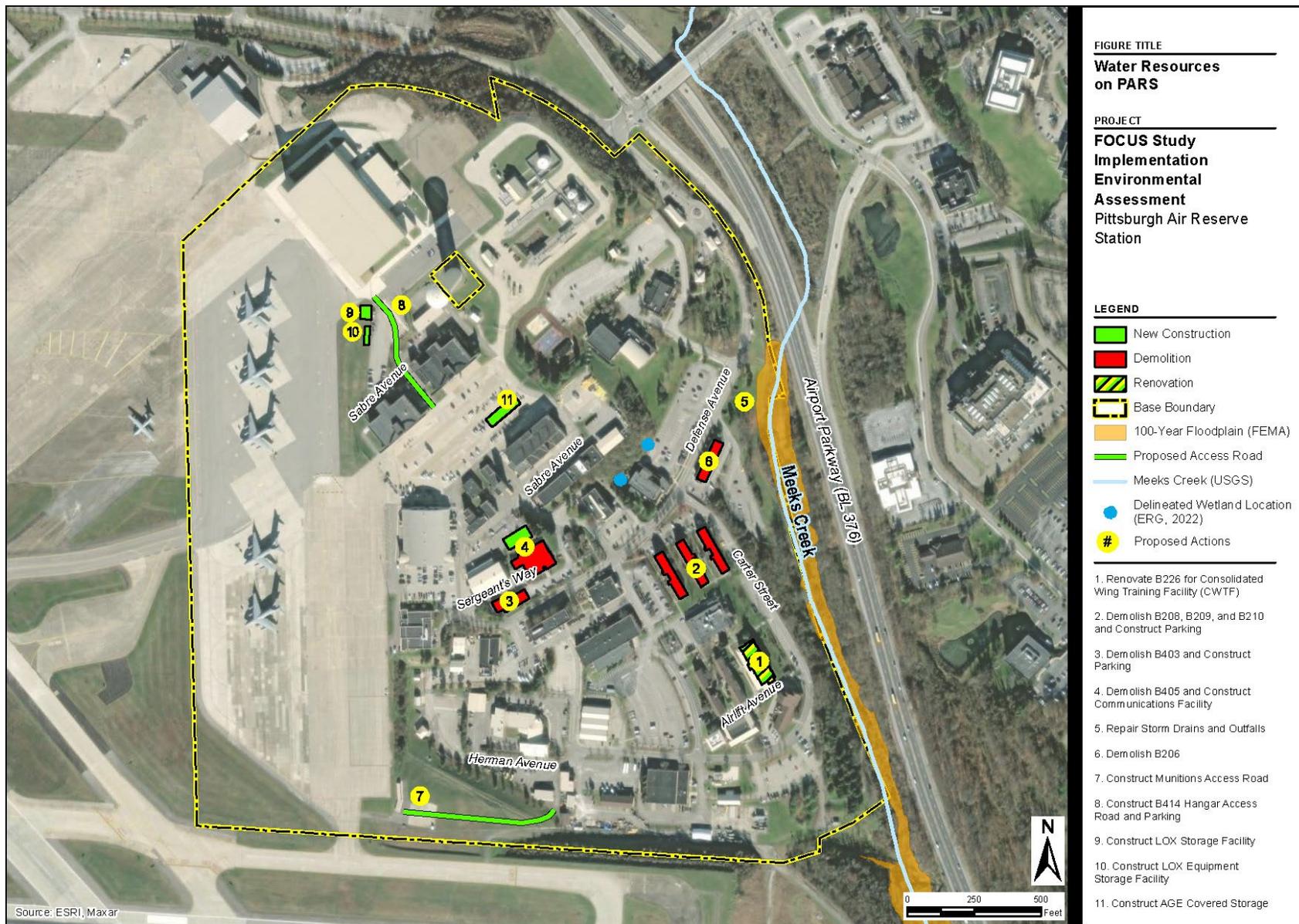
perennial stream which runs in a generally north-south direction along the eastern boundary of the base (see **Figure 5**). McClaren's Run is a tributary of Montour Run, which flows into the Ohio River approximately 4 miles east of PARS. Meeks Creek is a Clean Water Act Section 303(d) impaired water. Sources contributing to impairment include metals from acid mine drainage and organic material from urban runoff (USEPA, 2024a). A Total Maximum Daily Load (TMDL) for metals has been established under the Montour Run Watershed TMDL, but no TMDL is in place for organic material.

Wetlands: Two jurisdictional wetlands totaling approximately 0.02 acre were identified at PARS during a base-wide wetland survey in 2022 (ERG, 2022a). These wetlands are not located within, in the vicinity of, or downstream of any proposed project site. Therefore, activities under the Preferred Alternative would have no potential to affect wetlands and this resource is dismissed from further analysis.

Floodplains: The Federal Emergency Management Agency (FEMA) maps a floodplain associated with Meeks Creek along the eastern edge of PARS (see **Figure 5**). A portion of the 100-year floodplain is located near the proposed storm drain and outfall repairs.

Groundwater: Under the Safe Drinking Water Act, the USEPA defines a sole-source aquifer as an aquifer that provides at least 50 percent of the drinking water for its service area, with no reasonably available alternative sources if the aquifer becomes contaminated. According to the USGS, PARS is located within a sandstone aquifer that is not designated as a sole-source aquifer (USGS, n.d.). Groundwater is present at PARS within fractures in the underlying bedrock. Meeks Creek and McClaren's Run both receive discharge from the bedrock aquifers under the base (AFRC, 2012). Water levels in the area surrounding PARS has been observed at approximately 20 feet below land surface (USGS, n.d.). PARS is connected to the township water utility operated by Moon Township Municipal Authority (MTMA), which sources drinking water from the Ohio River and supply wells throughout the area (MTMA, 2022).

Figure 5: Water Resources on PARS



3.6.2 ENVIRONMENTAL CONSEQUENCES

A water resources impact would be significant if it would 1) substantially reduce water availability or interfere with the water supply to existing users; 2) create or contribute to the overdraft of groundwater basins or exceed decreed annual yields of water supply sources; 3) substantially adversely affect surface or groundwater quality; 4) degrade unique hydrologic characteristics; or 5) violate established water resources laws or regulations.

3.6.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Surface Water: While there are no surface waters within any of the proposed project sites, portions of Meeks Creek and McClaren's Run are within the ROI for water resources and could be impacted by stormwater runoff from the proposed project sites. Construction activities for the Preferred Alternative would involve soil disturbance that could result in increased runoff from the proposed project sites without proper erosion and sediment control measures. Construction activities that disturb one or more acres of land are subject to the requirements of the CWA; therefore, PARS would obtain a PAG-02 General NPDES permit for discharges of stormwater associated with construction activities from PA DEP and comply with the provisions included in its SWPPP. The SWPPP would identify potential sources of pollutants, describe all pollution prevention activities that would be implemented, and establish erosion and sediment control to manage stormwater discharges and minimize sedimentation to the extent practicable. Construction crews would adhere to best management practices outlined in the SWPPP, and the erosion and sediment controls would be implemented prior to land disturbing activities and maintained in good working order for the duration of construction.

Repairing the storm drains and outfalls would involve maintenance of an outfall structure along a Pennsylvania regulated water (Meeks Creek). As such, PARS would obtain a 25 Pennsylvania Code Chapter 105 General Permit for intake and outfall structures prior to the start of construction. Because the outfall repair could result in discharges of pollutants or sediments into a navigable water, a Section 401 Water Quality Certification would also be obtained from PA DEP. Overall, the Preferred Alternative would have *short-term, less-than-significant impacts* on surface waters in the ROI. In the long-term, reduced erosion would have a minor *beneficial* impact on surface water quality.

Although Meeks Creek is an impaired stream due to acid mine drainage and urban runoff, the Preferred Alternative would not have the potential to exacerbate this issue. All proposed projects would be designed to minimize stormwater impacts to the extent practicable, and all new construction would be designed in compliance with Section 438 of the EISA, as applicable. As such, little change to impervious surfaces is anticipated to occur.³ Further, no metals or organic material are anticipated to runoff from the Projects Sites. Therefore, the Preferred Alternative would have *negligible impacts* on impaired streams under Section 303(d) of the CWA.

Floodplains: Although the storm drain and outfall repairs would partially occur within a 100-year floodplain, the Preferred Alternative would not contribute to any loss with regard to flood control capacity. Portions of the existing corrugated metal pipes within the floodplain would be replaced with plastic pipe, and riprap outside of outfall #5 that is located within the floodplain would be removed. Construction equipment may be located in the floodplain temporarily to complete the repairs. No new impervious surfaces or structures would be constructed within the floodplain. Therefore, the Preferred Alternative would have *short-term, less-than-significant impact* to floodplains in the ROI.

³ Preliminary estimates indicate an approximately 0.3-acre reduction in impervious surfaces; however, this estimate is subject to change based on final designs.

PARS published an Early Public Notice in conjunction with the NOA for the Draft EA to disclose that the Proposed Action would occur within a floodplain, in accordance with EO 11988, *Floodplain Management* (see **Appendix D**). While PARS has designed the Preferred Alternative to avoid floodplain impacts to the extent feasible, due to the locations of infrastructure for outfall #3 and outfall #5, there is no practicable alternative to working in the floodplain to replace the existing corrugated metal piping and remove the riprap around outfall #5. PARS has prepared a Draft FONPA in accordance with EO 11988 for this Proposed Action, which is included in the Draft FONSI.

Groundwater: Construction of the proposed projects would not be anticipated to intersect groundwater (e.g., through deep excavation), involve groundwater withdrawals, or intentionally release or inject materials into groundwater resources and aquifers. Potential impacts to groundwater may occur from the accidental spill of petroleum products or other liquids on the sites during construction activities. With implementation of BMPs, such as carrying out routine inspections of equipment, maintaining spill-containment materials on-site, and adhering to site-specific HTMW plans, the potential for impacts to the groundwater would be minimized. Therefore, the Preferred Alternative would result in *short-term, negligible adverse impacts* to groundwater in the ROI.

3.6.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Impacts from Alternative 2 would generally be the same as the Preferred Alternative, except less ground disturbance would occur, resulting in less runoff and fewer opportunities for groundwater contamination. Therefore, Alternative 2 would have *short-term, less-than-significant impacts* and a *long-term beneficial* effect on surface waters in the ROI, and *negligible impacts* on impaired streams. Alternative 2 would have *short-term, less-than-significant impact* on floodplains and *negligible impact* groundwater in the ROI.

3.6.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Impacts on surface water, floodplains, and groundwater associated with the Preferred Alternative would not occur. However, the storm drains and outfalls would not be repaired and soil erosion near outfall #3 and outfall #6 would continue to progress as the stormwater pipes degrade, potentially resulting in discharges of sediment into Meeks Creek. Therefore, there would be *long-term, less-than-significant adverse impacts* to water resources associated with the No Action Alternative.

3.7 BIOLOGICAL RESOURCES

Biological Resources addressed in this EA consist of vegetation, wildlife, and special status species. Special status species relevant to this EA are those protected under the federal Endangered Species Act of 1973 (ESA), Bald and Golden Eagle Protection Act of 1940, Migratory Bird Treaty Act (MBTA) of 1918, or under applicable state laws or regulations.

The ROI for biological resources includes vegetation present within the boundaries of the project sites, terrestrial wildlife present on-site or within 0.2 miles of the base, and aquatic resources present downstream of the base within 0.5 miles (in accordance with the ROI for surface waters; see **Section 3.6**).

3.7.1 AFFECTED ENVIRONMENT

Vegetation: A flora and fauna survey was conducted at PARS on September 26 and 27, 2022. The investigation included traversing pedestrian transects and compiling a comprehensive list of flora and fauna observed on-site during the two field days. The purpose of the survey and report was to provide PARS with documentation to support the continuation of the Integrated Natural Resources Management Plan (INRMP) waiver. The majority of the base is developed and contains maintained lawns and ornamental tree and shrub species. However, the northern and eastern boundaries contain areas of dense tree and shrub growth in which existing species grow with little anthropogenic influence. The investigation identified a total of 150 flora species within the base. Dominant vegetation observed included white avens (*Geum canadense*), red clover (*Trifolium pratense*), red maple (*Acer rubrum*), box elder (*Acer negundo*), grapevine (*Vitis sp.*) and a variety of grasses, including perennial ryegrass (*Lolium perenne*), green foxtail grass (*Setaria viridis*), barnyard grass (*Echinochola sp.*), and bristlegrass (*Setaria sp.*). Of the 150 flora species, 18 were identified by the PA DCNR as invasive species. The majority of the invasive species were identified within the two unmaintained shrub/tree corridors previously mentioned. Invasive coverage within these areas were moderate and were dominated by crown vetch (*Securigera varia*), Tatarian honeysuckle (*Lonicera tatarica*), and poison hemlock (*Conium maculatum*) (ERG, 2022b).

Wildlife: Although the boundary fencing limits occurrences of wildlife on PARS, the flora and fauna survey report identified 27 fauna species on the base, including small mammals, birds, insects, and fish. The most common species observed included house sparrow (*Passer domesticus*), black fly (*Simulium jenningsi*), field cricket (*Gryllus pennsylvanicus*), and the American robin (*Turdus migratorius*). While avian species were observed throughout the base, the majority of the other fauna were observed within the wooded areas along the northern and eastern base boundaries. All but one of the species are considered native fauna. The northernmost area is dominated by invasive tree of heaven (*Ailanthus altissima*), which is also a host species to the invasive spotted lanternfly (*Lycorma delicatula*). Several dozen spotted lanternflies were observed on and at the base of many of the tree of heaven plants at the time of the investigation (ERG, 2022b). Because of the lack of suitable habitat and developed nature of the base, PARS has been given a waiver for developing an INRMP.

PARS has a joint BASH Program with Pittsburgh International Airport, the Allegheny County Airport Authority, and the FAA (AFRC, 2017). BASH programs implement measures such as managing vegetation to discourage large or flocking birds from congregating near the airfield to minimize the hazard caused by interactions of birds and wildlife with aircraft.

Special Status Species: The AFRC initially queried the USFWS Information for Planning and Consultation (IPaC) database to identify federally listed threatened and endangered (T&E) species with the potential to occur within the Proposed Action Area. IPaC identified two endangered species: the northern long-eared bat (NLEB, *Myotis septentrionalis*) and the Indiana bat (*Myotis sodalis*). In addition, IPaC identified the monarch butterfly (*Danaus plexippus*), which is a candidate species (USFWS, 2024). No critical habitat was identified in the Proposed Action Area.

The NLEB hunts at night over small ponds, in forest clearings, and at tree top level along forest edges (PNHP, 2007). The species also uses caves and underground mines for hibernation. Maternity roosts are located in tree cavities, under exfoliating tree bark, and in buildings. Indiana bats roost in trees in summer and rarely roost in buildings; hibernacula tend to be found in regions with well-developed limestone caverns and abandoned mines (PA Game Commission, 2010). Primary maternity roosts are large, dead trees with exfoliating bark and sun exposure that results in high temperatures; most roosts are within 0.25-mile of water. Both the NLEB and Indiana bat give birth to one young per female between mid-June and July. While no bats have been historically documented on-base, the NLEB and/or Indiana bat could roost along the

forested riparian corridor on the eastern boundary of the base during the active season between April and November.

Monarch butterflies are a migratory species that typically arrive in Pennsylvania in mid-May when milkweed foliage becomes available (PA NRCS, 2020). Monarch butterflies use numerous habitat sites but require milkweed to reproduce; meadows with spring to fall nectar supply and a high density of milkweed have the highest levels of monarch butterfly activity. While the monarch butterfly was observed on-base in 2022 (ERG, 2022b), it is not anticipated to occur in the Proposed Action Area because the project sites consist of maintained lawn that does not provide suitable habitat.

A Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review for the Proposed Action Area was conducted through the Pennsylvania Natural Heritage Program to determine whether any known federal or state-listed T&E species and/or special concern species could be impacted within the project area. The PNDI Environmental Review indicated that no impacts to threatened and endangered and/or special concern species are anticipated within the analyzed area (see **Appendix A**); the PNDI Environmental Review is valid until July 2026, beyond which PARS would conduct another review for any uncompleted projects (PA DCNR, 2024). Additionally, while no T&E species were observed in the 2022 flora and fauna survey, the monarch butterfly was observed on-base (ERG, 2022b).

IPaC identified 12 Birds of Conservation Concern (BCCs) as having potential to occur at PARS (see **Appendix A**). IPaC notes that while the bald eagle (*Haliaeetus leucocephalus*) is not a BCC in this area, it warrants attention due to the Bald and Golden Eagle Protection Act. No BCCs were observed at PARS in the 2022 flora and fauna survey (ERG, 2022b).

3.7.2 ENVIRONMENTAL CONSEQUENCES

A biological resources impact would be significant if it would 1) substantially reduce regionally or locally important habitat; 2) substantially diminish a regionally or locally important plant or animal species; or 3) adversely affect recovery of a federally protected species.

3.7.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Vegetation: The Preferred Alternative would clear minimal vegetation, primarily maintained lawn, for the construction of the communications facility, munitions access road, B414 hangar access road, and LOX equipment storage shelter. No tree removal is anticipated. Following the demolition of B208, B209, B210, B403, B405, and B206, any areas not being redeveloped would be seeded and landscaped. Therefore, the existing vegetation at the proposed project sites would not substantially change under the Preferred Alternative. The base would remain a mostly developed area, with heavily altered vegetation from development, construction, landscaping, and other disturbances. Therefore, the Preferred Alternative would have *long-term, negligible impacts* to vegetation within the ROI.

Wildlife: All proposed work would occur in already developed areas and areas of actively maintained lawns, which are mowed on a regular basis. Wildlife habitat is of low value and is already highly fragmented in these areas, and it is not likely that the Preferred Alternative would negatively affect populations of existing wildlife species that may be using or traveling through the limited available habitat. Any indirect impacts to wildlife from construction, demolition, and renovations, such as noise and vibrations, would be temporary in nature, and mobile wildlife would be expected to avoid these areas. Therefore, the Preferred Alternative would have *short-term, negligible indirect impacts* on wildlife within the ROI.

Special Status Species: AFRC completed a Determination Key in IPaC for the NLEB and determined that the Preferred Alternative *may affect* the NLEB (see **Appendix A**) due to increased noise from construction

in the vicinity of potential bat habitat on the eastern boundary of the base. However, existing noise levels on the base range from approximately 65 dB to 75 dB and only a small area of potential bat habitat is present between the base and the highway. Therefore, due to the temporary nature of the construction noise, elevated baseline noise levels, and the small area of potential bat habitat, the Preferred Alternative is *not likely to adversely affect* the NLEB. Since Indiana bats would occupy the same on-base habitat and experience the same potential effects as the NLEB, AFRC has also determined that the Preferred Alternative *may affect, but is not likely to adversely affect*, the Indiana bat. Finally, AFRC determined that the Preferred Alternative would have *no effect* on the monarch butterfly, a federal candidate species, as no suitable habitat for the monarch butterfly exists within the Proposed Action Area. The AFRC provided its effect determinations to USFWS on August 14, 2024, and is currently awaiting a response (see **Appendix A**).

The PNDI environmental review concluded that no impacts to T&E and/or special concern species are anticipated within the Proposed Action Area (PA DCNR, 2024).

No BCCs were observed at PARS in the 2022 flora and fauna survey (ERG, 2022b). Additionally, no trees would be removed under the Preferred Alternative, and minimal vegetation would be cleared, which would not substantially alter potential habitat for BCCs. Finally, construction, demolition, and renovation activities would be temporary, and birds would be expected to avoid the area. Therefore, the Preferred Alternative would likely have *short-term, negligible indirect adverse impacts* on migratory birds.

3.7.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Alternative 2 would have similar impacts to biological resources as Alternative 1, however, renovating B403 and B405 instead of demolishing those buildings would produce less noise that could potentially disturb wildlife. Overall, Alternative 2 would have *long-term, negligible impacts* to vegetation, *short-term, negligible indirect impacts* on wildlife, *no significant impact* on federally and state listed species, and *short-term, negligible indirect adverse impacts* on migratory birds within the ROI.

3.7.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Related impacts on vegetation, wildlife, and special status species associated with the Preferred Alternative would not occur. Therefore, there would be *no impact* on biological resources associated with the No Action Alternative.

3.8 CULTURAL RESOURCES

Cultural resources are historic properties as defined by the NHPA; cultural items as defined by the Native American Graves Protection and Repatriation Act; archaeological resources as defined by the Archaeological Resources Protection Act; sacred sites as defined by EO 13007, Indian Sacred Sites, to which access is afforded under the American Indian Religious Freedom Act; and collections and associated records as defined by 36 CFR Part 79.

Historic properties covered by the NHPA include any prehistoric or historic district, site, building, structure, or object with known or potential significance with regard to pre- or post-American history, architecture, archaeology, engineering, or culture. Section 106 of the NHPA requires federal agencies to consider the effect an undertaking may have on historic properties. The Proposed Action is considered an undertaking and is required to comply with Section 106, including consultation with the PHMC, the SHPO for

Pennsylvania. All Section 106 correspondence with the PHMC for the Preferred Alternative is provided in **Appendix B**.

Consistent with Section 106 of the NHPA, DoDI 4710.02, AFI 90-2002, and AFMAN 32-7003, the AFRC is also consulting with six federally recognized tribes that are historically affiliated with PARS and the surrounding area regarding the potential for the Preferred Alternative to affect properties of cultural, historical, or religious significance to the tribes. The AFRC initiated consultation with each tribe via letter on July 30, 2024; a record of this consultation and a list of tribes contacted is provided in **Appendix C**. To date, tribes have identified no properties of cultural, historical, or religious significance at PARS.

The ROI for cultural resources is the area of potential effects (APE) as defined by the NHPA. The AFRC has defined the APE as the limits of disturbance (LOD) for the demolition and construction activities and a 0.25-mile radius around the boundary of the LOD to account for visual impacts. Due to the proximity of the 11 projects, a single 0.25-mile radius around all projects is included in the APE, which encompassed the entirety of PARS.

3.8.1 AFFECTED ENVIRONMENT

A historic building inventory survey was conducted at PARS in 2021. The purpose of the survey was to document, record, and evaluate NRHP eligibility of 10 buildings aged 40 to 45 years. The following buildings were surveyed:

- B129, Maintenance Squadron Hangar
- B130, Aerial Port Squadron Training Facility
- B316, Headquarters Facility
- B401, Chapel
- B405, Communication Squadron Facility
- B408, Survival Equipment Facility
- B409, Non-Destructive Inspection Facility
- B417, Scheduled Maintenance Hangar
- B418, Aircraft Maintenance Hangar
- B420, Aerospace Ground Equipment Facility

The survey report concluded that the 10 surveyed buildings are not eligible for listing in the NRHP because they lack integrity and/or historic and architectural significance; no additional surveys were recommended (AFRC, 2022). Additionally, in 1998, Science Application International Corporation (SAIC) assessed 53 World War II and Cold War architectural resources. The base was evaluated as a historic district (1998RE01956) and found not eligible for listing in the NRHP (SAIC, 1998). Within the 0.25-mile APE, one additional above-ground resource has been documented outside of PARS (1996RE00474), which is located approximately 0.2-mile off base. This resource was located within the adjacent Pittsburgh International Airport and has been demolished. In 2021, PARS received an Integrated Cultural Resources Management Plan (ICRMP) waiver which is valid for five years (AFCEC/CZTQ, 2021).

No archaeological resources have been identified within the base boundary (SAIC, 1998). Due to the highly developed nature of PARS, there are few locations on the base that have not been previously disturbed; the LODs of the 11 proposed projects have low archaeological potential.

3.8.2 ENVIRONMENTAL CONSEQUENCES

A cultural resources impact would be significant if it would constitute an unresolved adverse effect as defined in Section 106 of the NHPA (36 CFR 800.5): alteration, directly or indirectly, of any of the

characteristics of a historic property that qualify it for inclusion in the NRHP in a manner that would diminish the integrity of its location, design, setting, materials, workmanship, feeling, or association.

3.8.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

The Preferred Alternative would have *no effect*, direct or indirect, on historic properties as no NRHP-eligible properties are present within the APE. In addition, PARS contains urban land complex soils that are previously disturbed and have low potential for archeological resources. AFRC provided its effect determination to SHPO in accordance with Section 106 of the NHPA on July 30, 2024. The SHPO concurred the same day that they have no aboveground or archaeological concerns. A record of this consultation is provided in **Appendix B**.

Although the Proposed Action Area is not located in an archaeologically sensitive area, there is the potential for inadvertent archaeological discoveries while conducting ground-disturbing activities. Should any unanticipated cultural resource be encountered during construction, or other activities associated with the Preferred Alternative, PARS would immediately cease work and report the discovery to the PHMC and federally recognized tribes for consultation on how to proceed.

3.8.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Therefore, there would be *no effect*, direct or indirect, on historic properties. Should any unanticipated cultural resource be encountered during construction, or other activities associated with Alternative 2, PARS would immediately cease work and report the discovery to the PHMC and federally recognized tribes for consultation on how to proceed.

3.8.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Therefore, there would be *no impact* on cultural resources.

3.9 UTILITIES

Utilities include water storage facilities, treatment plants, and delivery systems; supplemental power generation, transmission, and distribution facilities, including, but not limited to, wind turbines, generators, substations, and power lines; natural gas transmission and distribution facilities; sewage collection systems and treatment plants; and communication systems.

The ROI for utilities includes all areas and end users within PARS that may be impacted from temporary utility disruptions or an increased demand on utilities. No off-base utility changes would occur.

3.9.1 AFFECTED ENVIRONMENT

Duquesne Light provides electrical power to PARS. A 22.9-kilovolt power supply is distributed via two separate overhead lines from an off-site transformer and an on-site substation owned by Duquesne Light. As of 2015, 85 percent of electrical utilities on the base were buried (AFRC, 2015). Data cables for communications are also hardwired into all PARS facilities (AFRC, 2015).

PARS is supplied natural gas from Peoples Natural Gas Co. Natural gas is metered on the base through a metering station in B119. From there, it is distributed to the rest of the base via 16,000 feet of polyethylene pipe (AFRC, 2015).

Potable water and sewer services are supplied to PARS by MTMA. Water service lines are primarily located within roadway rights of way. MTMA operates a 1.5-million-gallon capacity water tower on PARS, which is used to store water for use at PARS and the surrounding community (AFRC, 2015). Wastewater drains to four MTMA manholes and is directed into one sanitary sewer main owned and operated by MTMA before being conveyed off-base to the MTMA wastewater treatment facility (AFRC, 2015). The sanitary sewer network is a gravity-flow system.

Stormwater infrastructure at PARS includes catch basins, culverts, natural drainageways, underground pipes, and man-made ditches (AFRC, 2015). These components deliver water to one of the base's nine stormwater outfalls which discharge stormwater into Meeks Creek. Stormwater from the aircraft apron, base gas station, and petroleum, oil, and lubricant (POL) areas are treated by oil/water separators prior to being discharged in the stormwater system.

3.9.2 ENVIRONMENTAL CONSEQUENCES

A utilities impact would be significant if it would result in prolonged or permanent service disruptions to other utility end users, or substantially increase utility demand so as to burden utility providers or reduce local utility supply to the surrounding communities.

3.9.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Construction of the Preferred Alternative would involve the abandonment of utility connections to B206, B208, B209, B210, B403, and B405 prior to demolition. Tenants in the occupied buildings would not experience any interruptions to their utility use as they would relocate to other buildings prior to demolition. New electrical, communications, natural gas, sewer, and water connections would be made for the communications facility and new electrical, communications, and water connections would be made for the LOX storage facility. New electrical connections would be made for lighting the LOX equipment storage shelter and AGE covered storage facility. Interruptions to electrical and water connections could be experienced by end users at PARS when the new connections are installed, although no interruptions would be expected for public users off-base. Work on these systems would be temporary and all area users would be notified prior to the start of construction activities. To avoid any disruption to the base communication systems during the demolition of the B405 and construction of the communications facility, a small portion of B405 would not be demolished. Water would be used during construction activities for purposes of dust suppression; however, once construction is complete, there would be no further increased demand for water resources. The temporary increase in demand for water associated with the construction of the Preferred Alternative would not exceed local supplies. Overall, the construction of the Preferred Alternative would result in *short-term, less-than-significant adverse impacts* to utilities from temporary changes to utility connections.

Operation of the Preferred Alternative would not increase overall utility usage at PARS. B206, B208, B209, B210, B403, and B405 would no longer require utilities, as those buildings would be demolished. Once construction is complete, training activities and the number of personnel stationed at PARS would increase by about 27 personnel at the communications facility; this increase, and associated utility usage increase, would be marginal compared to the existing number of personnel at PARS. The LOX storage facility would require an electrical connection, telephone line, and water connection, and the LOX equipment storage shelter and AGE covered storage would only require electrical connections for lighting. As a result, there would likely be no increase in demand for electrical, communications, natural gas, sewer, or water services.

There would be no impact to the level of service provided elsewhere at PARS or in surrounding areas, and any increase to utility demand would be within the capacity of all utility providers.

New construction and renovation projects would be designed in accordance with UFC 1-200-02, *High Performance and Sustainable Building Requirements*. PARS would also comply with Section 438 of the EISA to manage stormwater runoff by incorporating LID features into the design of each new construction or renovation project involving over 5,000 SF of ground disturbance. A marginal decrease in impervious surfaces is expected, and repair of the storm drains and outfalls under the Preferred Alternative would ensure that all stormwater infrastructure assets on the base continue to function optimally, therefore the Preferred Alternative would have a *beneficial impact* on stormwater utilities. Overall, operations of the Preferred Alternative would have *long-term, negligible impacts* on utility usage/demand.

3.9.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Alternative 2 would have similar impacts to utilities as Alternative 1, however, the utilities would not be disconnected from B403 and B405, and no new utility connections would be made for the communications facility. Therefore, *short-term, less-than-significant impacts* to utilities would occur during the construction of Alternative 2, and the operation of Alternative 2 would have *long-term, negligible impacts* on utility usage/demand. Impacts under Alternative 2 would be slightly less than under Alternative 1 due to the fewer demolition and construction projects.

3.9.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Utility impacts associated with construction and implementation of the Preferred Alternative would not occur. However, existing storm drains and outfalls would not be repaired and soil erosion near outfall #3 and outfall #6 would continue to progress as the stormwater pipes degrade. Therefore, the No Action Alternative would have *long-term, less-than-significant adverse impacts* to utilities due to continued deterioration of current stormwater infrastructure.

3.10 SOCIOECONOMICS & ENVIRONMENTAL JUSTICE

Socioeconomics

Socioeconomics is defined as the basic attributes and resources associated with the human environment, particularly characteristics of population and economic activity. Regional birth and death rates and immigration and emigration affect population levels. Economic activity typically encompasses employment, personal income, and industrial or commercial growth. Changes in these fundamental socioeconomic indicators typically result in changes to additional socioeconomic indicators, such as housing availability and the provision of public services. Socioeconomic data at local, county, regional, and state levels permit characterization of baseline conditions in the context of regional and state trends.

Environmental Justice

Environmental justice is based on the principle that all people have a right to be protected from environmental pollution, and to live in and enjoy a clean and healthful environment. This means equal protection and meaningful involvement of all people with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies and the equitable distribution of environmental benefits. Environmental justice considerations are guided by EO 12898, *Federal Actions to Address*

Environmental Justice in Minority Populations and Low-Income Populations, which directs federal agencies to identify and address the environmental effects of their actions on minority and low-income populations. Additional guidance published by the CEQ and USEPA Federal Interagency Working Group on Environmental Justice (now the White House Environmental Justice Interagency Council or IAC) provides practical definitions of environmental justice communities and establishes a framework on how to appropriately identify such communities and assess potential impacts.

Minority populations are those persons who identify themselves as Black, Hispanic, Asian American, American Indian/Alaskan Native, Pacific Islander, or Other. According to the CEQ's guidance, minority populations exist if "(a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis" (CEQ, 1997b). Guidance from the IAC recommends identifying minority populations using the "Fifty Percent and Meaningfully Greater" analysis. The "Fifty Percent" analysis considers whether the percentage of minorities residing in the affected environment (i.e., the ROI) exceeds 50 percent. Following this determination, the "Meaningfully Greater" analysis compares the minority population of the ROI to a reference community to determine if the percent of minorities in the ROI is meaningfully greater than that within the reference community (EJ IWG, 2016).

Poverty status is used to define low-income. The CEQ recommends the identification of low-income populations where there is a substantial discrepancy between a community and the surrounding communities by using annual statistical poverty thresholds, and the IAC suggests assessing "the proportion of individuals below the poverty level, households below the poverty level, and families with children below the poverty level" (USEPA, 2024b; EJ IWG, 2016). Poverty status is determined based on the U.S. Census Bureau's annual poverty measure, which was \$30,000 for a family of four in 2023 (USEPA, 2023b; HHS, 2023).

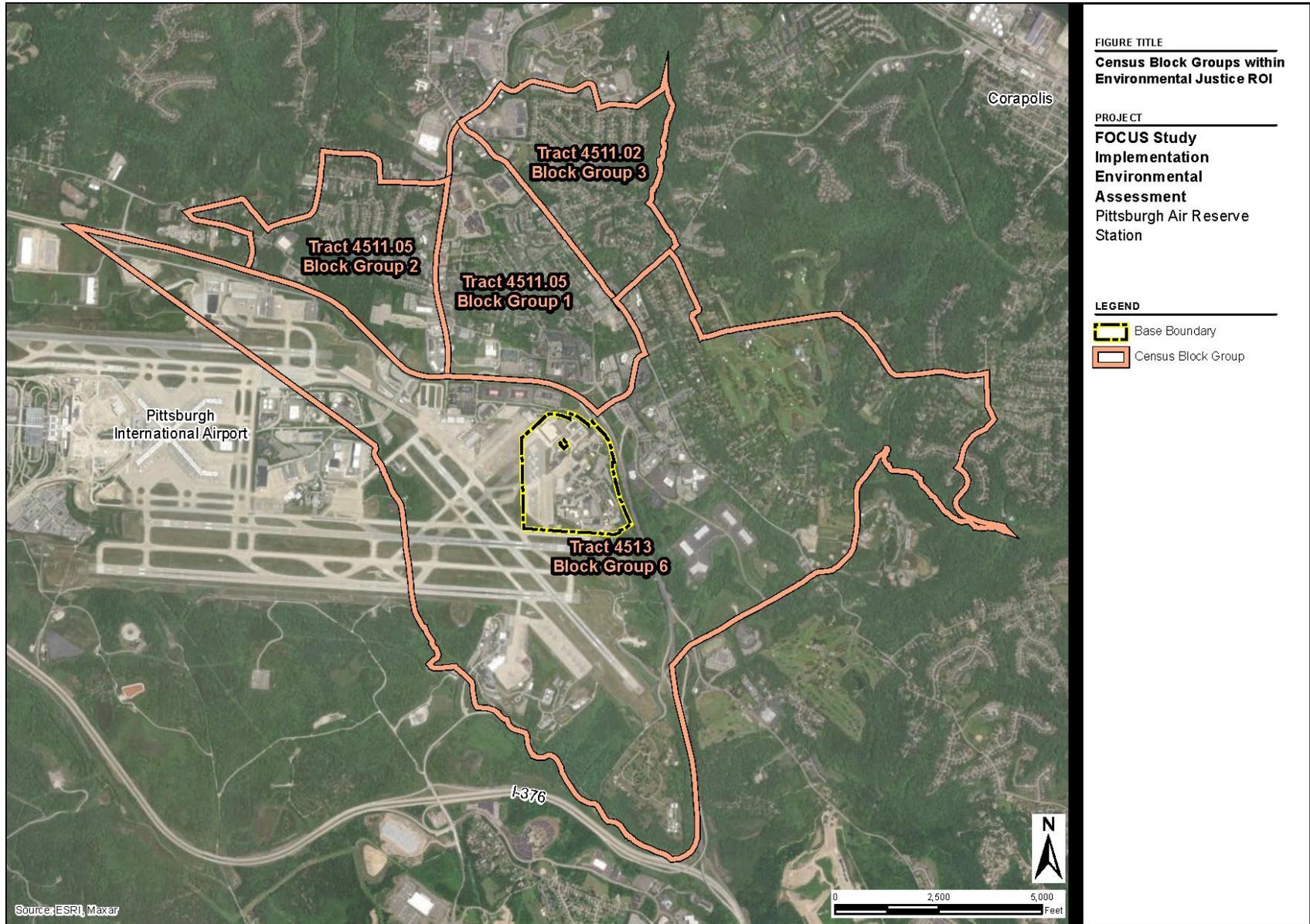
EO 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All*, was issued in April 2023. This EO affirms that environmental justice is central to the implementation of civil rights and environmental laws. The EO provides a federal definition of environmental justice as "the just treatment and meaningful involvement of all people, regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other federal activities that affect human health and the environment." The EO directs agencies to consider measures to address and prevent disproportionate and adverse environmental and health impacts on communities with environmental justice concerns in comparison to the general population, and whether these effects occur in communities also affected by the cumulative impacts of pollution and other burdens like climate change.

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, states that agencies should ensure that potential health and safety risks to children are identified and addressed, since children may be more susceptible to certain risks and exposures than adults.

3.10.1 AFFECTED ENVIRONMENT

The ROI for socioeconomic includes the census tract that contains PARS, tract 4513, as well as two other census tracts adjacent to PARS: tracts 4511.02 and 4511.05 (**Figure 6**). The ROI is limited to the geographic areas where work under the Proposed Action would occur and the surrounding areas where socioeconomic impacts may occur. No changes in the number of personnel at PARS would occur that would have the potential to affect socioeconomic conditions in a larger geographic area (i.e., in areas where personnel live).

Figure 6: Census Block Groups within Environmental Justice ROI



The ROI for environmental justice considerations consists of the block group that contains PARS, census tract 4513, block group 6. The environmental justice ROI also includes three other block groups that are both adjacent to the PARS block group and within a 1-mile radius from the specific sites where work would occur. These three block groups include census tract 4511.02, block group 3; and census tract 4511.05, block groups 1 and 2 (see **Figure 6**). These census block groups are the area where impacts from the Proposed Action could be most directly felt and where the potential for disproportionate impacts should be evaluated.

Socioeconomics

Demographic data, including population and economic data, are shown in **Table 18**, which provides an overview of the socioeconomic environment in the ROI. In addition to data for the ROI, **Table 18** includes data for Moon Township and Allegheny County, Pennsylvania, for comparative purposes and to demonstrate larger trends in the region. Although all census tracts have strong economic characteristics, with generally high median household income and low unemployment, there is a small amount of variability. Census tract 4513, which contains PARS, has the highest median household income and lowest unemployment rate. Census tract 4511.02 has the lowest median household income, but it is still substantially larger than the median household income of Allegheny County.

The population of children under 18 years of age is relatively consistent, with the highest percent in census tract 4513, which contains PARS. No individuals, including children, currently live on PARS. Children are not present in the vicinity of the proposed project sites, as PARS is an active base with secured entry.

While the population of census tract 4511.02 decreased from 2010 to 2022, total population across the region has generally increased at a varying rate since 2010, with the largest increase occurring in census tract 4511.05. The 63.4 percent population increase from 2010 to 2022 in tract 4511.05 is likely due to development of new single family homes approximately 2 miles northwest of PARS.

Table 18: 2022 Socioeconomic Characteristics in the ROI

Location	Total Population	Population Change, 2010-2022	Median Household Income	Unemployment Rate	Population Under 18 Years
Allegheny County, PA	1,245,310	1.8%	\$72,537	4.9%	18.6%
Moon Township, PA	26,938	14.0%	\$101,047	4.3%	19.2%
Census Tract 4513	7,291	7.1%	\$110,982	3.1%	21.1%
Census Tract 4511.02	6,088	-4.0%	\$86,040	3.5%	14.3%
Census Tract 4511.05	5,697	63.4%	\$96,821	7.6%	16.1%

Sources: (US Census Bureau, 2010; 2022d; 2022e)

Public services include fire protection, emergency medical services, law enforcement, schools, libraries, and parks. PARS is located in a suburban area within the metropolitan area of Pittsburgh, although it is considered to be part of Moon Township and would therefore use and rely on the services offered by that township and Allegheny County. There are two fire stations, one emergency services office, one police department, one school, one library, and one park located within 1 mile of PARS.

Environmental Justice

PARS is bordered by Moon Township, a growing suburban community to the north and east, and by the more rural communities of Findlay Township and Independence Township to the west and south, respectively. Some scattered neighborhoods are present north, south, and east of the base. Minority population and income characteristics of the environmental justice ROI are presented in **Table 19**, along with data for Moon Township and Allegheny County, for comparative purposes.

In accordance with the CEQ and IAC environmental justice guidance, no block groups are considered to contain a minority population. No block groups contain a minority population that exceeds 50 percent nor a population that is meaningfully greater than either Moon Township or Allegheny County. The block group with the highest minority population in the ROI is census tract 4511.05, block group 2 (24.9 percent), and while this population is higher than that of the reference community of Moon Township (12.4 percent), it is only slightly higher than that of Allegheny County overall (23 percent). None of the block groups in the ROI contain a low-income population that is substantially higher than surrounding geographies. The only block group that contains any low-income population is census tract 4511.02, block group 3, but this population is lower on a percentage basis than that of Allegheny County. Therefore, no communities with environmental justice concerns, with respect to either minority or low-income populations, are present surrounding PARS.

Table 19: 2022 Minority Population and Income Characteristics of the Environmental Justice ROI

Location	Total Population	Non-Hispanic White Alone (%)	Minority Population (%)	Low-Income Population (%)
Allegheny County, PA	1,212,023	77.0	23.0	11.1
Moon Township, PA	25,384	87.6	12.4	3.3
Census Tract 4513, Block Group 6	1,233	100.0	0.0	0.0
Census Tract 4511.02, Block Group 3	2,170	96.5	3.5	6.5
Census Tract 4511.05, Block Group 1	2,105	91.9	8.1	0.0
Census Tract 4511.05, Block Group 2	820	75.1	24.9	0.0

Source: (US Census Bureau, 2022a; 2022b; 2022c)

The CEQ has also developed a Climate and Economic Justice Screening Tool (CEJST) to identify census tracts that are considered overburdened and underserved based on a combination of burden and socioeconomic thresholds. According to CEJST data, neither the census tract PARS is in, nor the surrounding census tracts discussed above are considered disadvantaged (CEQ, 2023a).

3.10.2 ENVIRONMENTAL CONSEQUENCES

A socioeconomic impact would be significant if it would 1) substantially alter the location and distribution of the local population, or 2) change current economic conditions in the ROI in a way that would be notable and harmful for surrounding communities and residents. An environmental justice impact would be significant if it would result in disproportionate and adverse human health and environmental impacts, or exposures to environmental risks, on minority or low-income populations.

The total population under 18 years of age in the ROI is similar to the proportion in Moon Township and Allegheny County. There are several childcare facilities within the ROI, however, children would not be

permitted near any active construction site, and all sites would be secured to prevent unauthorized or accidental access. With site monitoring and access controls in place, and standard air quality controls in place, the Preferred Alternative would not have the potential to disproportionately impact children off-base. Therefore, protection of children does not warrant special considerations under EO 13045 for this Proposed Action, and this resource is dismissed from further analysis.

3.10.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Socioeconomics

Implementation of the Preferred Alternative would require construction, demolition, and paving work, resulting in negligible temporary benefits for local contractors who would be hired to perform this work. In the long-term, about 27 new personnel would be stationed at PARS to support the Cyber Squadron; this increase would be marginal compared the existing number of personnel at PARS. Public community and emergency services would not be impacted during construction; during operation, these services would not be diminished, nor would there be an effect on housing availability since the number of personnel at PARS would not change substantially. Therefore, implementation of the Preferred Alternative would result in *short-term, negligible beneficial impacts* on local socioeconomic conditions during construction, and *no impact* in the long-term, during operation.

Environmental Justice

Implementation of the Preferred Alternative would *not result in disproportionate and adverse impacts*, since no communities with environmental justice concerns are present in the ROI.

3.10.2.2 ALTERNATIVE 2

Socioeconomics

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. These variations in these projects would not meaningfully alter the anticipated socioeconomic effects. Therefore, Alternative 2 would result in *short-term, negligible beneficial impacts* on local socioeconomic conditions during construction, and *no impact* in the long-term, during operation.

Environmental Justice

Alternative 2 would *not result in disproportionate and adverse impacts*, as no communities with environmental justice concerns are present in the ROI.

3.10.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. There would be *no impact* to existing socioeconomic conditions. The No Action Alternative would *not result in disproportionate and adverse impacts* to communities with environmental justice concerns.

3.11 TRANSPORTATION

This section describes the existing vehicular transportation network located at and surrounding PARS. Mass transit, bicycle, and pedestrian infrastructure are not addressed as this infrastructure is not present on the base, therefore the Preferred Alternative would not meaningfully impact them.

The ROI for transportation consists of the base road network and roadways providing access to PARS, including Coraopolis Heights Road and Airport Parkway (BL-376).

3.11.1 AFFECTED ENVIRONMENT

PARS is bordered to the east by Airport Parkway (BL-376) and can be accessed via the Thorn Run Road interchange. Average annual daily traffic (AADT) was approximately 10,300 vehicles per day southbound at the interchange in 2023 and 17,600 vehicles per day northbound at the interchange. Local traffic can access the base via Coraopolis Heights Road. AADT at Coraopolis Heights Road was approximately 2,300 vehicles per day in 2023 (PennDOT, 2024). There are approximately 1,200 total Air Force Reserve members stationed at PARS. The base also employs approximately 350 DoD civilians and 100 contractors (PARS, 2024).

The main gate on Defense Avenue is the only permanent entrance to PARS. Defense Avenue is the main throughfare, providing a route from the main gate on the northeast boundary of the base towards facilities located to the south. There are a limited number of roads on base due to space constraints; as such, direct routes are not available between some facilities. Some intersections also require vehicles to make acute turns, which limits the types of vehicles that can access certain areas of the base.

There are an estimated 1,469 total parking spaces at PARS. Studies have indicated that the number of parking spaces on base is adequate; however, there is occasionally building-specific congestion (AFRC, 2021).

3.11.2 ENVIRONMENTAL CONSEQUENCES

A transportation impact would be significant if the associated increase in construction- or operation-related traffic would exceed the existing capacity of vehicular transportation networks or contribute to a noticeable degradation of existing traffic conditions.

3.11.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Construction and demolition occurring under the Preferred Alternative would result in temporary increases in construction-related traffic to PARS that would include workers' personal commuting vehicles and heavy construction vehicles. To manage construction-related traffic, the contractor would implement and adhere to a project-specific transportation management plan for each proposed project. Because each project site is located within PARS, no lane closures on public roadways outside of the base would occur.

Temporary on-base road closures and detours may be required to facilitate the demolition of B206, B208, B209, B210, B403, and B405 and the construction of the communications facility. Parking for construction vehicles and personal commuting vehicles would be made available at or surrounding each project site, so workers would not fill up spaces in nearby parking lots that are needed for base personnel. Overall increases in traffic near the project sites from construction vehicles would be temporary and within the capacity of the on-base roadways; these roads are not publicly accessible and construction traffic is not anticipated to impede or prevent the flow of traffic at PARS or outside of the base. Therefore, construction and demolition would have *short-term, less-than-significant adverse impacts* on transportation.

Once construction of the Preferred Alternative is complete, there would be additional parking for base personnel available at the existing locations of B208, B209, B210, B403, and around B414. The munitions access road would provide a safer, more direct route for transporting munitions between B317 (Munitions Maintenance and Inspection) and B425 (Munitions Storage) because it would reduce the number of trips on other base roadways and improve vehicle circulation for on-base operations. The construction of the

B414 hangar access road would also eliminate the need for vehicles to navigate an acute turn at the intersection of Sabre Street and Parking Lot M, which would ensure that larger trucks and vehicles with trailers can access B414. Overall, the Preferred Alternative would have a *long-term, beneficial impact* on transportation after construction is complete. Due to the total number of personnel on-base, the effect of about 27 new personnel on-base with respect to traffic conditions would be negligible.

3.11.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Transportation impacts from Alternative 2 would be about the same as for Alternative 1, except that slightly less new parking would be constructed because B403 would remain in place. Therefore, Alternative 2 would have *short-term, less-than-significant adverse impacts* to transportation during construction. Alternative 2 would have *long-term, beneficial impacts* to transportation after construction is complete.

3.11.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. Impacts on transportation associated with the construction and demolition activities of the Preferred Alternative, as well as the addition of about 27 new personnel on-base, would not occur. However, no additional parking would be added on base, and the munitions access road and B414 hangar access road would not be constructed to improve vehicle circulation. Therefore, there would be continued *long-term, less-than-significant adverse impacts* to transportation associated with the No Action Alternative.

3.12 SAFETY, HEALTH, AND HAZARDOUS AND TOXIC MATERIALS AND WASTE

This section describes the use and presence of hazardous materials and the generation of hazardous waste at PARS. HTMW are generally defined as materials or substances that pose a risk (through either physical or chemical reactions) to human health or the environment. Regulated hazardous substances are identified through a number of federal laws and regulations. The most comprehensive list is contained in 40 CFR Part 302, and identifies quantities of these substances that, when released to the environment, require notification to a federal government agency. Generally, hazardous wastes are discarded materials or substances (solids or liquids) not otherwise excluded by 40 CFR 261.4 that exhibit a hazardous characteristic (i.e., ignitable, corrosive, reactive, or toxic), or are specifically identified within 40 CFR Part 261. Petroleum products are specifically exempted from 40 CFR Part 302, but some are also generally considered hazardous substances due to their physical characteristics (especially fuel products), and their ability to impair natural resources. Any explosives safety related aspects (e.g., unexploded ordnances, sited locations, etc.) are addressed in AFMAN 91-201 *Explosives Safety Standards* and Defense Explosives Safety Regulations (DESR) 6055.09 Edition 1. The ROI for safety, health, and HTMW includes the immediate vicinity surrounding the project sites on PARS.

The DoD Environmental Restoration Program (DERP) was established to provide for the cleanup of environmental contamination at DoD installations. Eligible DERP sites include those contaminated by past defense activities that require cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), and certain corrective actions required by the Resource Conservation and Recovery Act. Non-DERP sites are remediated under the Compliance-Related Cleanup Program. The DERP is organized into the following program categories: 1) Installation Restoration Program (IRP), 2) Military Munitions Response Program (MMRP), and 3) Building Demolition/Debris Removal.

3.12.1 AFFECTED ENVIRONMENT

Hazardous materials at PARS are used, handled, stored, and managed in accordance with AFMAN 32-7002, *Environmental Compliance and Pollution Prevention, Hazardous Material Management*, Chapters 3 and 5. PARS maintains several planning documents to manage HTMW on the base. The Hazardous Waste Management Plan (HWMP) contains procedures for managing hazardous wastes in accordance with applicable DoD, federal, and state regulations and requirements. PARS also maintains a Spill Prevention, Control, and Countermeasure (SPCC) Plan and a Preparedness, Prevention, and Contingency (PPC) Plan, which are implemented in conjunction with the HWMP to address storage and management of hazardous materials and incident response and emergency responsibilities resulting from spills or discharges of HTMW (PARS, 2022).

PARS is a small quantity generator (SQG) under the Resource Conservation and Recovery Act (RCRA), generating greater than 100 kilograms (kg), but less than 1,000 kg, of hazardous waste each calendar month and accumulating no more than 6,000 kg at any one time (USEPA, 2023a). The base is also an episodic large quantity generator and maintains a 180-day accumulation point for the storage of hazardous wastes before the waste is transported off-site (USACE, 2017).

The operation of aircraft, vehicles, and equipment requires the use of various hazardous materials, including fuels, solvents, lubricants, and caustics. If released, these materials have the potential to harm the environment by impacting air, soil, or water quality. The activity at the base that poses the greatest potential threat to the local environment is the transfer and storage of POL, though the release potential of any substance at PARS is low. Spill prevention and response features in place, such as the SPCC Plan, SWPPP, and regularly scheduled inspections and testing of equipment, have reduced the potential for a release (PARS, 2022).

Explosive safety quantity distance (ESQD) arcs exist around facilities that provide space for the maintenance, inspection, and storage of munitions on base. The ESQD arc distances are identified in AFMAN 91-201, *Explosive Safety Standards*. The predetermined distance is based on limiting the damage in the unlikely event of a mishap. ESQD arcs place restrictions on uses surrounding munitions storage areas, hot cargo pads, and other areas to ensure that a safe distance is provided where explosions may occur. The current mission at PARS requires daily maintenance and inspection of munitions and routine transportation of munitions.

IRP sites are locations where hazardous materials were spilled or released and subsequently cleaned up and investigated for contamination. All seven IRP sites at PARS have been closed since 2002 and no longer represent a threat to human health or the environment (AFRC, 2015). None of the IRP sites are located within the proposed project sites.

Any buildings at PARS constructed in or before the 1980s may have ACM present. ACM may be present in insulation, flooring, roofing, and other construction materials manufactured before most uses of asbestos were banned in 1989. Previous surveys have identified ACM in B206, B208, B209, B201, B403, and B405.

Buildings constructed before the 1980s may also contain lead-based paint (LBP). Demolition or abatement activities involving LBP must be conducted by properly trained personnel, as improper removal of LBP may result in paint chips and dust, which can contaminate a structure and surrounding soil.

Finally, some facilities at PARS contain mold due to past water damage and existing structural issues. For example, mold has grown in B210 because of excess condensation from heating and air conditioning pipes. B405 is also known to contain mold.

3.12.2 ENVIRONMENTAL CONSEQUENCES

A safety, health, or HTMW impact would be significant if it would 1) interrupt, delay, or impede ongoing cleanup efforts; or 2) create new or substantial human or environmental safety or health risks (e.g., soil or groundwater contamination).

3.12.2.1 ALTERNATIVE 1 – PREFERRED ALTERNATIVE

Implementation of the Preferred Alternative at PARS would not add any new hazardous materials that exceed the base's current hazardous waste management capacity. PARS would continue to be classified as a SQG and generate hazardous wastes during various operation and maintenance activities. Existing procedures for the centralized management of the procurement, handling, storage, and issuance of hazardous materials are adequate to accommodate the Preferred Alternative.

Operation of construction equipment and vehicles under the Preferred Alternative would create the potential for discharge, spills, and contamination from commonly used products, such as diesel fuel, gasoline, oil, antifreeze, and lubricants, at the proposed project sites. Even without major release events, multiple minor releases could have potential effects to the environment within the ROI; however, such releases would be addressed via adherence to the SPCC Plan. All hazardous materials or waste discovered, generated, or used during construction would be handled, containerized, and disposed of in accordance with the PARS HWMP and applicable local, state, and federal regulations. Construction and demolition would result in a temporary, minor increase in solid waste generated that would not exceed the capacity of offsite facilities. Construction contractors would dispose of non-recyclable demolition debris at an offsite permitted landfill facility. Finally, the Preferred Alternative would have no potential to interfere with any of the IRP sites at PARS as none are located within the project sites. Overall, the Preferred Alternative would have the potential for *short-term, less-than-significant adverse impacts* from HTMW during construction.

Prior to demolishing B206, B208, B209, B210, B403, or B405, a survey for ACM would be completed by a PA Department of Labor and Industry licensed asbestos building inspector. If greater than 160 square feet of ACM is identified in the survey, PARS would obtain a demolition permit from the Allegheny County Department of Health. Any asbestos abatement would be completed by a contractor licensed to perform asbestos abatement in Allegheny County. Buildings would also be surveyed for LBP and mold prior to demolitions, abated of these concerns as appropriate, and demolished in a manner that would minimize any associated potential health risks or spreading of contamination to nearby areas. Abatement and removal of ACM, LBP, and mold would be a *beneficial effect* for the health of personnel on-base.

Following the construction of the munitions access road, vehicles transporting munitions would no longer need to travel long and circuitous routes through the base to access B314 and B425, thus reducing risks from transporting munitions across the airfield and more populated portions of the base. Therefore, there would be *long-term, beneficial impacts* to safety during operation of the Preferred Alternative.

3.12.2.2 ALTERNATIVE 2

Under Alternative 2, all projects would proceed as described in the Preferred Alternative, except B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed. Mold abatement would still occur, if required, in B405. Overall, there would be no meaningful difference in anticipated effects to safety, health, and HTMW compared to Alternative 1. Therefore, Alternative 2 would have *short-term, less-than-significant adverse impacts* from HTMW during construction. Abatement and removal of ACM, LBP, and mold would be a *beneficial effect* for the health of personnel on-base and there would be *long-term, beneficial impacts* to safety due to the use of the munitions access road during the operation of the Preferred Alternative.

3.12.2.3 NO ACTION ALTERNATIVE

Under the No Action Alternative, no new construction or renovations would occur on the base and no buildings would be demolished. HTMW impacts associated with the construction and demolition activities of the Preferred Alternative would not occur. However, the munitions access road would not be constructed, and munitions transportation would continue to occur on a longer, indirect route. Additionally, no abatement and removal of ACM, LBP, or mold would occur. Therefore, there would be continued *less-than-significant adverse impacts* to safety and the health of personnel on-base associated with the No Action Alternative

4.0 CUMULATIVE IMPACTS

4.1 INTRODUCTION

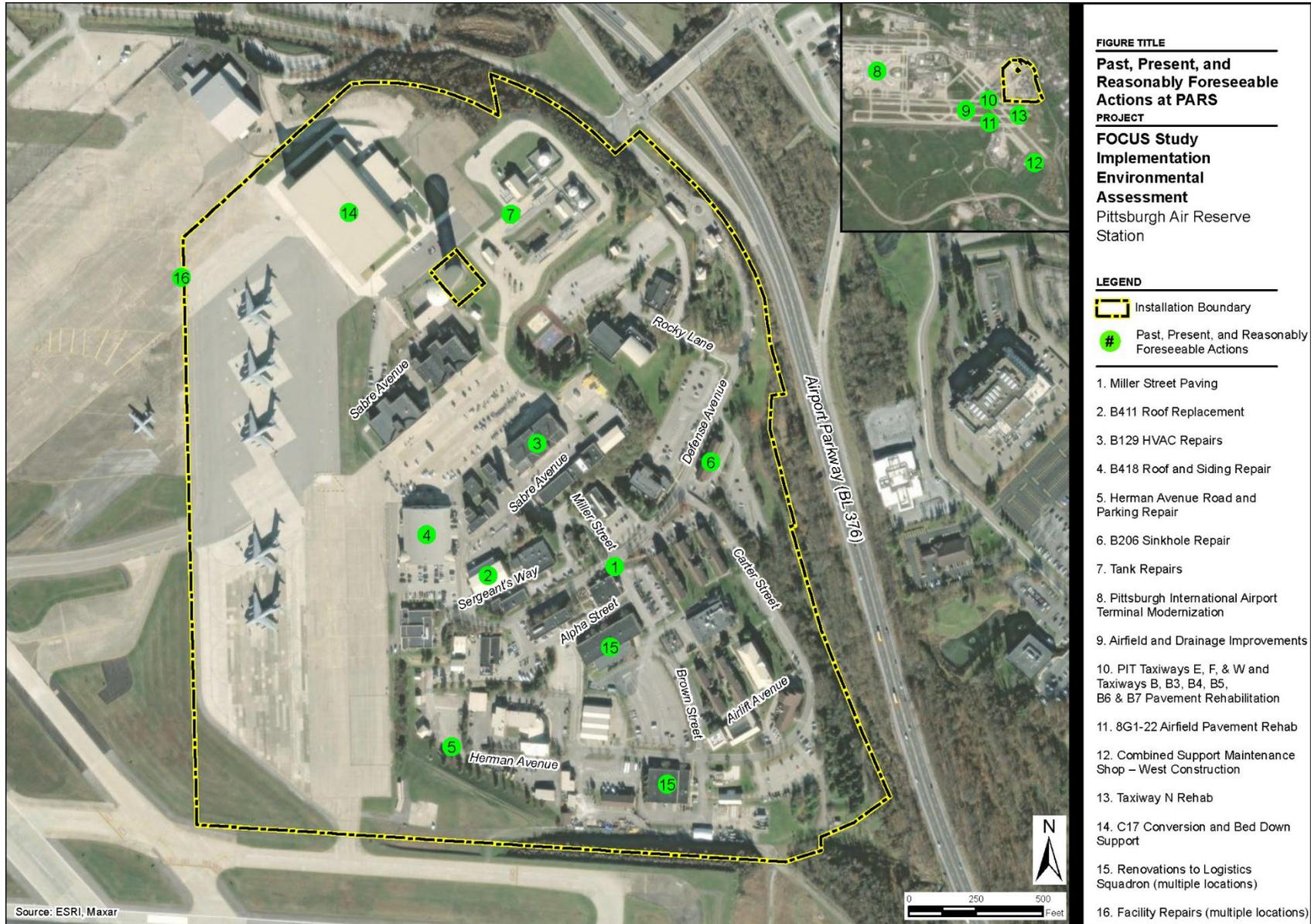
CEQ regulations define a cumulative impact as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions” (40 CFR 1507.7). Therefore, cumulative impacts can be viewed as the total combined impacts on the environment of the Proposed Action and alternatives and other known or reasonably foreseeable actions. The AFRC identified and reviewed past actions within five years, as well as present and reasonably foreseeable actions that have or are planned to occur within the Proposed Action’s ROI, including PARS and the surrounding off-base areas. The AFRC analyzed the potential for the Proposed Action and alternatives to have cumulative effects with these other actions. These projects are listed in **Table 20** and depicted on **Figure 7**.

Table 20: Past, Present, and Reasonably Foreseeable Actions at PARS

Project Name	Project Type	Description
1. Miller Street Paving	Transportation	Miller Street, Defense Avenue, and Alpha Street will be milled and overlaid with an allowance for full depth repair of less than 10 percent of the project area. No changes to route or grade are planned. Work is expected to begin June 2024.
2. B411 Roof Replacement	Institutional	Low bay and office roof of B411 will be replaced due to persistent leaks. Work is expected to begin May 2024.
3. B129 HVAC Repairs	Institutional	Humidification is being added to B129. Work is expected to be completed by Fall 2024.
4. B418 Roof and Siding Repair	Institutional	The central barrel roof of B418 will be recoated and the siding will be replaced. The east and west wings of the facility will be getting a full roof replacement.
5. Herman Avenue Road and Parking Repair	Transportation	Herman Avenue, the Herman Parking Lot, and Defense Avenue will be milled and overlaid, and sealcoat will be added to the B414 parking lot. No full depth repair is anticipated. The project will be completed in Fall 2024.
6. B206 Sinkhole Repair	Infrastructure	A sink hole formed around a stormwater underground detention feature near B206. There are no signs of infiltration into stormwater main or waterways. The area will be excavated and repaired in FY24.
7. Tank Repairs	Institutional	Repairs to ASTs in the base’s POL yard are planned to address deficiencies found during the last in-service inspection. Tank 101 will be lifted, and repairs will be made to the liner and containment with an out-of-service inspection and in-service inspection done. Tank 104 and Tank 105 will have minor repairs to containment and safety features such as guard rails and an in-service inspection. The project is currently underway and will be completed in FY25.
8. Pittsburgh International Airport Terminal Modernization	Commercial/ Institutional	Construction is currently underway at Pittsburgh International Airport to consolidate check-in, ticketing, security, and baggage operations in one new terminal. The project is located approximately 1.8 miles west of PARS. The new terminal is expected to be complete in 2025.

Project Name	Project Type	Description
9. Airfield and Drainage Improvements	Transportation	The drainage network that drains the infields located between PIT taxiways F1 and F4 was reconfigured. Construction was completed in 2022.
10. PIT Taxiways E, F, & W and Taxiways B, B3, B4, B5, B6 & B7 Pavement Rehabilitation	Transportation	PIT taxiways E, F, and W in the southern portion of the airfield and taxiways B, B3, B4, B5, B6 & B7 in the northwest portion of the airfield were rehabilitated. Construction began in 2021 and was completed in 2023.
11. 8G1-22 Airfield Pavement Rehab	Transportation	Rehabilitation and localized maintenance activities were completed on PIT Runway 10R-28L and Taxiways F4, F5, W, and P within the runway safety area. Maintenance activities included crack sealing, partial and full depth patching, spall repairs, and slab replacements. The project was completed in 2023.
12. Combined Support Maintenance Shop – West Construction	Institutional	An approximately 49,000 SF military equipment maintenance facility and related storage buildings, parking areas, roads, sidewalks, utilities, and aboveground fuel storage tank with two connected dispensers will be constructed 0.8-mile south of PARS. A 0.1-acre solar canopy will also be constructed as part of the project. Construction is anticipated to begin in late 2024 and will be completed in late 2026.
13. Taxiway N Rehab	Transportation	The Taxiway N Rehab project consisted of the removal and replacement of concrete and bituminous pavement on Taxiway N at various locations including N1 (adjacent to Runway 28R only), N3, N4, N6, and N8. The work included the replacement of full and partial distressed concrete slabs on the taxiway and the shoulder, milling and overlaying asphalt pavements, concrete joint sawing and resealing, crack sealing, and partial depth spall repairs. The work was completed in 2020.
14. C17 Conversion and Bed Down Support	Institutional	The C-17 Conversion and Bed Down Support project consisted of remodeling and modifications to various buildings across PARS, including occupant movements to support mission change. Buildings affected were largely Maintenance (B129, B416, B425, B417, B418), and Flight Support (B411, B125). B414 was constructed and the North parking Apron was acquired. Renovations and upgrades to the POL complex and Military Fuel Service Station were also included in the project. Construction for all stages was completed in 2023.
15. Renovations to Logistics Squadron	Institutional	Renovations were completed in B320 and clothing issue facilities, as well as parts storage in B312. Renovations were completed in 2019.
16. Facility Repairs	Institutional	From 2018 through 2024 multiple projects were undertaken to repair facilities and equipment at PARS. These projects included road and apron pavement repairs, HVAC systems repairs, sanitary sewer repairs, roof and siding repairs, fencing installation, and aircraft apron lighting repairs.

Figure 7: Past, Present, and Reasonably Foreseeable Actions at PARS



4.2 EVALUATION OF CUMULATIVE EFFECTS

Cumulative impacts would be significant if impacts from the Proposed Action in conjunction with impacts of other past, present, and reasonably foreseeable actions meet the resource-specific thresholds of significance outlined in **Section 3.0. Table 21** discusses potential cumulative impacts that could occur from implementation of the Preferred Alternative and past, present, and reasonably foreseeable actions. No significant cumulative impacts are anticipated as a result of the Preferred Alternative. Potential cumulative effects under Alternative 2 would generally be the same as under Alternative 1, but slightly less due to the fewer demolition and construction activities; as such, no significant cumulative impacts are anticipated as a result of Alternative 2.

Table 21: Potential Cumulative Impacts by Resource Area

Resource Area	Potential for Significant Cumulative Impacts?	Rationale
Air Quality	No	Construction of the Preferred Alternative and past, present, and reasonably foreseeable actions would generate air emissions from the use of construction equipment and vehicles. However, construction emissions would be temporary and would not exceed regulatory thresholds or threaten the attainment status of the region. Additionally, project-specific compliance with state and federal permitting requirements and implementation of BMPs would further minimize air emissions. Operational emissions from the Preferred Alternative would result in a long-term, less-than-significant impact due to the operation of space heating equipment and a new emergency generator at the communications facility. Other past, present, and reasonably foreseeable projects would not result in long-term emissions; therefore, cumulative air quality impacts would be <i>short-term and less-than-significant</i> .
Climate	No	Construction of the Preferred Alternative and past, present, and reasonably foreseeable actions would collectively contribute to GHG emissions through the consumption of energy, use of construction materials, and operation of vehicles and equipment. However, while these projects would cumulatively contribute to GHG emissions on PARS, they would not increase the vulnerability of the ROI, or nearby properties, to the effects of climate change. Because GHG emissions from the Preferred Alternative are well below the insignificance threshold, the cumulative impact to GHG emissions and climate change is expected to be <i>less-than-significant</i> .
Noise	No	Construction of the Preferred Alternative and past, present, reasonably foreseeable actions would increase noise levels in the ROI. Construction noise is typically considered a minor annoyance, due to its temporary nature. In addition, noise impacts from construction equipment are generally limited to a 0.2-mile buffer as noise attenuates quickly in the ambient environment. While an increase in temporary noise would be experienced by those in the surrounding areas, and primarily on PARS, collective noise would not substantially contribute to the existing soundscape already dominated by the PIT airfield. Through project specific BMPs, the AFRC would ensure the Preferred Alternative's cumulative impact on noise when considered with other past, present, and reasonably foreseeable actions is minimized to the greatest extent practicable. Therefore, cumulative noise impacts would be <i>short-term and less-than-significant</i> .

Resource Area	Potential for Significant Cumulative Impacts?	Rationale
Earth Resources	No	The Preferred Alternative and past, present, and reasonably foreseeable actions would not appreciably alter geological or topographic conditions in the ROI. Bedrock is not expected to be encountered, and grading would not meaningfully impact topography or surface drainage and runoff patterns in the ROI. Construction under the Preferred Alternative would disturb soils and create the potential for runoff and erosion. However, through adherence to BMPs and preparation of a SWPPP, PARS would ensure the Preferred Alternative's cumulative impact on soils when considered with other past, present, and reasonably foreseeable actions is minimized to the greatest extent practicable. Therefore, cumulative impacts would be <i>less-than-significant</i> .
Water Resources	No	The Preferred Alternative and past, present, and reasonably foreseeable actions would result in impacts on surface waters from erosion and sedimentation; however, AFRC would ensure cumulative impacts are minimized to the extent practicable through project-specific adherence to BMPs and a SWPPP. Additionally, impacts to the impairment status of Meeks Creek would be negligible and the Preferred Alternative would repair existing stormwater infrastructure to prevent future erosion and sedimentation. Therefore, cumulative impacts would be <i>less-than-significant</i> .
Biological Resources	No	The Preferred Alternative and past, present, and reasonably foreseeable actions would result in impacts to vegetation and wildlife associated with construction and development. However, the Proposed Action and past, present, and reasonably foreseeable actions are not anticipated to substantially reduce any regionally or locally important habitat or general wildlife species. Further, the areas in which past, present, or reasonably foreseeable actions have or would occur are generally already disturbed or in previously developed areas surrounded by urban and suburban development. Therefore, cumulative impacts on biological resources would be <i>less-than-significant</i> .
Cultural Resources	No	The Proposed Action would have no effect on cultural resources; therefore, there would also be <i>no cumulative effect</i> on cultural resources.
Utilities	No	Construction of the Preferred Alternative and past, present, and reasonably foreseeable actions would not increase utility demand at PARS and would repair existing stormwater infrastructure. Service disruptions to utilities during construction of the Preferred Alternative and other actions would be temporary and not affect off-base users. Therefore, cumulative impacts would be <i>less-than-significant</i> .
Socioeconomics & Environmental Justice	No	In the short term, the Preferred Alternative, when taken in consideration with past, present and reasonably foreseeable actions, would result in <i>cumulative beneficial impacts</i> on the local economy. Collective expenditures by temporary and permanent workforces would benefit local accommodation, food, and retail industries, as well as local fiscal benefits from associated sales tax revenues. No communities with environmental justice concerns, with respect to either minority or low-income populations, are present surrounding PARS; therefore, there would be <i>no cumulative effect</i> on communities with environmental justice concerns.

Resource Area	Potential for Significant Cumulative Impacts?	Rationale
Transportation	No	Construction activities associated with the Preferred Alternative and other actions would result in an increase in construction-related traffic on roadways surrounding PARS. Overall increases in traffic near the project sites from construction vehicles would be temporary and within the capacity of both on-base and off-base roadways. AFRC would implement project-specific traffic control plans to ensure construction traffic would not impede or prevent the flow of traffic at PARS or outside of the base. Past, present, and reasonably foreseeable transportation projects generally involve re-paving, which would improve existing roadways but would not affect the road network on-base. Therefore, cumulative effects would be <i>less-than-significant</i> .
Safety, Health, and Hazardous and Toxic Materials and Waste	No	Construction activities associated with the Preferred Alternative and other actions could result in potential discharge, spills, and contamination, as well as encounters with unexpected hazardous materials. Any construction activities requiring ground disturbance could expose previously unknown sources of hazardous materials. Proper permitting and compliance procedures would be in place to prevent exposure and the spread of any identified contamination. Abatement and removal of ACM, LBP, and mold would be a beneficial effect for the health of personnel on-base and there would be long-term, beneficial impacts to safety due to the use of the munitions access road during the operation of the Preferred Alternative. Overall, cumulative effects would be <i>less-than-significant</i> .

5.0 LIST OF PREPARERS

5.1 AIR FORCE AND FAA PREPARERS

Name	Role	Organization
Robert Barbish	Engineering Chief	911th AW
Jessica Brooks	Environmental Engineer	911th AW
Tom Forsyth. P.E.	Base Civil Engineer	911th AW
Sarah Ross	Environmental Engineer and Project Manager	911th AW
John Tower	Environmental Chief	911th AW
Heather Davis-Jenkins	Environmental Protection Specialist	FAA

5.2 AECOM PREPARERS

Name	Role	Degree	Years of Experience
Carrie Kyzar	Quality Assurance/Quality Control	M.S. in Environmental Management B.S. in Environmental Science	22
Michael Busam	Project Manager, EA preparation	B.S. in Environmental Science and Policy	9
Allison Carr	Preparation of EA sections	Master of City Planning B.A. in Geography	5
Tara Boyd	Preparation of EA sections	B.A. in Environmental Sciences	3
Evan Dodd	Preparation of Figures	B.S. in Environmental Sciences B.S. in Marine Biology	1
Sam Hartsfield	Preparation EA sections and air quality analysis	M.S. in Environmental Science and Management B.S. in Biology	15
KayLee Lavery	Preparation of EA sections	B.S. in Environmental Science and Sustainability	8

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APPENDIX A:
CONSULTATION WITH FEDERAL, STATE, AND LOCAL AGENCIES

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AGENCY DISTRIBUTION LIST

Federal Agencies

Federal Aviation Administration

Eastern Regional Office
1 Aviation Plaza
Jamaica, NY 11434
POC: Andrew Brooks, Regional Environmental
Program Manager
Email: Andrew.brooks@faa.gov

U.S. Army Corps of Engineers

Pittsburgh District
1000 Liberty Ave, Ste 2200
Pittsburgh, PA 15222
Email: Regulatory.Permits@usace.army.mil

U.S. Department of Agriculture, Natural Resources Conservation Service

Pennsylvania State Office
359 East Park Drive, Suite 2
Harrisburg, PA 17111
POC: Denise Coleman, State Conservationist
Email: denise.coleman@usda.gov

U.S. Department of the Interior

Office of Environmental Policy and
Compliance
Philadelphia Region
Custom House, Room 244
200 Chestnut Street
Philadelphia, PA 19106
POC: John Nelson, Regional Environmental
Officer

U.S. Environmental Protection Agency

Region 3 Office
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852
POC: Adam Ortiz, Regional Administrator
Email: Ortiz.Adam@epa.gov

U.S. Fish and Wildlife Service

Pennsylvania Ecological Services Field Office
110 Radnor Road, Suite 101
State College, PA 16801-7987
Email: IR1_ESPenn@fws.gov

State Agencies

Pennsylvania Department of Conservation and Natural Resources

Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17105
POC: Cindy Adams Dunn, Secretary

Pennsylvania Department of Environmental Protection

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222
POC: Jim Miller, Regional Director
Email: jamesmill@pa.gov

Pennsylvania Department of Transportation

District 11 Office
45 Thoms Run Road
Bridgeville, PA 15017

Pennsylvania Game Commission

Southwest Region
4820 Route 711
Bolivar, PA 15923
POC: Jason D. Farabaugh, Director

**Pennsylvania Historical and Museum
Commission**

State Historic Preservation Office
Commonwealth Keystone Building, Second
Floor
400 North Street
Harrisburg, PA 17120-0093
POC: Andrea MacDonald, State Historic
Preservation Officer
Email: amacdonald@pa.gov

Local Agencies

Allegheny County

542 Forbes Avenue
Pittsburgh, PA 15219
POC: Sara Innamorato, County Executive
Email: web.comm@alleghenycounty.us

**Allegheny County Airport Authority
Pittsburgh International Airport**

Landside Terminal, 4th Floor Mezzanine
P.O. Box 12370
Pittsburgh, PA 15231
POC: Chad A. Willis, Director, Planning
Email: info@flypittsburgh.com

Moon Township

Municipal Building
1000 Beaver Grade Road
Moon Township, PA 15108
POC: Scott Brillhart, Assistant Township
Manager & Planning Director
Email: moontwp@moontwp.com;
sbrilhart@moontwp.us



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND

20May2024

MEMORANDUM FOR See attached Agency Distribution List

FROM: 911th Airlift Wing
Pittsburgh International Air Reserve Station
2475 Defense Avenue
Coraopolis, PA 15108

SUBJECT: Preparation of an Environmental Assessment for Implementation of the Facilities Operations Capability and Utilization Survey Study at Pittsburgh Air Reserve Station

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts resulting from the implementation of 11 projects from the PARS Facilities Operations Capability and Utilization Survey (FOCUS) Study (Proposed Action). PARS is the home station of the AFRC's 911th Airlift Wing (AW), whose mission is to organize, recruit, and train Air Force Reserve personnel to provide strategic airlift of airborne forces, their equipment and supplies, and delivery of these forces and materials by air. The FOCUS study was conducted to document space utilization and assess the condition of AFRC facilities at PARS, and recommended projects AFRC should implement to improve its use of the space and facilities on the installation, including the 11 projects described below. As such, the purpose of the Proposed Action is to provide suitable facilities necessary to achieve the 911th AW's mission and achieve more optimal configuration of those facilities. The Proposed Action is needed because aging facilities and infrastructure are no longer able to support their originally planned uses, and existing buildings do not support sizes and layouts needed for mission operations, training activities, and airfield operations.

The 11 proposed projects included in the Proposed Action are located throughout the installation (see **Attachment 1**) and described below:

Renovate Building (B) 226 for Consolidated Wing Training Facility

This project would consist of an approximately 29,000 square foot (SF) interior renovation of B226 for training and consolidated Wing functions. The renovation would include the demolition of all interior non-load bearing walls and the construction of all supporting utilities, pavements, and landscaping, as well as interior and exterior communications infrastructure. Renovation of the building would improve operations and maintenance, upgrade substandard training facilities, and improve energy efficiency.

Demolish B208, B209, and B210 and Construct Parking

B208, B209, and B210 would be demolished, including facility, basement, and foundation components. The site would then be regraded for conversion into a parking area for the newly renovated B226.

Demolish B403 and Construct Parking

B403 would be demolished, and a new parking area would be constructed in the building's place. Current building operations would be moved to the renovated Consolidated Wing Training Facility.

Demolish B405 and Construct Communications Facility

The proposed Communications Facility would be a new, approximately 23,000 SF building constructed for the Communications Squadron. The new facility would accommodate approximately 27 new personnel. The existing Communications Facility housed in B405 lacks the space to support additional growth and fulfill existing mission requirements. B405 would be demolished and converted to parking for the new facility.

Repair Storm Sewer and Outfalls

Approximately 360 linear feet of damaged metal corrugated pipe leading to two outfalls would be removed and replaced with a new watertight plastic pipe. A new manhole and catch basin would also be installed and approximately 800 square feet of riprap would be removed. The existing damaged pipe is causing soil erosion and loss of bank stability in this location.

Demolish B206

B206, a two story stick framed building that served as a former lodging facility, would be demolished. The building's parking lot would also be removed, and the site would be regraded, seeded as a lawn, and stabilized. Demolition of the building would reduce operation and maintenance costs.

Construct Munitions Access Road

A new access road would be constructed between [REDACTED] for transporting munitions. Construction would include installing an asphalt drive and concrete curbs as well as a block retaining wall. The project would also require site clearing, preparation, and grading. The current route for transporting munitions is inefficient and runs through the main base.

B414 Hangar Access Road and Parking

A new roadway and retaining wall would be constructed for efficient access to B414. The project would require site clearing and preparation, new striping, and the installation of a new security fence along the north and west sides of the hangar. The project would also include installation of necessary stormwater drainage for the roadway and installation of a new dumpster enclosure.

Construct Liquid Oxygen (LOX) Storage Facility

A new LOX Storage facility would be constructed to replace the existing storage located in B5519 for safety purposes. Work would include the construction of three masonry and metal panel walls with an overhang to accommodate the storage of two 3,000-gallon LOX tanks.

Construct LOX Equipment Storage Shelter

A LOX support equipment parking shelter would be constructed to comply with Air Force technical requirements.

Construct Aerospace Ground Equipment (AGE) Covered Storage Facility

A new covered parking structure would be constructed for AGE. The project would also add weatherproof lighting and electrical systems. This project would primarily protect flightline ready AGE from direct weather impacts.

The EA will analyze the potential range of environmental impacts that could result from the Proposed Action (i.e., the Preferred Alternative) and the No Action Alternative. The Preferred Alternative includes the implementation of the 11 projects summarized above. The No Action Alternative, which reflects the status quo, will also be considered as a benchmark against which potential effects of the Proposed Action can be evaluated.

The EA will be prepared in compliance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code 4321, et seq.), the Council on Environmental Quality NEPA Implementing Regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508), and the Air Force Environmental Impact Analysis Process (32 CFR 989).

This memorandum is being sent as part of the scoping process for the EA. Please provide written comments or information regarding the action or potential areas of environmental impact at your earliest convenience but no later than 30 days from the receipt of this memorandum. Please submit your comments electronically to: Ms. Sarah Ross, Environmental Engineer, at sarah.ross.11@us.af.mil. Also enclosed is a list of those federal, state, and local agencies that have been included in this scoping process (see **Attachment 2**).

Sincerely,

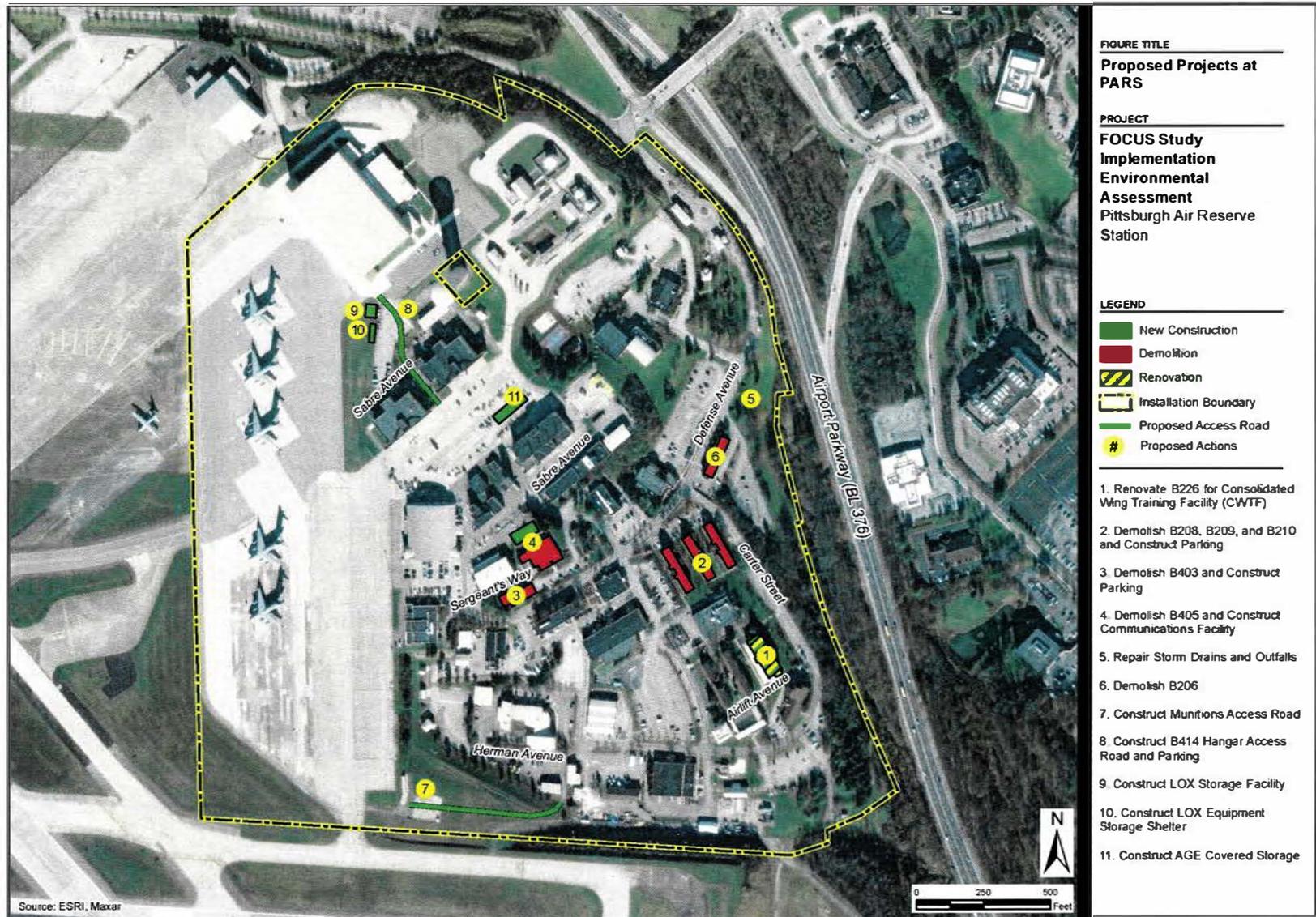


THOMAS FORSYTH, P.E.
Base Civil Engineer

Attachments:

1. Project Location Map
2. Agency Distribution List

Attachment 1: Project Location Map



Attachment 2: Agency Distribution List

Federal Agencies

Federal Aviation Administration

Eastern Regional Office
1 Aviation Plaza
Jamaica, NY 11434
POC: Andrew Brooks, Regional
Environmental Program Manager
Email: Andrew.brooks@faa.gov

U.S. Army Corps of Engineers

Pittsburgh District
1000 Liberty Ave, Ste 2200
Pittsburgh, PA 15222
Email: Regulatory.Permits@usace.army.mil

U.S. Department of Agriculture, Natural Resources Conservation Service

Pennsylvania State Office
359 East Park Drive, Suite 2
Harrisburg, PA 17111
POC: Denise Coleman, State
Conservationist
Email: denise.coleman@usda.gov

U.S. Department of the Interior

Office of Environmental Policy and
Compliance
Philadelphia Region
Custom House, Room 244
200 Chestnut Street
Philadelphia, PA 19106
POC: John Nelson, Regional Environmental
Officer

U.S. Environmental Protection Agency

Region 3 Office
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852
POC: Adam Ortiz, Regional Administrator
Email: Ortiz.Adam@epa.gov

U.S. Fish and Wildlife Service

Pennsylvania Ecological Services Field
Office
110 Radnor Road, Suite 101
State College, PA 16801-7987
Email: IR1_ESPenn@fws.gov

State Agencies

Pennsylvania Department of Conservation and Natural Resources

Rachel Carson State Office Building
400 Market Street
Harrisburg, PA 17105
POC: Cindy Adams Dunn, Secretary

Pennsylvania Department of Environmental Protection

Southwest Regional Office
400 Waterfront Drive
Pittsburgh, PA 15222
POC: Jim Miller, Regional Director
Email: jamesmill@pa.gov

Pennsylvania Department of Transportation

District 11 Office
45 Thoms Run Road
Bridgeville, PA 15017

Pennsylvania Game Commission

Southwest Region
4820 Route 711
Bolivar, PA 15923
POC: Jason D. Farabaugh, Director

**Pennsylvania Historical and Museum
Commission**

State Historic Preservation Office
Commonwealth Keystone Building, Second
Floor
400 North Street
Harrisburg, PA 17120-0093
POC: Andrea MacDonald, State Historic
Preservation Officer
Email: amacdonald@pa.gov

Local Agencies

Allegheny County

542 Forbes Avenue
Pittsburgh, PA 15219
POC: Sara Innamorato, County Executive
Email: web.comm@alleghenycounty.us

**Allegheny County Airport Authority
Pittsburgh International Airport**

Landside Terminal, 4th Floor Mezzanine
P.O. Box 12370
Pittsburgh, PA 15231
POC: Chad A. Willis, Director, Planning
Email: info@flypittsburgh.com

Moon Township

Municipal Building
1000 Beaver Grade Road
Moon Township, PA 15108
POC: Scott Brilhart, Assistant Township
Manager & Planning Director
Email: moontwp@moontwp.com;
sbrilhart@moontwp.us

FW: Pittsburgh Air Reserve Station Project Review Request -- Pennsylvania Department of Environmental Protection

Hepler, Stephen <shepler@pa.gov>

Tue 5/21/2024 7:48 AM

To: Carr, Allison <Allison.Carr@aecom.com>

Cc: sarah.ross.11@us.af.mil <sarah.ross.11@us.af.mil>; Rabinowitz, Geoffrey <Geoffrey.Rabinowitz@AlleghenyCounty.US>; Holt, Allason <Allason.Holt@AlleghenyCounty.US>; Conley, Cali M. <Cali.Conley@AlleghenyCounty.US>; Halloran, Kevin <khalloran@pa.gov>; Gorog, Mark <mgorog@pa.gov>; Krueger, John <jkrueger@pa.gov>; Miller, James E. <jamesmill@pa.gov>

 1 attachments (876 KB)

20240520_PARS_LetterToAgencies.pdf;

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Good morning. I hope that all is well.

I'm writing to make you aware that your communication (below) and letter (attached) have been forwarded to the Allegheny County Health Department's Air Quality Program. This is the local government agency responsible for regulation of air quality in Allegheny County (i.e., in place of PA DEP). Please be aware that Allegheny County has an ordinance referred to as Article XXI and it includes significant asbestos renovation/demolition regulations. The Allegheny County Health Department implements/enforces Article XXI and the respective federal asbestos NESHAP.

[Air Quality - Allegheny County, PA](#)

[Air Quality Program - Allegheny County, PA](#)

[Asbestos and Abrasive Blasting - Allegheny County, PA](#)

[Regulations and SIPs - Allegheny County, PA](#)

Best regards,

Stephen D. Hepler | Air Quality Program Specialist, CC-P

He/him/his

Department of Environmental Protection

Southwest Regional Office

400 Waterfront Drive | Pittsburgh, PA 15222-4745

Phone: 412.442.4170 | 412.442.4194

www.dep.pa.gov

From little acorns of simple kindness grow mighty oaks of happiness.

From: Hepler, Stephen

Sent: Tuesday, May 21, 2024 7:27 AM

To: Rabinowitz, Geoffrey <Geoffrey.Rabinowitz@AlleghenyCounty.US>; Holt, Allason

<Allason.Holt@AlleghenyCounty.US>; Conley, Cali M. <Cali.Conley@AlleghenyCounty.US>

Cc: Halloran, Kevin <khalloran@pa.gov>; Gorog, Mark <mgorog@pa.gov>; Miller, James E. <jamesmill@pa.gov>; Krueger, John <jkrueger@pa.gov>

Subject: RE: [External] Pittsburgh Air Reserve Station Project Review Request -- Pennsylvania Department of Environmental Protection

Importance: High

Good morning. I hope that all is well.

Please read the communication, below, and the attached letter to agencies. I quickly reviewed the letter and it includes information of future demolition projects (asbestos). The letter includes an Attachment 2: Agencies Distribution List with some local agencies, including Allegheny County (County Chief Executive Sara Innamorato), but I didn't want to assume that this information has reached your program. Please work directly with Allison Carr (AECOM) to address any air quality concerns. Thank you!

Best regards,

Stephen D. Hepler | Air Quality Program Specialist, CC-P

He/him/his

Department of Environmental Protection

Southwest Regional Office

400 Waterfront Drive | Pittsburgh, PA 15222-4745

Phone: 412.442.4170 | 412.442.4194

www.dep.pa.gov

From little acorns of simple kindness grow mighty oaks of happiness.

From: Carr, Allison <Allison.Carr@aecom.com>

Sent: Monday, May 20, 2024 3:29 PM

To: Miller, James E. <jamesmill@pa.gov>

Cc: sarah.ross.11@us.af.mil <sarah.ross.11@us.af.mil>

Subject: [External] Pittsburgh Air Reserve Station Project Review Request -- Pennsylvania Department of Environmental Protection

ATTENTION: *This email message is from an external sender. Do not open links or attachments from unknown senders. To report suspicious email, use the [Report Phishing button in Outlook](#).*

Good afternoon:

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate potential environmental impacts resulting from the implementation of 11 facility and airfield improvement projects at PARS in Pittsburgh, Pennsylvania. On behalf of AFRC, we are seeking input from your agency regarding any information or potential environmental concerns associated with these projects. Please see the attached letter for additional details.

Any comments, concerns, information, or other data you may have regarding these projects should be provided to Ms. Sarah Ross, Environmental Engineer (sarah.ross.11@us.af.mil, cc'd here) within thirty (30) days of receipt of this correspondence.

We look forward to and welcome your participation in this analysis.

Thank you,

Allison Carr AICP

Environmental Planner, Environmental Planning & Permitting

M +1-302-584-6295

allison.carr@aecom.com

AECOM

aecom.com

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FW: Pittsburgh Air Reserve Station, 911th Airlift Wing - EPA Scoping Comments

ROSS, SARAH M CIV USAFR AFRC 911 CIVIL ENGINEER SQ/CEVE <sarah.ross.11@us.af.mil>

Mon 6/24/2024 7:28 AM

To: Busam, Michael <Michael.Busam@aecom.com>; Carr, Allison <Allison.Carr@aecom.com>; Kyzar, Carrie <carrie.kyzar@aecom.com>

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From: Esch, Emma (she/her/hers) <Esch.Emma@epa.gov>

Sent: Thursday, June 20, 2024 5:01 PM

To: ROSS, SARAH M CIV USAFR AFRC 911 CIVIL ENGINEER SQ/CEVE <sarah.ross.11@us.af.mil>

Cc: Witman, Timothy <witman.timothy@epa.gov>; Davis, Jamie <Davis.Jamie@epa.gov>

Subject: [Non-DoD Source] Pittsburgh Air Reserve Station, 911th Airlift Wing - EPA Scoping Comments

You don't often get email from esch.emma@epa.gov. [Learn why this is important](#)

Good Afternoon Ms. Ross,

Thank you for providing notice to the U.S. Environmental Protection Agency (EPA) that the U.S. Air Force Reserve Command (AFRC) and the Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts resulting from the implementation of 11 projects from the PARS Facilities Operations Capability and Utilization Survey (FOCUS) Study. The FOCUS Study was conducted to document space utilization and assess the condition of AFRC facilities at PARS, and recommended projects AFRC should implement to improve its use of the space and facilities on the installation including the 11 projects described in the Scoping Document.

The purpose of the Proposed Project is to provide suitable facilities necessary to achieve the 911th Airlift Wing's mission and achieve more optimal configuration of those facilities. The existing facilities and infrastructure are aging and no longer able to support their originally planned uses.

In accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508), EPA has the following general scoping recommendations for your consideration in the development of the EA:

Alternative Analysis. We recommend developing detailed evaluations of the alternatives considered, including alternative designs and configurations for the 11 proposed individual projects. Such an analysis would include a discussion of the selected projects, a list of sites and actions that have been evaluated, and the reason(s) sites and actions were eliminated from consideration.

Environmental Impacts. The EA should examine the potential direct and indirect impacts of each project on the environment. In addition, mitigation measures for any adverse environmental impacts should be described. Areas that we recommend be addressed are described below.

Climate Change. We recommend that AFRC produce a climate change analysis that considers the potential effects of the project on climate change, including assessing both Greenhouse Gas (GHG) emissions and reductions from the proposed action and the effects of climate change on the proposed action in accordance with [CEQ's climate change guidance](#).

Additionally, EPA recommends using low embodied carbon construction materials to reduce GHG Emissions consistent with the goals of the [Federal Buy Clean Initiative](#).

Air Quality. The EA should identify the attainment status of each National Ambient Air Quality Standards (NAAQS) criteria pollutant and include a general conformity rule analysis according to the guidance provided in Determining Conformity of General Federal Actions to State or Federal Implementation Plans. Under the general conformity rule, reasonably foreseeable direct and indirect emissions associated with all operational and construction activities should be quantified and compared to the de minimis levels in nonattainment or maintenance areas.

We recommend that the EA also include a discussion of current permits, the potential for an increase or decrease of emissions, and potential permits or modifications that may be needed.

Construction and the resulting soil disturbance will produce fugitive dust, which will negatively affect air quality. The EPA recommends the EA include a plan for addressing dust control. We suggest the plan include the level of required or anticipated dust control, control methods, documentation procedures, and accountability processes. In addition, EPA recommends reducing surface disturbance to effectively reduce fugitive dust. Impacts can also be reduced by reclaiming disturbed areas as soon as practicable.

Water Resources. In accordance with the Section 404 of the Clean Water Act, impacts to streams and wetlands should be avoided or minimized. Once a preferred alternative is identified, more detailed information will be needed to assess impacts. As part of this assessment, all aquatic resources on or immediately surrounding the site should be delineated and characterized. The extent of streams should be mapped and wetlands on the site should be delineated according to the 1987 Corps of Engineers Wetlands Delineation Manual (“the 1987 Manual”) and the Regional Supplement.

Please note that if this project involves the discharge of dredged and/or fill material into waters of the United States, a Section 404 Clean Water Act (CWA) permit may be needed from the Army Corps of Engineers and/or state regulatory agency. Be advised that EPA may review such applications pursuant to its responsibilities under CWA Section 404 and may provide comments to the Corps to assure consistency with the CWA Section 404(b)(1) Guidelines (Guidelines) (40 C.F.R. Part 230). A premise of the Guidelines is that no discharge of dredged or fill material may be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation’s waters would be significantly degraded.

The EA should also outline measures to protect surface waters, including erosion and sedimentation control practices during construction and post-construction stormwater management to prevent pollutants and reduce runoff that contributes to flooding. While site-specific best management practices (BMPs) may not be known at this time, general practices (e.g. types of BMPs or monitoring) or requirements that must be met by a selected contractor should be indicated.

Vegetation and Habitat. Based on the Scoping Document, it appears that most of the impacts are proposed in areas previously disturbed for the existing facilities. Where vegetation is removed, we recommend acreage of vegetation clearing or removal be quantified by type (e.g., maintained grass, old field vegetation, shrubs, etc.)

Utilities. The EA would benefit from a discussion of the utilities that will be required for each project (electric, water, sewer, etc.) This would include a discussion of the capacity of existing infrastructure, whether construction or upgraded facilities are needed, and associated impacts.

Stormwater Runoff, Green Infrastructure (GI), and Low Impact Development (LID). We recommend avoiding an increase in overall impervious area of the site as much as practicable to prevent impacts in the downstream watersheds. Please also consider assessing the current stormwater management and identifying any opportunities for improvement. We recommend the incorporation of GI practices and LID design features where possible to reduce the effects of existing proposed impervious surfaces. Please refer to EPA’s [Technical guidance](#) and [EPA’s GI webpage](#) and for implementing GI practices and LID. Other information can be found at EPA’s [Urban Runoff LID webpage](#) and the International Stormwater [BMP Database](#).

Sustainability/Energy Efficiency. We recommend incorporating sustainability practices into the EA and looking for ways to reduce energy, water consumption and implement efficiency and recycling measures at the project site. The following resources may be useful for incorporating environmentally sustainable practices and energy efficiency:

- EPA Comparison Tool for Green Building Standards: EPA provides this list of model codes or rating systems that can be used to develop green building programs: <https://www.epa.gov/smartgrowth/green-building-standards>.
- Leadership in Energy and Environmental Design (LEED): The U.S. Green Building Council's rating systems to increase the environmental and health performance for the design, construction, and operation of buildings, sites, structures, and neighborhoods: <http://www.usgbc.org/leed>.
- The Sustainable SITES Initiative (SITES®): The Sustainable SITES Initiative provides a set of comprehensive, voluntary guidelines and rating system to assess the sustainable design, construction, and maintenance of landscapes: <http://www.sustainablesites.org>.

Noise and Traffic. Impacts to nearby residences should be fully evaluated. We suggest that the EA include an evaluation of issues such as noise, emissions, safety, and traffic during construction, renovation, and demolition activities and identify best management practices and mitigation measures that may be employed. We recommend the EA assess whether each project may increase noise, traffic congestion, lighting, or cause other impacts to the surrounding community. We recommend outreach to the community and residences that may be impacted by the project.

Cumulative Effects. The EA should clearly evaluate cumulative impacts from the Proposed Action along with other projects that have taken place in the past, are planned, or are underway at or near PARS.

Environmental Justice. Executive Order 12898 *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, February 11, 1994 was supplemented by Executive Order (EO) 14096, *Revitalizing Our Nation's Commitment to Environmental Justice for All* on April 26, 2023. EO 14096 directs federal agencies, as appropriate and consistent with applicable law: to identify, analyze, and address disproportionate and adverse human health and environmental effects (including risks) and hazards of Federal activities, including those related to climate change and cumulative impacts of environmental and other burdens on communities with environmental justice concerns. Section 3 (b)(i) of EO 14096 also directs the EPA to assess whether each agency analyzes and avoids or mitigates disproportionate human health and environmental effects on communities with environmental justice concerns when carrying out responsibilities under Section 309 of the Clean Air Act, 42 U.S.C. 7609. To assist in this analysis, we recommend referencing the following resources:

- EPA EJScreen tool at: <https://www.epa.gov/ejscreen>
- CEQ Environmental Justice Guidance under NEPA: https://www.epa.gov/sites/default/files/2015-02/documents/ej_guidance_nepa_ceq1297.pdf.

Thank you for the opportunity to provide comments. We request that you provide an email copy of the Draft EA when it is complete. We would welcome the opportunity to discuss any of these comments and to work with you as more information becomes available. Feel free to contact me or Tim Witman (witman.timothy@epa.gov) with any questions or concerns.

Best,



Emma Esch

Life Scientist, NEPA Reviewer
EJ, Community Health, & Environmental Review Division
US EPA Mid-Atlantic Region

Phone 215-814-2723

Email [esch.emma@epa.gov]esch.emma@epa.gov





DEPARTMENT OF THE ARMY
PITTSBURGH DISTRICT, CORPS OF ENGINEERS
WILLIAM S. MOORHEAD FEDERAL BUILDING
1000 LIBERTY AVENUE
PITTSBURGH, PA 15222-4186

June 25, 2024

Regulatory Division
2024-00224

Ms. Sarah Ross
Environmental Engineer
911th Airlift Wing
Pittsburgh International Air Reserve Station
2476 Defense Avenue
Coraopolis, Pennsylvania 15108
sarah.ross.11@us.af.mil

Dear Ms. Ross:

I refer to an email with attachment, received in this office May 20, 2024, regarding an Environmental Assessment (EA) to evaluate potential environmental impacts resulting from the implementation of 11 facility and airfield improvement projects at PARS in Pittsburgh, Pennsylvania. (Location Map enclosed)

The U.S. Army Corps of Engineers regulates earth moving activities within streams or wetlands. This includes any placement of fill material, temporary or permanent. Due to the fact that your letter and location map do not clearly identify each aquatic resource, we recommend that you hire a qualified wetland consultant to evaluate the entire project area in order to determine if any streams or wetlands are present. Enclosed is a list of wetland consultants. If impacts to streams or wetlands are in fact proposed, you should again contact this office to discuss permitting requirements.

Every effort should be made to avoid and minimize impacts to the aquatic resources on-site. We will continue to work with you in order to protect any aquatic resources that may be present.

This project has been assigned Department of the Army Permit Number **2024-00224**. Please refer to this number in all future communications concerning this matter.

If you have any questions, please contact Linda E. Everley by phone at (412) 395-7152 or email at linda.l.everley@usace.army.mil. Please complete our customer survey online and provide us with feedback at <https://regulatory.ops.usace.army.mil/customer-service-survey/>.

Sincerely,

//SIGNED//

Alyssa B. Barkley
Chief, South Branch
Regulatory Division

Enclosures

Attachment 1: Project Location Map

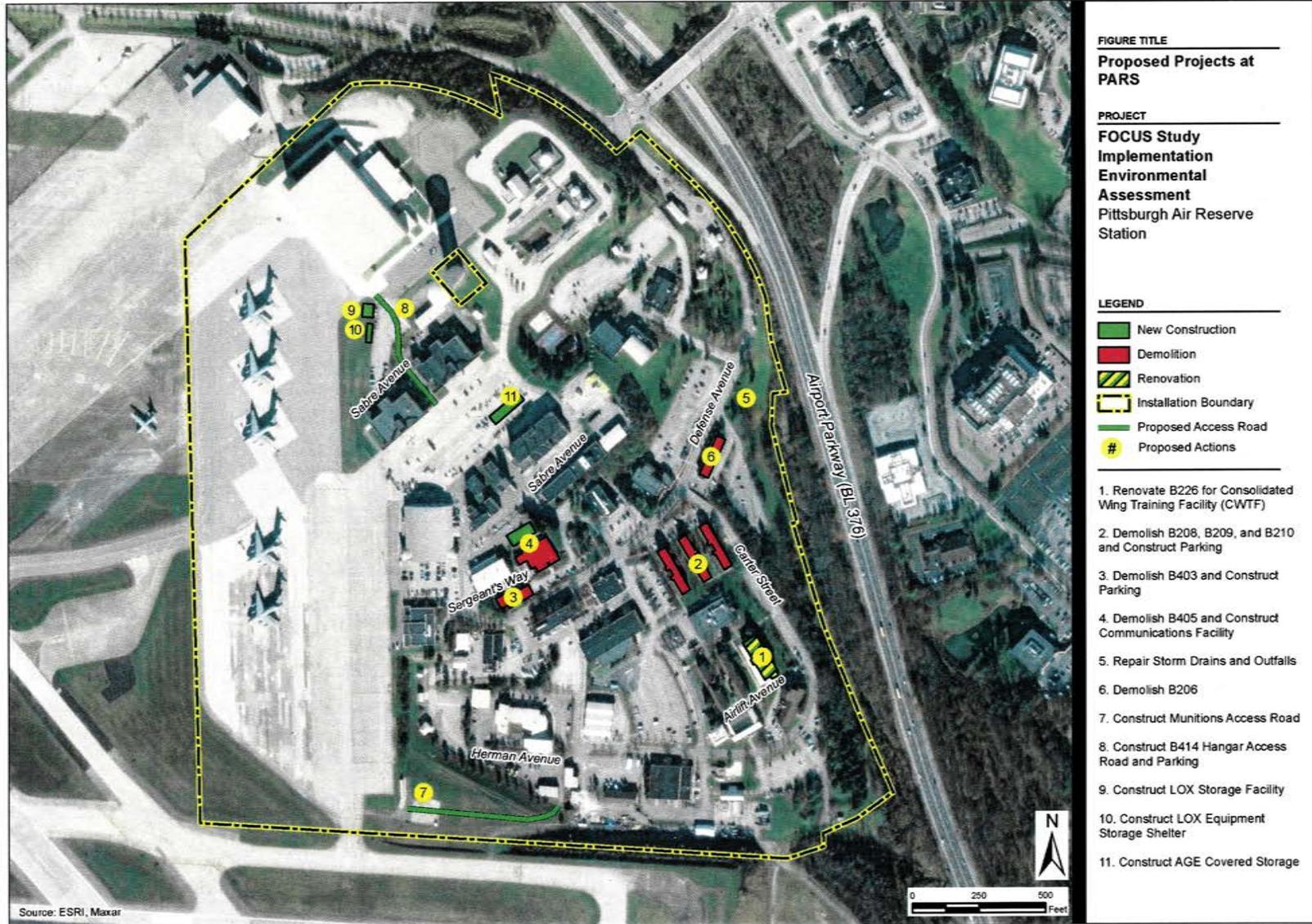


FIGURE TITLE

Proposed Projects at PARS

PROJECT

**FOCUS Study
Implementation
Environmental
Assessment
Pittsburgh Air Reserve
Station**

LEGEND

- New Construction
- Demolition
- Renovation
- Installation Boundary
- Proposed Access Road
- Proposed Actions

1. Renovate B226 for Consolidated Wing Training Facility (CWTF)
2. Demolish B208, B209, and B210 and Construct Parking
3. Demolish B403 and Construct Parking
4. Demolish B405 and Construct Communications Facility
5. Repair Storm Drains and Outfalls
6. Demolish B206
7. Construct Munitions Access Road
8. Construct B414 Hangar Access Road and Parking
9. Construct LOX Storage Facility
10. Construct LOX Equipment Storage Shelter
11. Construct AGE Covered Storage

Wetland Consultant List

The following is a list of contractors for environmental and engineering services. This list is not all inclusive. This list contains only firms who have requested listing. The Corps of Engineers provides this list as a service to the public. No recommendation or guarantee of competence or experience is implied by this listing. The Corps of Engineers neither endorses nor accepts responsibility for work performed by any firm on this list. We suggest that prospective clients ask for credentials before contracting for professional services.

NOTE: The Corps is the final authority with respect to the delineation of wetland areas and other waters of the U.S., as well as the determination of activities requiring Department of the Army permits. All wetland delineations must be conducted and documented in accordance with the 1987 Wetland Delineation Manual and appropriate regional supplement. The Corps will review all jurisdictional determinations to verify their accuracy.

A.D. Marble & Company

1000 Gamma Drive
Suite 203
Pittsburgh, PA 15238
Phone: 412-968-5978
Fax: 412-968-5978
www.admarble.com

AECOM

1300 East 9th Street
5th Floor
Cleveland, OH 44114
Phone: 216-622-2400
www.aecom.com

AGES, Inc.

2402 Hookstown Grade Road
Suite 200
Clinton, PA 15026
Phone: 412-264-6453
Fax: 412-264-6567
www.appliedgeology.net

Alliance Consulting

Raleigh County Airport Industrial Park
124 Philpott Lane
Beaver, WV 25813
304-255-0491
www.aci-wv.com

Allstar Ecology, LLC

1582 Meadowdale Rd
Fairmont, WV 26554
Phone/Fax: 866-213-2666
www.allstarecology.com

ARM Group, Inc.

1129 West Governor Road
P.O. Box 797
Hershey, PA 17033
Phone: 717-533-8600
www.armgroup.net

ASC Group, Inc.

121 Orchard Drive
Pittsburgh, PA 15236
Phone: 412-653-9080
www.ascgroup.net

Atlantic Environmental Group, Inc.

453 S.R. 227
Oil City, PA 16301
Phone: 814-677-3139

Blazosky Associates, Inc.

787 Pine Valley Drive
Suite C
Pittsburgh, PA 15239
Phone: 724-733-2060
Fax: 724-733-2077
www.blazosky.com

BAI Group – Balanced Environmental Solutions

2525 Green Tech Drive
Suite D
State College, PA 16803
Phone: 814-238-2060
kfinlan@baigroupinc.net

Big Pine Consultants LLC

1066 Towervue Drive
Pittsburgh, PA 15227
Phone: 231-282-2192
www.bigpineconsultants.com

Bob Beran

2322 W. Sunbury Road
Boyers, PA 16020
Phone: 724-735-2766
www.beranenvironmental.com

BL Companies

3755 Boettler Oaks Drive
Suite G
Green, OH 44685
Phone: 234-294-6340
www.blcompanies.com

Boord, Benchek & Associates

345 Southpointe Blvd.
Canonsburg, PA 15317
Phone: 724-984-5482
Fax: 724-746-1244
www.boordbenchek.com

Bowser Morner

4518 Taylorsville Road
Dayton, OH 45424
Phone: 937-236-8805 ext. 322
www.bowser-morner.com

Buckeye Mineral Services, Inc.

834 Cookson Avenue, SE
New Philadelphia, OH 44663
Phone: 330-339-2100

Chagrin Valley Engineering, LTD

22999 Forbes Road
Suite B
Cleveland, OH 44146-5667
Phone: 440-439-1999
Cell: 440-478-5848
Fax: 440-439-1969
www.cvelimited.com

Civil & Environmental Consultants, Inc.

333 Baldwin Road
Pittsburgh, PA 15205
Phone: 412-429-2324
www.cecinc.com

CME Management, LLC

165 East Union Street
Somerset, PA 15501
Phone: 814-443-3344

Collective Efforts, LLC

462 Perry Highway
2nd Floor
Pittsburgh, PA 15229
Phone: 412-459-0114
www.collectiveefforts.com

CTL

1091 Chaplin Road
Morgantown, WV 26501
Phone: 304-292-1135
www.ctleng.com

Davey Resource Group

1500 N. Mantua Street
P.O. Box 5193
Kent, OH 44240
Phone: 330-673-5685
www.davey.com

Dawood Engineering, Inc.

2020 Good Hope Road,
Enola, PA 17025
Phone: 717-732-8576
www.dawood.cc

Dieffenbach & Hritz, LLC

827 Fairmont Road
Suite 203
Morgantown, WV 26501
Phone: 304-241-1694
www.dandhengineers.com

Duda Environmental

429 Jumonville Road
Hopwood, PA 15445
Phone: 724-438-3036
Fax: 724-438-3929
duda-environmental@hotmail.com

The EADS Group

1126 Eighth Avenue
Altoona, PA 16602
Phone: 814-944-5035
www.eadsgroup.com

Ecology & Environment, Inc.

5098 West Washington Street
Suite 406
Cross Lanes, WV 25313
304-769-0207
www.ene.com

Ecotune

215 Executive Drive
Suite 204
Cranberry Township, PA 16066
724-779-9011

Envirens, Inc. – Pennsylvania Office

3815 Roser Road
Glen Rock, PA 17327
Phone: 717-235-8426
Fax: 717-227-0484
www.envirens.com

**Envirens, Inc. - Michael S.
Hollins**

Phone: 410-299-6898
www.envirens.com

Envirens, Inc. – Maryland Office

P.O. Box 299
Freeland, MD 21053
Phone: 410-299-6898
Fax: 717-227-0484
www.envirens.com

**Environmental Solutions & Innovations,
Inc.**

4525 Este Avenue
Cincinnati, OH 45232
Phone: 513-451-1777
www.envsi.com

EnviroScience

3781 Darrow Road
Stow, OH 44224
Phone: 330-688-0111
www.enviroscienceinc.com

Flickinger Wetland Service Group, Inc.

554 White Pond Drive
Suite D
Fairlawn, OH 44320
Phone: 330-865-0688
www.flickingerwetlandgroup.com

GAI Consultants

385 East Waterfront Drive
Homestead, PA 15120
Phone: 412-476-2000
www.gaiconsultants.com

Gannett Fleming, Inc.

207 Senate Avenue
Camp Hill, PA 17011
Phone: 717-763-7211
www.gfnet.com

Garvin Boward Beitko Engineering, Inc.

632 South Center Avenue
Apt A
Somerset, PA 15501
Phone: 814-443-2548
<http://garvinbowardeng.com>

Green Rivers

P.O. Box 106
Thomas, WV 26292
Phone: 304-704-4283
www.greenrivers.net

Gibson-Thomas Engineering

9951 Old Perry Highway
Wexford, PA 15090
Phone: 724-935-8188
www.gibson-thomas.com

Hanover Engineering

Bethlehem Office
Corporate Headquarters
252 Brodhead Road
Suite 100
Bethlehem, PA 18017-8944
Phone: 610-691-5644
Fax: 610-691-6968
www.hanovereng.com

Hatch Mott MacDonald

Summit Corporate Center
1001 Corporate Drive
Suite 100
Canonsburg, PA 15317
Phone: 724-514-5330
www.hatchmott.com

JM Environmental Consulting, LLC

9190 Springfield Road, #18D
Poland, OH 44514
Phone: 412-276-5594

Jack A. Hamilton & Associates, Inc.

342 High Street
Box 471
Flushing, OH 43977
Phone: 740-968-4847
www.hamiltonandassoc.com

Keystone Consultants, Inc.

32 East Main Street
Carnegie, PA 15106
Phone: 412-278-2100
www.keystoneconsultants.net

Kleski Environmental Services

P.O. Box 812
46071 State Route 124
Racine, OH 45771
Phone: 740-949-2240
www.kleskienviro.com

L. Robert Kimball & Associates

Coraopolis Office
415 Moon Clinton Road
Coraopolis, PA 15108
Phone: 412-262-5400
www.lrkimball.com

L. Robert Kimball & Associates

Headquarters
615 Highland Avenue
Ebensburg, PA 15931
Phone: 814-472-7700
lrkimball.com

L. Robert Kimball & Associates

Pittsburgh Office:
Frick Building, Suite 812
437 Grant Street
Pittsburgh, PA 15219
Phone: 412-201-4900
lrkimball.com

KU Resources, Inc.

22 South Linden Street
Duquesne, PA 15110
Phone: 412-469-9331
Fax: 412-469-9336
www.kuresources.com

Lawhon & Associates, Inc.

Mr. Jason Earley
1441 King Avenue
Columbus, OH 43212
Phone: 614-481-8600
Fax: 614-481-8610
www.lawhon-assoc.com

Lee Simpson Associates, Inc.

203 West Weber Avenue
P.O. Box 5504
DuBois, PA 15801
Phone: 814-371-7750
www.leesimpson.com

Lennon, Smith, & Souleret Engineering, Inc.

846 Fourth Avenue
Coraopolis, PA 15108
Phone: 412-265-4400
www.lsse.com

MAD Scientist & Associates, Inc.

253 N. State Street, Suite 101
Westerville, OH 43081-1472
Phone: 614-818-9156
www.madscientistassociates.net

Maguire Group, Inc.

D.L. Clark Building
Suite 610
503 Martindale Street
Pittsburgh, PA 15212-5746
Phone: 412-322-8340
www.cdrrmaguire.com

Markosky Engineering Group, Inc.

3689 Route 711
Ligonier, PA 15658
724-238-4138
www.markosky.com

McTish, Kunkel, & Associates

400 Penn Center Blvd.
Suite 600
Pittsburgh, PA 15235
Phone: 610-841-2700
www.mctish.com

Melius & Hockenberry

2402 William Penn
Highway
Suite 2Johnstown,
PA15909Phone: 814-322-4822
www.mhesinc.com

Michael Baker International

Bank of New York Mellon
500 Grant Street
#5400
Pittsburgh, PA 15219
Phone: 412-269-6300
www.mbakerial.com

Morris Knowles & Associates

443 Athena Drive
Delmont, PA 15626
Phone: 724-468-4622
www.morrisknowles.com

MS Consultants, Inc.

One Cascade Plaza
Suite 140
Akron, OH 44308-1116
Phone: 330-258-9920
www.msconsultants.com

The Orin Group, LLC

10 North West Avenue
Suite 200
Tallmadge, OH 44278
Phone: 330-630-3937
www.theoringroup.com

Pennsylvania Soil & Rock, Inc.

570 Beatty Road
Monroeville, PA
Phone: 412-372-4000
www.pasoilrock.com

Pittsburgh Wildlife & Environmental, Inc.

853 Beagle Club Road
McDonald, PA 15057
Phone: 724-796-5137
www.pwenv.com

Porter Consulting Engineers

552 State Street
Meadville, PA 16335
Phone: 814-337-4447
www.pceengineers.com

Potesta & Associates, Inc.

7012 MacCorkle Avenue, SE
Charleston, WV 25304
Phone: 304-342-1400
www.potesta.com

Professional Energy Consultants – A Division of Smith Land Surveying, Inc.

P.O. Box 150
12 Van Horn Drive
Glenville, WV 26351
Phone: 304-462-5634
Fax: 304-462-5656
www.slssurveys.com

R.A. Smith National, Inc.

333 Allegheny Avenue
Suite 202
Oakmont, PA 15139-2072
Phone: 412-828-7604
www.rasmithnational.com

R.D. Zande & Associates

1500 Lake Shore Drive
Suite 100
Columbus, OH 43204
Phone: 614-486-4383
www.zande.com

SCIEngineering, Inc.

650 Pierce Boulevard
O'Fallon, IL 43204
Phone: 618-624-6969
www.sciengineering.com

Skelly and Loy

3820 William Pitt Way
Pittsburgh, PA 15238
Phone: 712-828-1412
www.skellyloy.com

S&ME, Inc.

6190 Enterprise Court
Dublin, OH 43016
Phone: 614-793-2226
www.smeinc.com

Sovereign Consulting, Inc.

111-A North Gold Drive
Robbinsville, NJ 08691
Phone: 609-259-8200
www.sovcon.com

Stiffler, McGraw, and Associates, Inc.

1731 Juniata Street
P.O. Box 462
Holidaysburg, PA 16648
Phone: 814-696-6280
www.stiffler-mcgraw.com

T&M Associates

11 Tindall Road
Middletown, NJ 07748
Phone: 732-671-6400
Fax: 732-671-7365
www.tandmassociates.com

Terradon Corporation

401 Jacobson Drive
Poca, WV 25159
Phone: 304-755-8291
www.terradon.com

Thrasher Engineering

600 White Oaks Boulevard
Bridgeport, WV 26330
Phone: 304-624-4108
www.thrashereng.com

TNT Environmental, Inc.

13996 Parkeast Circle,
Suite 101
Chantilly, VA 20151
703-466-5123
www.tntenvironmentalinc.com

Triad

1075 Sherman Ave #D
Hagerstown, MD 21740
Phone: 301-797-6400
www.triadeng.com

Triad Engineering, Inc.

1097 Chaplin Road
Morgantown, WV 26501
Phone: 304-296-2562
Direct: 304-983-7027
Cell: 304-517-4131

Tri-County Engineering, LLC

319 Paintersville Road
Hunker, PA 15639
Phone: 724-635-0210
www.tricountyeng.com

Urban Engineers

1319 Sassafras Street
Erie, PA 16501
Phone: 814-453-5702
www.urbanengineers.com

URS Corporation

Foster Plaza 6
681 Anderson Drive
Suite 400
Pittsburgh, PA 15220
412-503-4700
www.urscorp.com

Virginia Waters & Wetlands, Inc.

6799-A Kennedy Road
Warrenton, VA 20187
Phone: 540-349-1522
Fax: 540-349-4527
www.vawaters.com

WallacePancher Group

1085 S. Hermitage Road
Hermitage, PA 16148
724-981-0155
www.wallacepanchergroup.com4/23/18

Wetlands Studies and Solutions, Inc.

5300 Wellington Branch Drive
Suite 100
Gainesville, VA 20155
703-679-5637
www.wetlandstudies.com

WHM Group, LTD

2525 Green Tech Drive
Suite B
State College, PA 16803
Phone: 814-689-1650
Fax: 814-689-1557
www.whmgroup.com

Wilson Ecological Consulting

314 Hill Top Lane
Port Matilda, PA 16870
814-933-2488
www.wilsonecological.com

Widmer Engineering

806 Lincoln Place
Beaver Falls, PA 15010
Phone: 724-847-1696
www.widmerengineering.com

Pittsburgh Air Reserve Station Project Review Request - Federal Aviation Administration

Langer, Lori (FAA) <lori.langer@faa.gov>

Thu 6/13/2024 2:06 PM

To: Carr, Allison <Allison.Carr@aecom.com>

Cc: Sacavage, Charles L (FAA) <Charles.L.Sacavage@faa.gov>; Stascak, Justin <jstascak@Flypittsburgh.com>; Davis-Jenkins, Heather F (FAA) <heather.f.davis-jenkins@faa.gov>

 2 attachments (1 MB)

20240520_PARS_LetterToAgencies.pdf; Project Area 1-11.pdf;

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Report Suspicious

Allison,

We received your email below and attachments from our Regional EPS.

We have reviewed the proposed projects and have determined that the FAA retains ALP Approval Authority for some of the actions and therefore we would be a cooperating agency for your EA. Please include Heather Davis-Jenkins, our FAA Airports District Office Lead EPS, as the POC for your EA.

I have included Heather on this email, as well as Allegheny County Airport Authority's contact Justin Stascak.

Please let me know if you have any questions.

Thanks,

Lori B.R. Langer

Lead Community Planner/PFC Contact

FAA Harrisburg Airports District Office

Lori.Langer@faa.gov

From: Carr, Allison <Allison.Carr@aecom.com>

Sent: Monday, May 20, 2024 3:19 PM

To: Brooks, Andrew (FAA) <Andrew.Brooks@faa.gov>

Cc: sarah.ross.11@us.af.mil

Subject: Pittsburgh Air Reserve Station Project Review Request -- Federal Aviation Administration

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon:

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate potential environmental impacts resulting from the implementation of 11 facility and airfield improvement projects at PARS in Pittsburgh, Pennsylvania. On behalf

of AFRC, we are seeking input from your agency regarding any information or potential environmental concerns associated with these projects. Please see the attached letter for additional details.

Any comments, concerns, information, or other data you may have regarding these projects should be provided to Ms. Sarah Ross, Environmental Engineer (sarah.ross.11@us.af.mil, cc'd here) within thirty (30) days of receipt of this correspondence.

We look forward to and welcome your participation in this analysis.

Thank you,

Allison Carr AICP

Environmental Planner, Environmental Planning & Permitting

M +1-302-584-6295

allison.carr@aecom.com

AECOM

aecom.com

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**DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND**

24 June 2024

Thomas Forsyth, P.E.
Base Civil Engineer
911th Airlift Wing
Pittsburgh Air Reserve Station
2475 Defense Avenue
Coraopolis, PA 15108

Heather Davis-Jenkins
Airports District Office Lead EPS
Federal Aviation Administration
3905 Hartzdale Drive
Suite 508
Camp Hill, PA 17011-7837

Dear Ms. Davis-Jenkins,

The Air Force Reserve Command (AFRC) is preparing an Environmental Assessment (EA) for Facilities Operations Capability and Utilization Survey (FOCUS) Study Implementation at the Pittsburgh Air Reserve Station (PARS), Pennsylvania, in accordance with the National Environmental Policy Act (NEPA) of 1969. The AFRC requests that the Federal Aviation Administration (FAA) formally participate as a Cooperating Agency (CA) in the preparation of the EA. FAA participation is requested because the proposed project includes improvements that may be subject to Airport Layout Plan (ALP) approval from the FAA on behalf of the Allegheny County Airport Authority. As such, this action would require concurrence from the FAA.

This CA arrangement is established pursuant to 40 C.F.R. §1501.8, Cooperating Agencies. As the lead the AFRC requests the FAA support by:

- Participating in the scoping process;
- Assuming responsibility, upon request by the AFRC, for developing information and preparing analyses, including portions of the EA, on issues for which the FAA has special expertise;
- Making staff support available to enhance interdisciplinary review capability and provide specific comments;
- Providing review and comments within the timelines prescribed in the milestone schedule; and
- Responding, in writing, to this request.

The AFRC will act as the Lead Agency for purposes of compliance with 40 CFR Parts 1500-1508 (Council on Environmental Quality (CEQ) Regulations for Implementing the

Procedural Provisions of NEPA), 32 CFR Part 989 (Environmental Impact Analysis Process), and similar regulatory consultation or coordination requirements.

Should you or your staff have further questions regarding the FOCUS Study Implementation EA or this request, our point of contact is Ms. Sarah Ross, Environmental Engineer, at sarah.ross.11@us.af.mil.

Sincerely,

FORSYTH.THOMAS.GORDON.V.1271153585
153585



Digitally signed by
FORSYTH.THOMAS.GORDON.V
.1271153585
Date: 2024.06.24 11:30:19 -04'00'

THOMAS FORSYTH, P.E.
Base Civil Engineer

RE: Pittsburgh Air Reserve Station Project Review Request - Federal Aviation Administration

Davis-Jenkins, Heather F (FAA) <heather.f.davis-jenkins@faa.gov>

Thu 6/27/2024 11:11 AM

To: Carr, Allison <Allison.Carr@aecom.com>; ROSS, SARAH M CIV USAFR AFRC 911 CIVIL ENGINEER SQ/CEVE <sarah.ross.11@us.af.mil>

Cc: Sacavage, Charles L (FAA) <Charles.L.Sacavage@faa.gov>; Stascak, Justin <jstascak@Flypittsburgh.com>; Busam, Michael <Michael.Busam@aecom.com>; Langer, Lori (FAA) <lori.langer@faa.gov>

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Report Suspicious

Good day-

This email confirms that the FAA has received the letter confirming the FAA as a cooperating agency for the FOCUS Study Implementation EA.

I look forward to working with you on this NEPA initiative.

Take care,

Heather Davis-Jenkins, CFM
Environmental Protection Specialist

Harrisburg Airports District Office
3905 Hartzdale, Dr. Ste 508
Camp Hill, PA 17011
Heather.F.Davis-Jenkins@faa.gov
(717) 730-2835
(717) 730-2838 (fax)

From: Carr, Allison <Allison.Carr@aecom.com>

Sent: Tuesday, June 25, 2024 9:26 AM

To: Langer, Lori (FAA) <lori.langer@faa.gov>; Davis-Jenkins, Heather F (FAA) <heather.f.davis-jenkins@faa.gov>

Cc: Sacavage, Charles L (FAA) <Charles.L.Sacavage@faa.gov>; Stascak, Justin <jstascak@Flypittsburgh.com>; Busam, Michael <Michael.Busam@aecom.com>; ROSS, SARAH M CIV USAFR AFRC 911 CIVIL ENGINEER SQ/CEVE <sarah.ross.11@us.af.mil>

Subject: Re: Pittsburgh Air Reserve Station Project Review Request - Federal Aviation Administration

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

The AFRC and PARS concur that the FAA be added as a Cooperating Agency for the FOCUS Study Implementation EA. Please review the attached letter for further details on AFRC's request for FAA participation.

Thank you,

Allison Carr

Environmental Planner, Environmental Planning & Permitting

M +1-302-584-6295

allison.carr@aecom.com

AECOM

aecom.com

From: Langer, Lori (FAA) <lori.langer@faa.gov>

Sent: Thursday, June 13, 2024 2:05 PM

To: Carr, Allison <Allison.Carr@aecom.com>

Cc: Sacavage, Charles L (FAA) <Charles.L.Sacavage@faa.gov>; Stascak, Justin <jstascak@Flypittsburgh.com>; Davis-Jenkins, Heather F (FAA) <heather.f.davis-jenkins@faa.gov>

Subject: Pittsburgh Air Reserve Station Project Review Request - Federal Aviation Administration

Allison,

We received your email below and attachments from our Regional EPS.

We have reviewed the proposed projects and have determined that the FAA retains ALP Approval Authority for some of the actions and therefore we would be a cooperating agency for your EA. Please include Heather Davis-Jenkins, our FAA Airports District Office Lead EPS, as the POC for your EA.

I have included Heather on this email, as well as Allegheny County Airport Authority's contact Justin Stascak.

Please let me know if you have any questions.

Thanks,

Lori B.R. Langer

Lead Community Planner/PFC Contact

FAA Harrisburg Airports District Office

Lori.Langer@faa.gov

From: Carr, Allison <Allison.Carr@aecom.com>

Sent: Monday, May 20, 2024 3:19 PM

To: Brooks, Andrew (FAA) <Andrew.Brooks@faa.gov>

Cc: sarah.ross.11@us.af.mil

Subject: Pittsburgh Air Reserve Station Project Review Request -- Federal Aviation Administration

CAUTION: This email originated from outside of the Federal Aviation Administration (FAA). Do not click on links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon:

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate potential environmental impacts resulting from the implementation of 11 facility and airfield improvement projects at PARS in Pittsburgh, Pennsylvania. On behalf of AFRC, we are seeking input from your agency regarding any information or potential environmental concerns associated with these projects. Please see the attached letter for additional details.

Any comments, concerns, information, or other data you may have regarding these projects should be provided to Ms. Sarah Ross, Environmental Engineer (sarah.ross.11@us.af.mil, cc'd here) within thirty (30) days of receipt of this correspondence.

We look forward to and welcome your participation in this analysis.

Thank you,

Allison Carr AICP

Environmental Planner, Environmental Planning & Permitting

M +1-302-584-6295

allison.carr@aecom.com

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DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND

31 July 2024

911th Airlift Wing
Pittsburgh Air Reserve Station
2475 Defense Avenue
Coraopolis, PA 15108

U.S. Fish & Wildlife Service
Pennsylvania Ecological Services Field Office
110 Radnor Road, Suite 101
State College, PA 16801-7987

Subject: Endangered Species Act Section 7 Consultation for the PARS FOCUS Study EA;
Project Code: 2024-0116037

Dear Sir or Madam,

The United States (U.S.) Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to analyze the potential environmental consequences associated with implementing 11 projects outlined in the PARS Facilities Operations Capability and Utilization Survey (FOCUS) Study, to meet training requirements and conduct airfield operations to support the 911th Airlift Wing (AW). PARS is preparing the EA in compliance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [USC] 4321, et seq.); the Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and the Air Force Environmental Impact Analysis Process (32 CFR Part 989). In accordance with Section 7 of the Endangered Species Act of 1973, this correspondence is intended to initiate informal consultation regarding the Proposed Action.

PARS is collocated with the Pittsburgh International Airport (PIT or the Airport) in Moon Township, Pennsylvania (see **Attachment 1**). PARS is the home station of the AFRC's 911th AW, whose mission is to organize, recruit, and train Air Force Reserve personnel to provide strategic airlift of airborne forces, their equipment and supplies, and delivery of these forces and materials by air. A FOCUS study was completed for the 911th AW in 2021 to document space utilization and evaluate the condition of AFRC facilities. The FOCUS Study resulted in development of a list of over 60 recommended projects over the coming years, with the implementation of 11 recommended projects under current consideration.

The purpose of the Proposed Action is to provide suitable facilities necessary to achieve the 911th AW's mission and achieve more optimal configuration of those facilities. The Proposed Action is needed because aging facilities and infrastructure are no longer able to support their originally planned uses, and existing buildings do not support sizes and layouts needed for mission operations, training activities, and airfield operations.

Project Description

The Proposed Action includes 11 non-contiguous components and project areas (see **Attachment 2**), described below, which would be implemented between approximately Calendar Years 2025 – 2029. The overall Proposed Action area is 5.9 acres.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility

This project would consist of an approximately 29,000 square foot (SF) interior renovation of B226 for training and consolidated Wing functions. The renovation would include the demolition of all interior non-load bearing walls and the construction of all supporting utilities, pavements, and landscaping, as well as interior and exterior communications infrastructure. Renovation of the building would improve operations and maintenance, upgrade substandard training facilities, and improve energy efficiency.

2. Demolish B208, B209, and B210 and Construct Parking

B208, B209, and B210 would be demolished, including facility, basement, and foundation components. The site would then be regraded for conversion into a parking area for the newly renovated B226.

3. Demolish B403 and Construct Parking

B403 would be demolished, and a new parking area would be constructed in the building's place. Current building operations would be moved to the renovated Consolidated Wing Training Facility.

4. Demolish B405 and Construct Communications Facility

The proposed Communications Facility would be a new, approximately 23,000 SF building constructed for the Communications Squadron. The new facility would accommodate approximately 27 new personnel. The existing Communications Facility housed in B405 lacks the space to support additional growth and fulfill existing mission requirements. B405 would be demolished and converted to parking for the new facility.

5. Repair Storm Drains and Outfalls

Approximately 360 linear feet of damaged metal corrugated pipe leading to two outfalls would be removed and replaced with a new watertight plastic pipe. A new manhole and catch basin would also be installed and approximately 800 SF of riprap would be removed. The existing damaged pipe is causing soil erosion and loss of bank stability in this location.

6. Demolish B206

B206, a two-story stick-framed building that formerly served as a lodging facility, would be demolished. The building's parking lot would also be removed, and the site would be regraded, seeded as a lawn, and stabilized. Demolition of the building would reduce operation and maintenance costs.

7. Construct Munitions Access Road

A new access road would be constructed between [REDACTED] for transporting munitions. Construction would include installing an asphalt drive and concrete curbs as well as a block

retaining wall. The project would also require site clearing, preparation, and grading. The current route for transporting munitions is inefficient and runs through the main base.

8. B414 Hangar Access Road and Parking

A new roadway and retaining wall would be constructed for efficient access to B414. The project would require site clearing and preparation, new striping, and the installation of a new security fence along the north and west sides of the hangar. The project would also include installation of necessary stormwater drainage for the roadway and installation of a new dumpster enclosure.

9. Construct Liquid Oxygen (LOX) Storage Facility

A new LOX Storage facility would be constructed to replace the existing storage located in B5519 for safety purposes. Work would include the construction of three masonry- and metal-panel walls with an overhang to accommodate the storage of two 3,000-gallon LOX tanks.

10. Construct LOX Equipment Storage Shelter

A LOX support equipment parking shelter would be constructed to comply with Air Force technical requirements.

11. Construct Aerospace Ground Equipment (AGE) Covered Storage Facility

A new covered parking structure would be constructed for AGE. The project would also add weatherproof lighting and electrical systems. This project would primarily protect flightline-ready AGE from direct weather impacts.

Section 7 of the ESA

AFRC queried the United States Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) database to determine whether any federally listed species have the potential to occur within the Proposed Action Area (Project Code 2024-0116037). IPaC identified two endangered species—the northern long-eared bat (NLEB, *Myotis septentrionalis*) and the Indiana bat (*Myotis sodalis*)—as having potential to occur within the Proposed Action Area. IPaC also identified the monarch butterfly (*Danaus plexippus*), which is a candidate species (see **Attachment 4** for the official species list). No critical habitat was identified in the Proposed Action Area. Effect determinations for these species are provided below.

NLEB (*Myotis septentrionalis*) – Federally Endangered

The NLEB hunts at night over small ponds, in forest clearings, and at tree top level along forest edges (PNHP, 2007). The species also uses caves and underground mines for hibernation. Maternity roosts are located in tree cavities, under exfoliating tree bark, and in buildings. No bats have been documented on-base (ERG, 2022b), and no known roost trees or hibernacula are located within 0.25 mile of project activities. However, the NLEB could potentially roost along the forested riparian corridor on the eastern boundary of the base during the active season between April and November. AFRC completed a Determination Key in IPaC for the NLEB and determined that the Proposed Action *may affect* the NLEB (see **Attachment 5**) due to increased noise from construction in the vicinity of potential bat habitat on the eastern boundary of the base. However, existing noise levels on the base range from approximately 65 dB to 75 dB and only a small area of potential bat habitat is present, which is located between the base and the highway (see **Attachment 2**). Therefore, due to the temporary nature of the construction noise, elevated

baseline noise levels, and the small area of potential bat habitat, the Proposed Action is *not likely to adversely affect* the NLEB. No tree clearing activities would occur for the proposed projects.

Indiana Bat (*Myotis sodalis*) – Federally Endangered

Indiana bats roost in trees in summer and rarely roost in buildings; hibernacula tend to be found in regions with well-developed limestone caverns and abandoned mines (PA Game Commission, 2010). Primary maternity roosts are large, dead trees with exfoliating bark and sun exposure that results in high temperatures; most roosts are within 0.25-mile of water. While no bats have been historically documented on-base, the Indiana bat could potentially roost along the forested riparian corridor on the eastern boundary of the base during the active season between April and November. Since Indiana bats would occupy the same on-base habitat and experience the same potential effects as the NLEB, AFRC has also determined that the Proposed Action *may affect*, but is *not likely to adversely affect*, the Indiana bat.

Monarch Butterfly (*Danaus plexippus*) – Candidate

While not federally protected, IPaC identified the monarch butterfly as potentially occurring within the Proposed Action Area. Monarch butterflies are a migratory species that typically arrive in Pennsylvania in mid-May when milkweed foliage becomes available (PA NRCS, 2020). Monarch butterflies use numerous habitat sites but require milkweed to reproduce; meadows with spring to fall nectar supply and a high density of milkweed have the highest levels of monarch butterfly activity. While the monarch butterfly was observed on-base in 2022 (ERG, 2022b), it is not anticipated to occur within the Proposed Action Area because the project sites consist of maintained lawn that does not provide suitable habitat. Therefore, the Proposed Action is anticipated to have *no effect* on this species.

A Pennsylvania Natural Diversity Inventory (PNDI) Environmental Review for the Proposed Action Area was conducted through the Pennsylvania Natural Heritage Program to determine whether any known federal or state-listed T&E species and/or special concern species could be impacted within the project area. The PNDI Environmental Review indicated that no impacts to threatened and endangered and/or special concern species are anticipated within the analyzed area; the PNDI Environmental Review is valid until July 2026, beyond which PARS would conduct another review for any uncompleted projects (PA DCNR, 2024).

Pursuant to ESA Section 7, AFRC requests USFWS review and concurrence with the effects determinations stated in this letter. AFRC also solicits input on the Proposed Action and its potential to impact other plant or animal species of concern or interest to USFWS. AFRC respectfully requests your review and concurrence within **thirty (30) days** from receipt of this correspondence so that we may complete our environmental review in a timely manner.

AFRC has contracted AECOM to facilitate the NEPA process. If you have comments or information relevant to the development of the EA, please direct your correspondence to Allison Carr at Allison.Carr@aecom.com.

Sincerely,

FORSYTH.THOMAS.GORDON.V.1271153585
Digitally signed by
FORSYTH.THOMAS.GORDON.V.1271153585
Date: 2024.08.13 09:21:07
-04'00'

THOMAS FORSYTH, P.E.
Base Civil Engineer

5 Attachments:

1. Figure 1: PARS Site Vicinity Map
2. Figure 2: Proposed Projects at PARS Map
3. References
4. Official Species List via IPaC
5. May Affect Consistency Letter for the NLEB

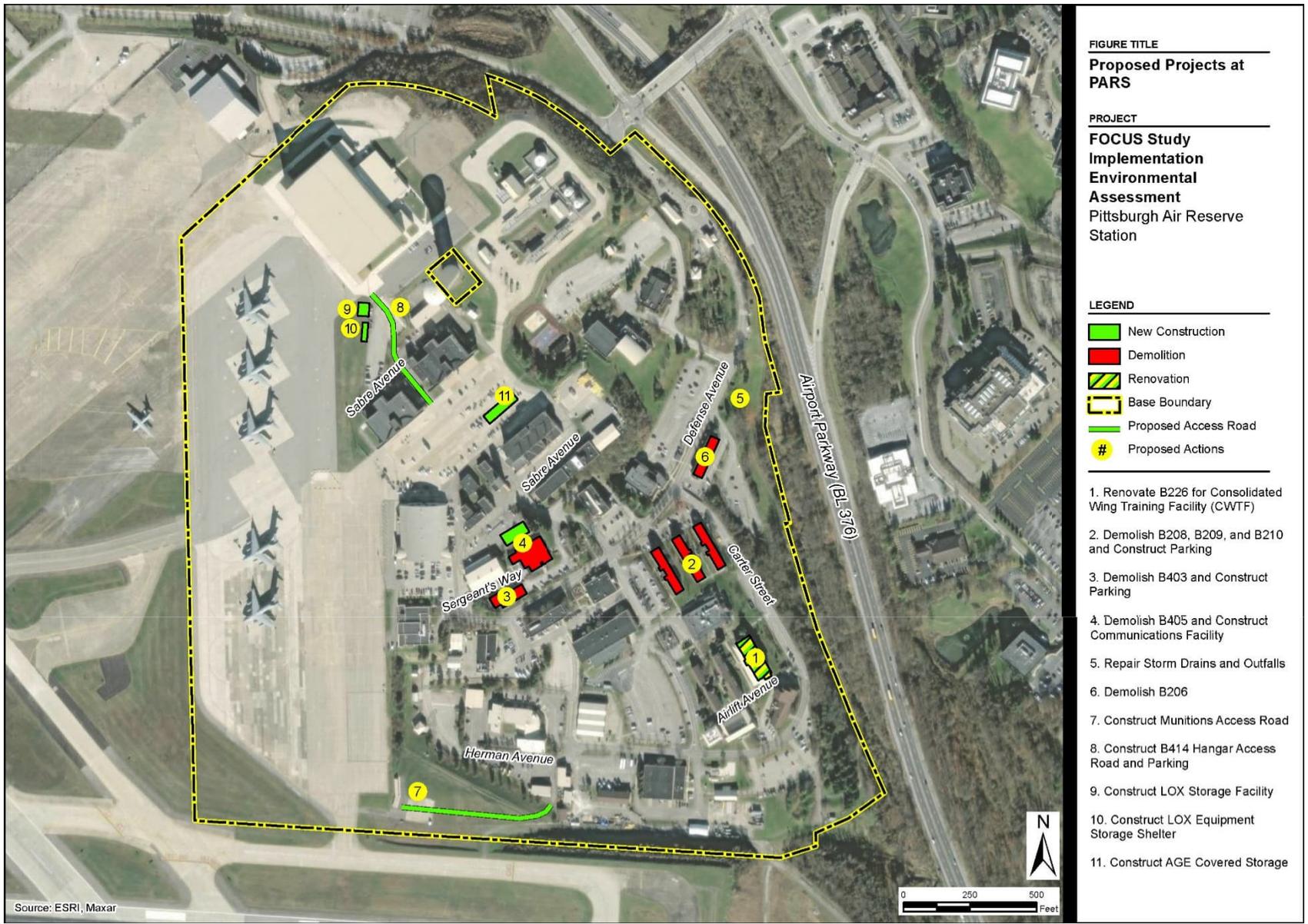


FIGURE TITLE
PARS Site Vicinity

PROJECT
FOCUS Study
Implementation
Environmental
Assessment
Pittsburgh Air Reserve
Station

LEGEND
 Base Boundary

Attachment 1: Figure 1: PARS Site Vicinity Map



Attachment 2: Figure 2: Proposed Projects at PARS Map

Attachment 3: References

ERG. (2022b). *Pittsburgh Air Reserve Station (PARS) – Flora and Fauna Survey, September 2022*. Baltimore, MD: Environmental Research Group L.L.C.

PA DCNR. (2024, July 12). Final Receipt for FOCUS Study Implementation EA PNDI Environmental Review.

PA Game Commission. (2010). *Species Profile: Indiana Bat*. Retrieved from <https://www.pgc.pa.gov/Wildlife/EndangeredandThreatened/Pages/IndianaBat.aspx>

PA NRCS. (2020). *Monarch Butterfly (Danaus plexippus)*. USDA. Retrieved from <https://www.fws.gov/sites/default/files/documents/Monarch%20Butterfly%20Field%20Version-Final.pdf>

PNHP. (2007). *Pennsylvania Mammal Species of Concern: Northern Myotis (Myotis septentrionalis)*. Retrieved from <https://www.naturalheritage.state.pa.us/factsheets/11451.pdf>

USFWS. (2024). *Monarch butterfly (Danaus plexippus)*. Retrieved March 1, 2024, from <https://ecos.fws.gov/ecp/species/9743#candidate>

Attachment 4: Official Species List via IPAC



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:

07/15/2024 15:19:59 UTC

Project Code: 2024-0116037

Project Name: EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Pennsylvania Ecological Services Field Office

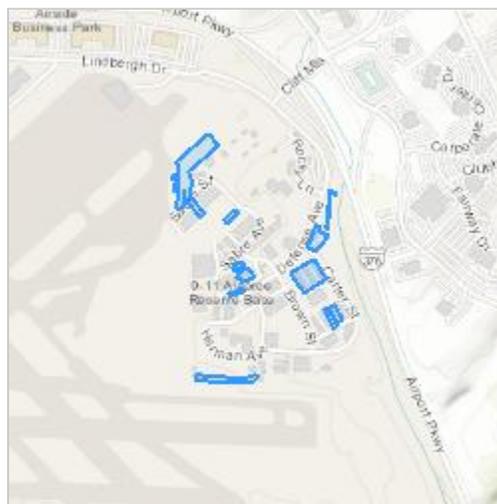
110 Radnor Road Suite 101
State College, PA 16801-7987
(814) 234-4090

PROJECT SUMMARY

Project Code: 2024-0116037
Project Name: EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station
Project Type: Military Development
Project Description: Under the Preferred Alternative, the US Air Force Reserve Command (AFRC) would implement 11 projects identified in the Facilities Operations Capability and Utilization Survey (FOCUS) study at Pittsburgh Air Reserve Station: (1) renovate Building (B) 226 for Consolidated Wing Training Facility; (2) demolish B208, B209, and B210 and construct parking; (3) demolish B403 and construct parking; (4) demolish B405 and construct a communications facility; (5) repair two storm drains and outfalls; (6) demolish B206; (7) construct a munitions access road; (8) construct a B414 hangar access road and parking; (9) construct a liquid oxygen (LOX) storage facility; (10) construct a LOX storage equipment shelter; and (11) construct aerospace ground equipment (AGE) covered storage. Operation of the new communications facility would require approximately 27 new personnel at PARS; none of the other projects would involve changes in personnel or operations occurring at PARS.

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.490375799999995,-80.21153383394561,14z>



Counties: Allegheny County, Pennsylvania

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

-
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> There is final critical habitat for this species. Your location does not overlap the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act¹ and the Migratory Bird Treaty Act².

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats³, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

-
1. The [Bald and Golden Eagle Protection Act](#) of 1940.
 2. The [Migratory Birds Treaty Act](#) of 1918.

3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

There are likely bald eagles present in your project area. For additional information on bald eagles, refer to [Bald Eagle Nesting and Sensitivity to Human Activity](#)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)

Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

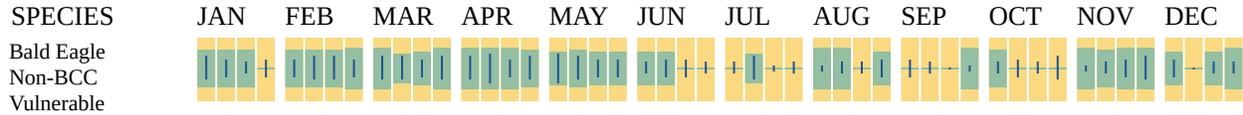
Survey Effort (|)

Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

■ probability of presence ■ breeding season | survey effort — no data



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

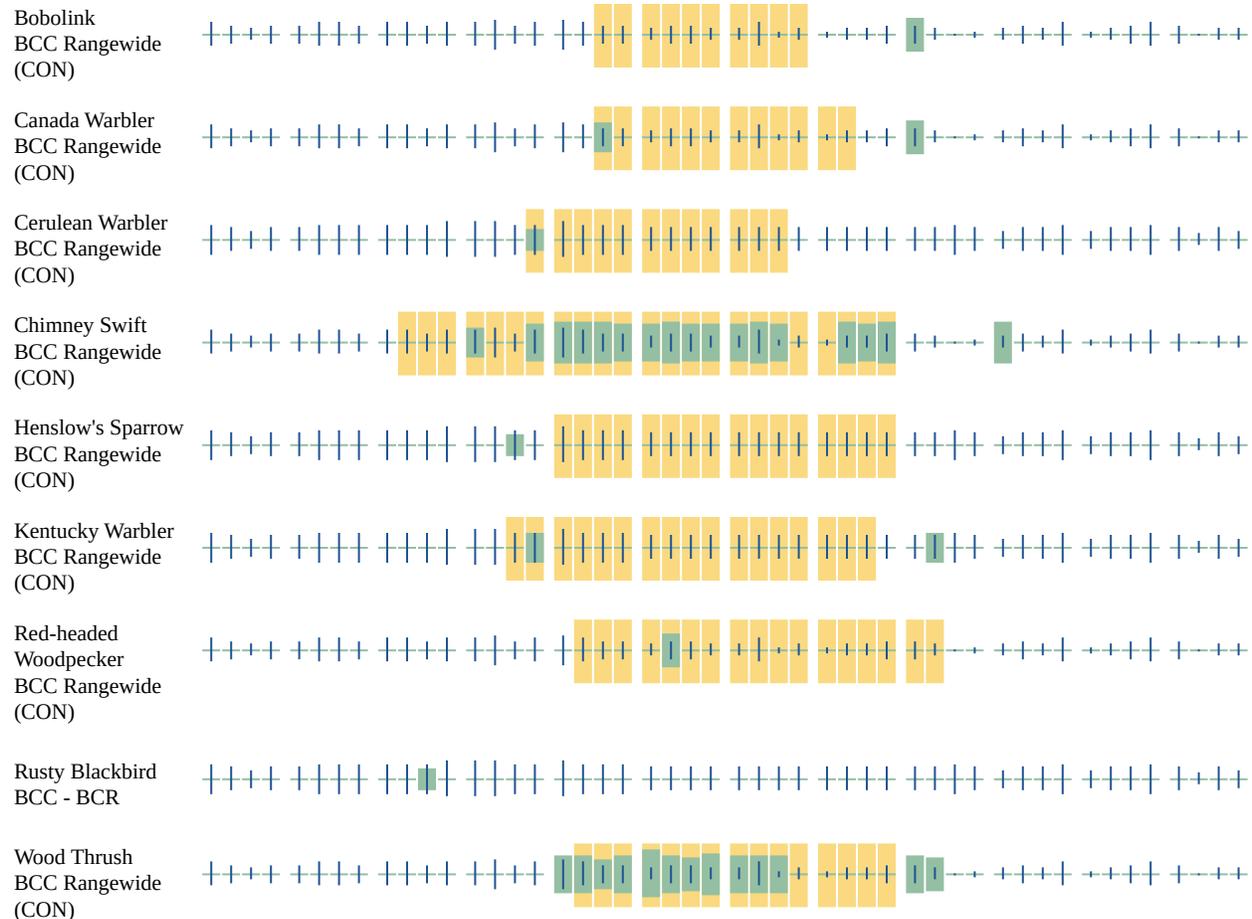
Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats³ should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Aug 31

NAME	BREEDING SEASON
Black-billed Cuckoo <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9399	Breeds May 15 to Oct 10
Black-capped Chickadee <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/10645	Breeds Apr 10 to Jul 31
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9454	Breeds May 20 to Jul 31
Canada Warbler <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9643	Breeds May 20 to Aug 10
Cerulean Warbler <i>Setophaga cerulea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/2974	Breeds Apr 27 to Jul 20
Chimney Swift <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9406	Breeds Mar 15 to Aug 25
Henslow's Sparrow <i>Centronyx henslowii</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/3941	Breeds May 1 to Aug 31
Kentucky Warbler <i>Geothlypis formosa</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9443	Breeds Apr 20 to Aug 20
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9398	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9478	Breeds elsewhere



Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.

IPAC USER CONTACT INFORMATION

Agency: AECOM

Name: Tara Boyd

Address: 4840 Cox Rd

City: Glen Allen

State: VA

Zip: 23060

Email: tara.boyd@aecom.com

Phone: 2036853220

Attachment 5: May Affect Consistency Letter for the NLEB



United States Department of the Interior



FISH AND WILDLIFE SERVICE
Pennsylvania Ecological Services Field Office
110 Radnor Road Suite 101
State College, PA 16801-7987
Phone: (814) 234-4090 Fax: (814) 234-0748

In Reply Refer To:

07/17/2024 18:21:44 UTC

Project code: 2024-0116037

Project Name: EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station

Federal Nexus: yes

Federal Action Agency (if applicable): Air Force

Subject: Technical assistance for 'EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station'

Dear Tara Boyd:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on July 17, 2024, for 'EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station' (here forward, Project). This project has been assigned Project Code 2024-0116037 and all future correspondence should clearly reference this number. **Please carefully review this letter. Your Endangered Species Act (Act) requirements are not complete.**

Ensuring Accurate Determinations When Using IPaC

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into IPaC must accurately represent the full scope and details of the Project. **Failure to accurately represent or implement the Project as detailed in IPaC or the Northern Long-eared Bat Rangewide Determination Key (Dkey), invalidates this letter.**

Determination for the Northern Long-Eared Bat

Based on your IPaC submission and the standing analysis for the Dkey, your project has reached the determination of "May Affect" the northern long-eared bat.

Next Steps

Your action may qualify for the Interim Consultation Framework for the northern long-eared bat. To determine if it qualifies, review the Interim Consultation Framework posted here <https://www.fws.gov/library/collections/interim-consultation-framework-northern-long-eared-bat>. If you

determine it meets the requirements of the Interim Consultation Framework, follow the procedures outlined there to complete section 7 consultation.

If your project does **not** meet the requirements of the Interim Consultation Framework, please contact the Pennsylvania Ecological Services Field Office for further coordination on this project. Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of “May Affect”.

Other Species and Critical Habitat that May be Present in the Action Area

The IPaC-assisted determination for the northern long-eared bat does not apply to the following ESA-protected species and/or critical habitat that also may occur in your Action area:

- Indiana Bat *Myotis sodalis* Endangered
- Monarch Butterfly *Danaus plexippus* Candidate

You may coordinate with our Office to determine whether the Action may cause prohibited take of the species listed above.

Action Description

You provided to IPaC the following name and description for the subject Action.

1. Name

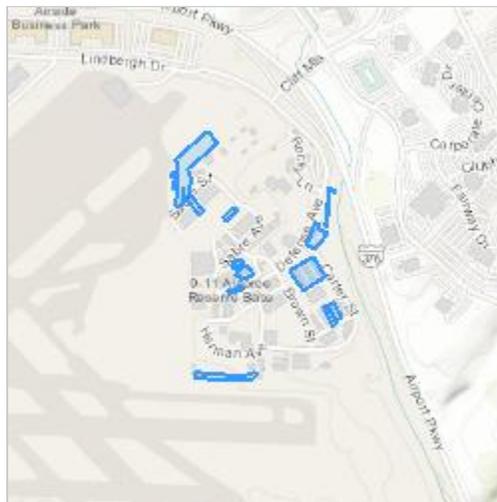
EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station

2. Description

The following description was provided for the project 'EA for FOCUS Study Implementation at Pittsburgh Air Reserve Station':

Under the Preferred Alternative, the US Air Force Reserve Command (AFRC) would implement 11 projects identified in the Facilities Operations Capability and Utilization Survey (FOCUS) study at Pittsburgh Air Reserve Station: (1) renovate Building (B) 226 for Consolidated Wing Training Facility; (2) demolish B208, B209, and B210 and construct parking; (3) demolish B403 and construct parking; (4) demolish B405 and construct a communications facility; (5) repair two storm drains and outfalls; (6) demolish B206; (7) construct a munitions access road; (8) construct a B414 hangar access road and parking; (9) construct a liquid oxygen (LOX) storage facility; (10) construct a LOX storage equipment shelter; and (11) construct aerospace ground equipment (AGE) covered storage. Operation of the new communications facility would require approximately 27 new personnel at PARS; none of the other projects would involve changes in personnel or operations occurring at PARS.

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@40.490375799999995,-80.21153383394561,14z>



DETERMINATION KEY RESULT

Based on the answers provided, the proposed Action is consistent with a determination of “may affect” for the Endangered northern long-eared bat (*Myotis septentrionalis*).

QUALIFICATION INTERVIEW

1. Does the proposed project include, or is it reasonably certain to cause, intentional take of the northern long-eared bat or any other listed species?

Note: Intentional take is defined as take that is the intended result of a project. Intentional take could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered or proposed species?

No

2. Does any component of the action involve construction or operation of wind turbines?

Note: For federal actions, answer ‘yes’ if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

3. Is the proposed action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

Yes

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) funding or authorizing the proposed action, in whole or in part?

No

5. Are you an employee of the federal action agency or have you been officially designated in writing by the agency as its designated non-federal representative for the purposes of Endangered Species Act Section 7 informal consultation per 50 CFR § 402.08?

Note: This key may be used for federal actions and for non-federal actions to facilitate section 7 consultation and to help determine whether an incidental take permit may be needed, respectively. This question is for information purposes only.

Yes

6. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)? Is the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC) funding or authorizing the proposed action, in whole or in part?

No

7. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

No

8. Have you determined that your proposed action will have no effect on the northern long-eared bat? Remember to consider the [effects of any activities](#) that would not occur but for the proposed action.

If you think that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, answer “No” below and continue through the key. If you have determined that the northern long-eared bat does not occur in your project’s action area and/or that your project will have no effects whatsoever on the species despite the potential for it to occur in the action area, you may make a “no effect” determination for the northern long-eared bat.

Note: Federal agencies (or their designated non-federal representatives) must consult with USFWS on federal agency actions that may affect listed species [50 CFR 402.14(a)]. Consultation is not required for actions that will not affect listed species or critical habitat. Therefore, this determination key will not provide a consistency or verification letter for actions that will not affect listed species. If you believe that the northern long-eared bat may be affected by your project or if you would like assistance in deciding, please answer “No” and continue through the key. Remember that this key addresses only effects to the northern long-eared bat. Consultation with USFWS would be required if your action may affect another listed species or critical habitat. The definition of [Effects of the Action](#) can be found here: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

9. [Semantic] Is the action area located within 0.5 miles of a known northern long-eared bat hibernaculum?

Note: The map queried for this question contains proprietary information and cannot be displayed. If you need additional information, please contact your State wildlife agency.

Automatically answered

No

10. Does the action area contain any caves (or associated sinkholes, fissures, or other karst features), mines, rocky outcroppings, or tunnels that could provide habitat for hibernating northern long-eared bats?

No

11. Does the action area contain or occur within 0.5 miles of (1) talus or (2) anthropogenic or naturally formed rock crevices in rocky outcrops, rock faces or cliffs?

No

12. Is suitable summer habitat for the northern long-eared bat present within 1000 feet of project activities?
(If unsure, answer "Yes.")

Note: If there are trees within the action area that are of a sufficient size to be potential roosts for bats (i.e., live trees and/or snags ≥ 3 inches (12.7 centimeter) dbh), answer "Yes". If unsure, additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

13. Will the action cause effects to a bridge?

No

14. Will the action result in effects to a culvert or tunnel?

No

15. Does the action include the intentional exclusion of northern long-eared bats from a building or structure?

Note: Exclusion is conducted to deny bats' entry or reentry into a building. To be effective and to avoid harming bats, it should be done according to established standards. If your action includes bat exclusion and you are unsure whether northern long-eared bats are present, answer "Yes." Answer "No" if there are no signs of bat use in the building/structure. If unsure, contact your local U.S. Fish and Wildlife Services Ecological Services Field Office to help assess whether northern long-eared bats may be present. Contact a Nuisance Wildlife Control Operator (NWCO) for help in how to exclude bats from a structure safely without causing harm to the bats (to find a NWCO certified in bat standards, search the Internet using the search term "National Wildlife Control Operators Association bats"). Also see the White-Nose Syndrome Response Team's guide for bat control in structures

No

16. Does the action involve removal, modification, or maintenance of a human-made structure (barn, house, or other building) **known or suspected to contain roosting bats**?

No

17. Will the action directly or indirectly cause construction of one or more new roads that are open to the public?

Note: The answer may be yes when a publicly accessible road either (1) is constructed as part of the proposed action or (2) would not occur but for the proposed action (i.e., the road construction is facilitated by the proposed action but is not an explicit component of the project).

No

18. Will the action include or cause any construction or other activity that is reasonably certain to increase average daily traffic on one or more existing roads?

Note: For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.). .

No

19. Will the action include or cause any construction or other activity that is reasonably certain to increase the number of travel lanes on an existing thoroughfare?

For federal actions, answer 'yes' when the construction or operation of these facilities is either (1) part of the federal action or (2) would not occur but for an action taken by a federal agency (federal permit, funding, etc.).

No

20. Will the proposed action involve the creation of a new water-borne contaminant source (e.g., leachate pond pits containing chemicals that are not NSF/ANSI 60 compliant)?

No

21. Will the proposed action involve the creation of a new point source discharge from a facility other than a water treatment plant or storm water system?

No

22. Will the action include drilling or blasting?

No

23. Will the action involve military training (e.g., smoke operations, obscurant operations, exploding munitions, artillery fire, range use, helicopter or fixed wing aircraft use)?

No

24. Will the proposed action involve the use of herbicide or other pesticides (e.g., fungicides, insecticides, or rodenticides)?

No

25. Will the action include or cause activities that are reasonably certain to cause chronic nighttime noise in suitable summer habitat for the northern long-eared bat? Chronic noise is noise that is continuous or occurs repeatedly again and again for a long time.

Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

26. Does the action include, or is it reasonably certain to cause, the use of artificial lighting within 1000 feet of suitable northern long-eared bat roosting habitat?

Note: Additional information defining suitable roosting habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

No

27. Will the action include tree cutting or other means of knocking down or bringing down trees, tree topping, or tree trimming?

No

28. Will the action result in the use of prescribed fire?

No

29. Will the action cause noises that are louder than ambient baseline noises within the action area?

Yes

30. Will the action cause noises during the active season in suitable summer habitat that are louder than anthropogenic noises to which the affected habitat is currently exposed?
Answer 'no' if the noises will occur only during the inactive period.

Note: Inactive Season dates for areas within a spring staging/fall swarming area can be found here: <https://www.fws.gov/media/inactive-season-dates-swarming-and-staging-areas>.

Note: Additional information defining suitable summer habitat for the northern long-eared bat can be found at: <https://www.fws.gov/media/northern-long-eared-bat-assisted-determination-key-selected-definitions>

Yes

PROJECT QUESTIONNAIRE

Will all project activities be completed by November 30, 2024?

No

IPAC USER CONTACT INFORMATION

Agency: AECOM
Name: Tara Boyd
Address: 4840 Cox Rd
City: Glen Allen
State: VA
Zip: 23060
Email: tara.boyd@aecom.com
Phone: 2036853220

LEAD AGENCY CONTACT INFORMATION

Lead Agency: Air Force

1. PROJECT INFORMATION

Project Name: **EA for FOCUS Study Implementation at PARS**

Date of Review: **7/12/2024 10:56:02 AM**

Project Category: **Development, Additions/maintenance to existing development facilities**

Project Area: **5.89 acres**

County(s): **Allegheny**

Township/Municipality(s): **MOON TOWNSHIP**

ZIP Code:

Quadrangle Name(s): **OAKDALE**

Watersheds HUC 8: **Upper Ohio**

Watersheds HUC 12: **Montour Run**

Decimal Degrees: **40.496331, -80.211788**

Degrees Minutes Seconds: **40° 29' 46.7929" N, 80° 12' 42.4358" W**

2. SEARCH RESULTS

Agency	Results	Response
PA Game Commission	No Known Impact	No Further Review Required
PA Department of Conservation and Natural Resources	No Known Impact	No Further Review Required
PA Fish and Boat Commission	No Known Impact	No Further Review Required
U.S. Fish and Wildlife Service	No Known Impact	No Further Review Required

As summarized above, Pennsylvania Natural Diversity Inventory (PNDI) records indicate no known impacts to threatened and endangered species and/or special concern species and resources within the project area. Therefore, based on the information you provided, no further coordination is required with the jurisdictional agencies. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

EA for FOCUS Study Implementation at PARS



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

EA for FOCUS Study Implementation at PARS



-  Buffered Project Boundary
-  Project Boundary



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA, Intermap and the GIS user community

RESPONSE TO QUESTION(S) ASKED

Q1: Is tree removal, tree cutting or forest clearing necessary to implement all aspects of this project?

Your answer is: No

Q2: How many acres of woodland, forest, forested fencerows and trees will be cut, cleared, removed, disturbed or flooded (inundated) as a result of carrying out all aspects or phases of this project? [Round acreages UP to the nearest acre (e.g., 0.2 acres = 1 acre).]

Your answer is: zero acres

3. AGENCY COMMENTS

Regardless of whether a DEP permit is necessary for this proposed project, any potential impacts to threatened and endangered species and/or special concern species and resources must be resolved with the appropriate jurisdictional agency. In some cases, a permit or authorization from the jurisdictional agency may be needed if adverse impacts to these species and habitats cannot be avoided.

These agency determinations and responses are **valid for two years** (from the date of the review), and are based on the project information that was provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the following change: 1) project location, 2) project size or configuration, 3) project type, or 4) responses to the questions that were asked during the online review, the results of this review are not valid, and the review must be searched again via the PNDI Environmental Review Tool and resubmitted to the jurisdictional agencies. The PNDI tool is a primary screening tool, and a desktop review may reveal more or fewer impacts than what is listed on this PNDI receipt. The jurisdictional agencies **strongly advise against** conducting surveys for the species listed on the receipt prior to consultation with the agencies.

PA Game Commission

RESPONSE:

No impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Department of Conservation and Natural Resources

RESPONSE:

No impact is anticipated to threatened and endangered species and/or special concern species and resources.

PA Fish and Boat Commission

RESPONSE:

No impact is anticipated to threatened and endangered species and/or special concern species and resources.

U.S. Fish and Wildlife Service

RESPONSE:

No impacts to **federally** listed or proposed species are anticipated. Therefore, no further consultation/coordination under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq. is required. Because no take of federally listed species is anticipated, none is authorized. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

4. DEP INFORMATION

The Pa Department of Environmental Protection (DEP) requires that a signed copy of this receipt, along with any required documentation from jurisdictional agencies concerning resolution of potential impacts, be submitted with applications for permits requiring PNDI review. Two review options are available to permit applicants for handling PNDI coordination in conjunction with DEP's permit review process involving either T&E Species or species of special concern. Under sequential review, the permit applicant performs a PNDI screening and completes all coordination with the appropriate jurisdictional agencies prior to submitting the permit application. The applicant will include with its application, both a PNDI receipt and/or a clearance letter from the jurisdictional agency if the PNDI Receipt shows a Potential Impact to a species or the applicant chooses to obtain letters directly from the jurisdictional agencies. Under concurrent review, DEP, where feasible, will allow technical review of the permit to occur concurrently with the T&E species consultation with the jurisdictional agency. The applicant must still supply a copy of the PNDI Receipt with its permit application. The PNDI Receipt should also be submitted to the appropriate agency according to directions on the PNDI Receipt. The applicant and the jurisdictional agency will work together to resolve the potential impact(s). See the DEP PNDI policy at <https://conservationexplorer.dcnr.pa.gov/content/resources>.



5. ADDITIONAL INFORMATION

The PNDI environmental review website is a preliminary screening tool. There are often delays in updating species status classifications. Because the proposed status represents the best available information regarding the conservation status of the species, state jurisdictional agency staff give the proposed statuses at least the same consideration as the current legal status. If surveys or further information reveal that a threatened and endangered and/or special concern species and resources exist in your project area, contact the appropriate jurisdictional agency/agencies immediately to identify and resolve any impacts.

For a list of species known to occur in the county where your project is located, please see the species lists by county found on the PA Natural Heritage Program (PNHP) home page (www.naturalheritage.state.pa.us). Also note that the PNDI Environmental Review Tool only contains information about species occurrences that have actually been reported to the PNHP.

6. AGENCY CONTACT INFORMATION

PA Department of Conservation and Natural Resources

Bureau of Forestry, Ecological Services Section
400 Market Street, PO Box 8552
Harrisburg, PA 17105-8552
Email: RA-HeritageReview@pa.gov

PA Fish and Boat Commission

Division of Environmental Services
595 E. Rolling Ridge Dr., Bellefonte, PA 16823
Email: RA-FBPACENOTIFY@pa.gov

U.S. Fish and Wildlife Service

Pennsylvania Field Office
Endangered Species Section
110 Radnor Rd; Suite 101
State College, PA 16801
Email: IR1_ESPenn@fws.gov
NO Faxes Please

PA Game Commission

Bureau of Wildlife Management
Division of Environmental Review
2001 Elmerton Avenue, Harrisburg, PA 17110-9797
Email: RA-PGC_PNDI@pa.gov
NO Faxes Please

7. PROJECT CONTACT INFORMATION

Name: _____
Company/Business Name: _____
Address: _____
City, State, Zip: _____
Phone:(_____) _____ Fax:(_____) _____
Email: _____

8. CERTIFICATION

I certify that ALL of the project information contained in this receipt (including project location, project size/configuration, project type, answers to questions) is true, accurate and complete. In addition, if the project type, location, size or configuration changes, or if the answers to any questions that were asked during this online review change, I agree to re-do the online environmental review.

applicant/project proponent signature

date

APPENDIX B:
NATIONAL HISTORIC PRESERVATION ACT SECTION 106
CONSULTATION

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**DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND**

7/23/2024

Andrea MacDonald, State Historic Preservation Officer
Pennsylvania Historical and Museum Commission
State Historic Preservation Office
Commonwealth Keystone Building, Second Floor
400 North Street
Harrisburg, PA 17120-0093
Email: amacdonald@pa.gov

SUBJECT: Cultural Resources Section 106 Project Review for 11 Facilities Operations Capability and Utilization Survey (FOCUS) Study projects at Pittsburgh Air Reserve Station (PARS)

Ms. MacDonald:

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts resulting from the implementation of 11 projects from the PARS Facilities Operations Capability and Utilization Survey (FOCUS) Study in order to meet training requirements and conduct airfield operations to support the 911th Airlift Wing (AW). PARS is collocated with the Pittsburgh International Airport (PIT or the Airport) in Moon Township, Pennsylvania (**Attachment 1: Figure 1**). PARS is the home station of the AFRC's 911th AW, whose mission is to organize, recruit, and train Air Force Reserve personnel to provide strategic airlift of airborne forces, their equipment and supplies, and delivery of these forces and materials. A FOCUS study was completed for the 911th AW in 2021 to document space utilization and evaluate the condition of AFRC facilities (AFRC 2021). The FOCUS Study resulted in development of a list of over 60 recommended projects over the coming years, with the implementation of 11 recommended projects under current consideration.

The projects include: (1) Renovate Building (B)226, (2) Demolish B208, B209, and B210 and Construct Parking, (3) Demolish B403 and Construct Parking, (4) Demolish B405 and Construct Communications Facility, (5) Repair Storm Drains and Outfalls, (6) Demolish B206, (7) Construct Munitions Access Road, (8) Construct B414 Hangar Access Road and Parking, (9) Construct a Liquid Oxygen (LOX) Storage Facility, (10) Construct a LOX Equipment Storage Shelter, and (11) Construct an Aerospace Ground Equipment (AGE) Covered Storage (**Attachment 1: Figure 2**). The project is an undertaking subject to review under the National Historic Preservation Act (NHPA) Section 106 process (54 U.S. Code 306108). As mentioned above, a National Environmental Policy Act (NEPA) EA is being prepared to evaluate the environmental impacts resulting from the Proposed Action.

Project Details

The Proposed Project (undertaking) includes 11 non-contiguous components and project areas (**Attachment 1: Figures 2 through 7**), described below.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility

This project would consist of an approximately 29,000 square foot (SF) interior renovation of B226 for training and consolidated Wing functions. The renovation would include the demolition of all interior non-load bearing walls and the construction of all supporting utilities, pavements, and landscaping, as well as interior and exterior communications infrastructure. Renovation of the building would improve operations and maintenance, upgrade substandard training facilities, and improve energy efficiency.

2. Demolish B208, B209, and B210 and Construct Parking

B208, B209, and B210 would be demolished, including facility, basement, and foundation components. The site would then be regraded for conversion into a 39,000 SF parking area for the newly renovated B226.

3. Demolish B403 and Construct Parking

B403 would be demolished, and a new 5,400 SF parking area would be constructed in the building's place. Current building operations would be moved to the renovated Consolidated Wing Training Facility.

4. Demolish B405 and Construct Communications Facility

The proposed Communications Facility would be a new, approximately 23,000 SF building constructed for the Communications Squadron. The new facility would accommodate approximately 27 new personnel. The existing Communications Facility housed in B405 lacks the space to support additional growth and fulfill existing mission requirements. B405 would be demolished and converted to an approximately 11,300 SF parking lot for the new facility.

5. Repair Storm Drains and Outfalls

Approximately 360 linear feet of damaged metal corrugated pipe leading to two outfalls would be removed and replaced with a new watertight plastic pipe. A new manhole and catch basin would also be installed and approximately 800 SF of riprap would be removed. The existing damaged pipe is causing soil erosion and loss of bank stability in this location.

6. Demolish B206

B206, a two-story stick-framed building that formerly served as a lodging facility, would be demolished. The building's approximately 17,700 SF parking lot would also be removed, and the site would be regraded, seeded as a lawn, and stabilized. Demolition of the building would reduce operation and maintenance costs.

7. Construct Munitions Access Road

A new access road would be constructed between [REDACTED] and [REDACTED] for transporting munitions. Construction would include installing an asphalt drive and concrete curbs as well as a block retaining wall. The project would also require site clearing, preparation, and grading. The current route for transporting munitions is inefficient and runs through the main base.

8. B414 Hangar Access Road and Parking

A new roadway and retaining wall would be constructed for efficient access to B414. The project would require site clearing and preparation, new striping, and the installation of a new security fence along the north and west sides of the hangar. The project would also include installation of necessary stormwater drainage for the roadway and installation of a new dumpster enclosure.

9. Construct Liquid Oxygen (LOX) Storage Facility

A new LOX Storage facility would be constructed to replace the existing storage located in B5519 for safety purposes. Work would include the construction of three masonry- and metal-panel walls with an overhang to accommodate the storage of two 3,000-gallon LOX tanks.

10. Construct LOX Equipment Storage Shelter

A LOX support equipment parking shelter would be constructed to comply with Air Force technical requirements.

11. Construct Aerospace Ground Equipment (AGE) Covered Storage Facility

A new covered parking structure would be constructed for AGE. The project would also add weatherproof lighting and electrical systems. This project would primarily protect flightline-ready AGE from direct weather impacts.

Steps Taken to Identify the Area of Potential Effects (APE):

The proposed APE for the undertaking (36 Code of Federal Regulations [CFR] 800.16 (d)) consists of the limits of disturbance (LOD) for the demolition and construction activities and a 0.25-mile radius around the boundary of the LOD to account for visual impacts. Due to the proximity of the 11 projects, a single 0.25-mile radius around all projects was included in the APE, which encompassed the entire PARS facility.

Potential for Effects to Historic Properties

To assess the potential of the Undertaking to affect historic properties, AFRC contracted AECOM to conduct research and an assessment of archaeological potential. Research included a review of previous investigations, historic maps, aerial photographs, soil data, and other environmental data. Information about previous investigations was obtained from AFRC files and the Pennsylvania Historical and Museum Commission (PHMC) online cultural resources system (PA-Share).

Above-Ground Resources

Two architectural history surveys have taken place within the facility. In 1998, Science Applicational International Corporation (SAIC) assessed 53 World War II and Cold War architectural resources, with all recommended not eligible for the National Register of Historic Places (NRHP). The installation as a whole was evaluated as a historic district (1998RE01956) and found not eligible for listing in the NRHP. In 2021, AFRC undertook a historic building inventory for the PARS (CH2M Hill 2022). There were a total of 10 buildings and structures over 45 years of age or nearing 45 years of age within PARS assessed as part of this second survey, including nine buildings that had been part of the previous survey in 1998. The resources were recommended not eligible due to a lack of integrity and/or historic or architectural significance within the identified themes.

One additional above-ground resource has been documented outside of PARS but within the 0.25-mile APE (1996RE00474); this resource was located within the adjacent Pittsburgh International Airport and has been demolished. **Attachment 1: Figure 8** shows the location of previously recorded above-ground resources and surveys within the APE. No above-ground resources listed in or eligible for the NRHP are present within the APE.

Archaeological Resources

Proposed projects 1 through 6 include the renovation, demolition, and repair of existing twentieth-century resources and utilities (**Attachment 1: Figures 3 through 5**). Projects 4 and 7 through 11 include new construction of short roadways and small buildings or structures (**Attachment 1: Figures 4, 6, and 7**). The undertaking includes 11 small, non-contiguous LODs.

No archaeological sites have been previously identified within the LODs or anywhere within the PARS facility, and no previous archaeological surveys have taken place. In 2005, Engineering-Environmental Management, Inc., prepared a cultural resource status report, noting that the entire PARS property had been extensively disturbed prior to and for facility construction as a result of grading and cut-and-fill; their conclusion was based on a review of historic photographs and a reconnaissance survey. A review of PHMC site files shows that numerous surveys have taken place within a 1-mile radius of the LODs, resulting in the identification of five archaeological sites (**Table 1; Attachment 1: Figure 9**).

Table 1. Archaeological Sites within 1 Mile of the APE

Site #	Description	NRHP Status
36AL0502	Late Archaic Habitation Site	Undetermined
36AL0614	20 th Century Farmstead	Not Eligible
36AL0626	Coffer/Rieck Farm	Not Eligible
36AL0752	19 th to 20 th Century Farmstead	Not Eligible
36AL0753	19 th to 20 th Century Scatter	Not Eligible

The 11 LODs have low archaeological potential, primarily due to previous disturbance. Mapped soil types within the PARS facility consist of Urban land-Culleoka complex, gently sloping (west side) and moderately steep (east side).

Renovation of the interior of B226, which was built c. 2012, (Project 1) will include minimal ground disturbance related to landscaping and utilities (**Attachment 1: Figure 3**). This work will take place within areas previously disturbed for construction of the existing building.

Demolition of B208, B209, and B210, all built c. 1952, and construction of a parking lot in their place (Project 2, **Attachment 1: Figure 3**) will not result in new ground disturbance. The vicinity of the buildings was disturbed during the original construction.

Demolition of B403 (c. 1986; Project 3, **Attachment 1: Figure 4**) and construction of a parking lot in the same location will not result in new ground disturbance because the area was disturbed during construction of the building.

Demolition of B405 (c. 1972; Project 4, **Attachment 1: Figure 4**) and construction of an adjacent communications facility will not result in new ground disturbance because the area was disturbed during construction of the extant building. The proposed new communications facility will be installed immediately north of the current B405 proposed for demolition, within a paved parking lot. No buildings are shown at this location on the 1906 USGS topographic map (**Attachment 1: Figure 10**), but by 1960 the area was developed as part of the Pittsburgh International Airport and military reservation (**Attachment 1: Figure 11**). The area has been previously disturbed.

Repair of the existing storm drains and outfalls (Project 5, **Attachment 1: Figure 5**) located in the northeast portion of the facility does not have the potential to affect significant archaeological sites with integrity because the work will take place within the right-of-way of existing stormwater pipes and outfalls. The ground has been previously disturbed.

Demolition of B206 (c. 1955) and its parking lot (Project 6, **Attachment 1: Figure 5**) would not result in new ground disturbance because the area was disturbed during the initial construction.

The proposed munitions access road (Project 7) will be constructed on the southern end of the PARS facility (**Attachment 1: Figure 6**). This area was steeply sloped with a small drainage in 1906 (**Attachment 1: Figure 10**) and has since been filled.

The proposed B414 Hangar access road and parking (Project 8) will be constructed between two buildings and across a parking lot (**Attachment 1: Figure 7**). This sloped area had been disturbed during installation of the taxiways for the Pittsburgh International Airport and military reservation by 1960 (**Attachment 1: Figure 11**). The proposed access road is not likely to result in new ground disturbance.

Construction of LOX storage facilities (Projects 9 and 10) is proposed near the south corner of the B414 Hangar (**Attachment 1: Figure 7**). This area had been steeply sloped prior to the air facility construction and was disturbed for installation of taxiways (**Attachment 1: Figures 10 and 11**).

The proposed AGE covered storage facility (Project 11) will be built within a paved parking lot (**Attachment 1: Figure 7**). This area had been steeply sloped prior to the air facility construction (**Attachment 1: Figure 10**).

Determination of Effects

Based on the information presented above, we request your concurrence on the proposed APE and a determination of “no historic properties affected” as described in 36 CFR § 800.4(d)(1) because the location has been surveyed for historic standing structures and has been previously disturbed for archaeology. **Table 2** presents a summary of the proposed projects.

Table 2. Project Summary

Project #	Location	Undertaking	Potential Historic Properties in APE	Potential S106 Effects
1	B226	Renovate interior of B226	None: B226 (c. 2012) is not historic, ground previously disturbed	None
2	B208, B209, and B210	Demolish three buildings, and install a parking area	None: B208 (c. 1952), B209 (c. 1952), and B210 (c. 1952) are not eligible; ground previously disturbed	None
3	B403	Demolish B403 and install a parking area	None: B403 (c. 1986) is not historic; ground previously disturbed	None
4	B405	Demolish B405, install parking area, and build communications facility	None: B405 (c. 1972) has been determined not eligible; ground previously disturbed	None
5	East side of base	Repair storm drains and outfalls	None: Ground previously disturbed	None
6	B206	Demolish B206 and parking lot	None: B206 (c. 1955) is not eligible; ground previously disturbed	None
7	Between [REDACTED] and [REDACTED]	Construct munitions access road	None: ground previously disturbed	None
8	South of B414	Construct B414 hangar access road, parking, and fence	None: ground previously disturbed	None
9	NW corner of facility	Construct LOX storage facility	None: ground previously disturbed	None
10	NW corner of facility	Construct LOX equipment storage facility	None: ground previously disturbed	None
11	NW corner of facility	Construct AGE storage facility	None: ground previously disturbed	None

This memorandum is being sent as part of the scoping process for the EA. Please provide written comments or information regarding the action at your earliest convenience but no later than 30 days from the receipt of this memorandum. Please submit your comments electronically to: Ms. Sarah Ross, Environmental Engineer, at sarah.ross.11@us.af.mil.

Sincerely,

FORSYTH.THOMAS.G
ORDON.V.1271153585

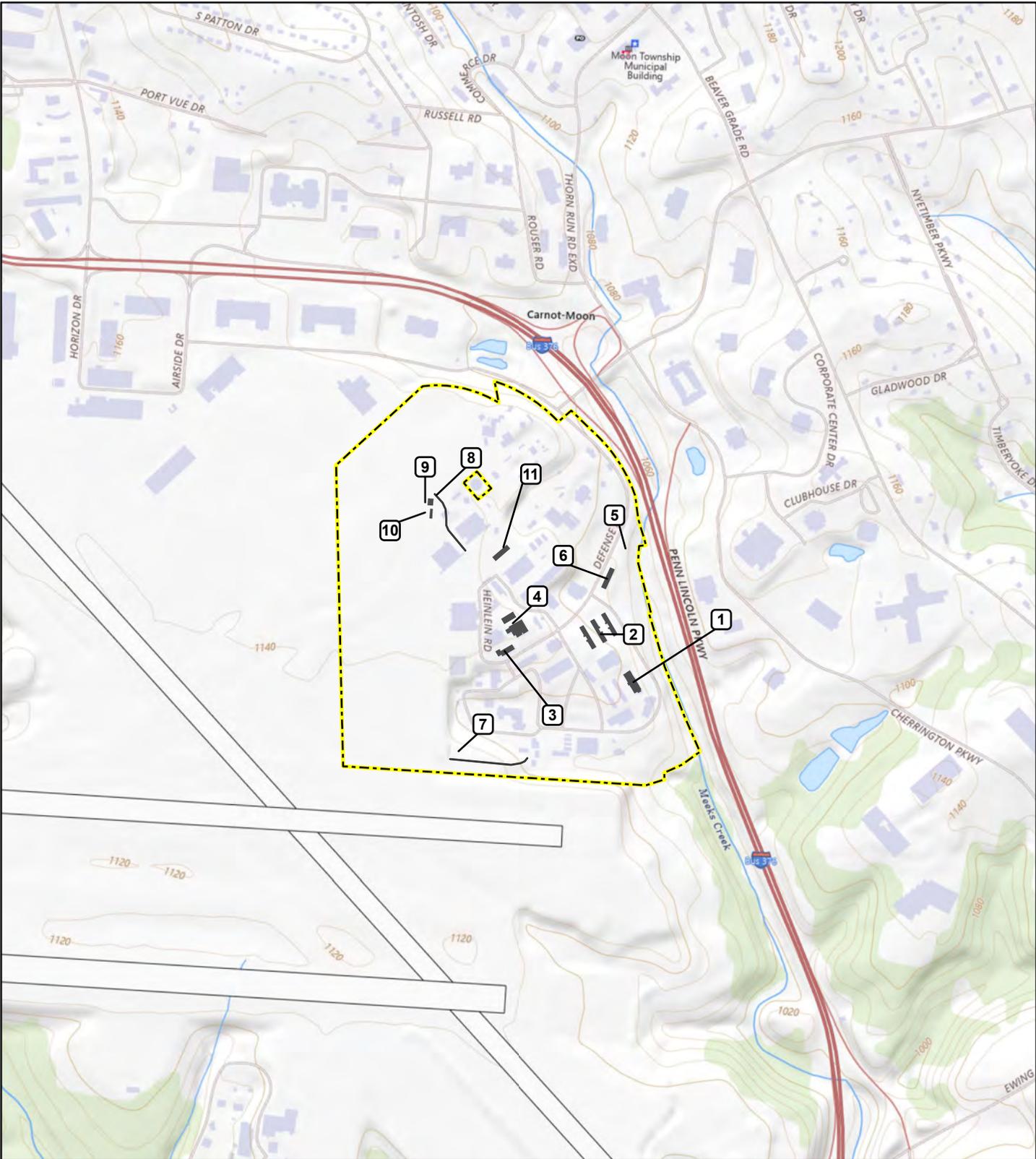
Digitally signed by FORSYTH.THOMAS.GORDON.V.1271153585
Date: 2024.07.24 15:27:09 -04'00'

THOMAS G. FORSYTH, P.E.
Base Civil Engineer

Attachments:

1. Figures
2. References Cited

Attachment 1: Figures



Legend

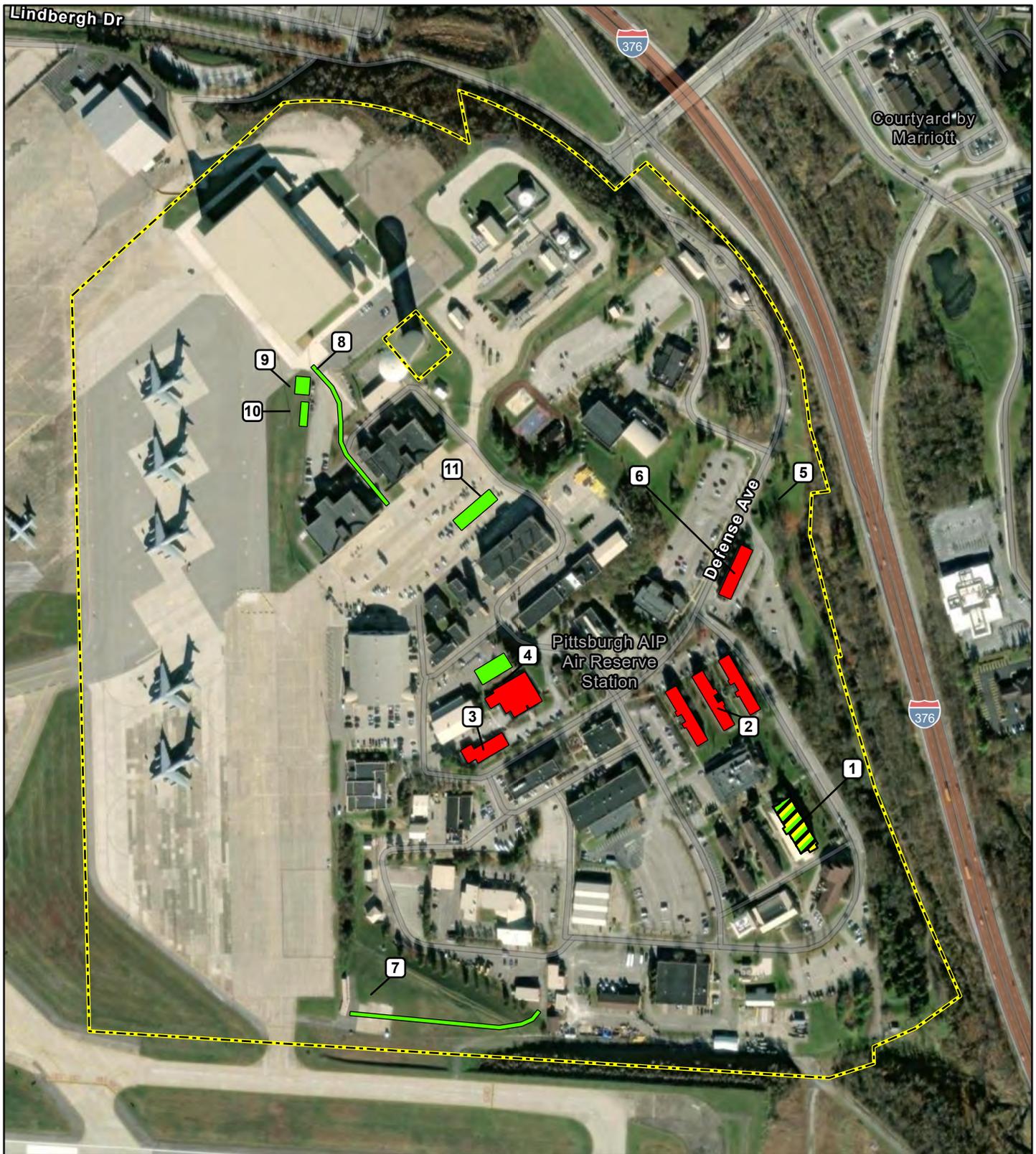
-  Installation Boundary
-  Access Road
-  Facility



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

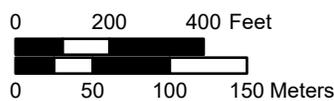
Project Location

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 1



Legend

- Proposed Action Installation Boundary
- Construction
- Demolition
- Renovation



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Proposed Actions

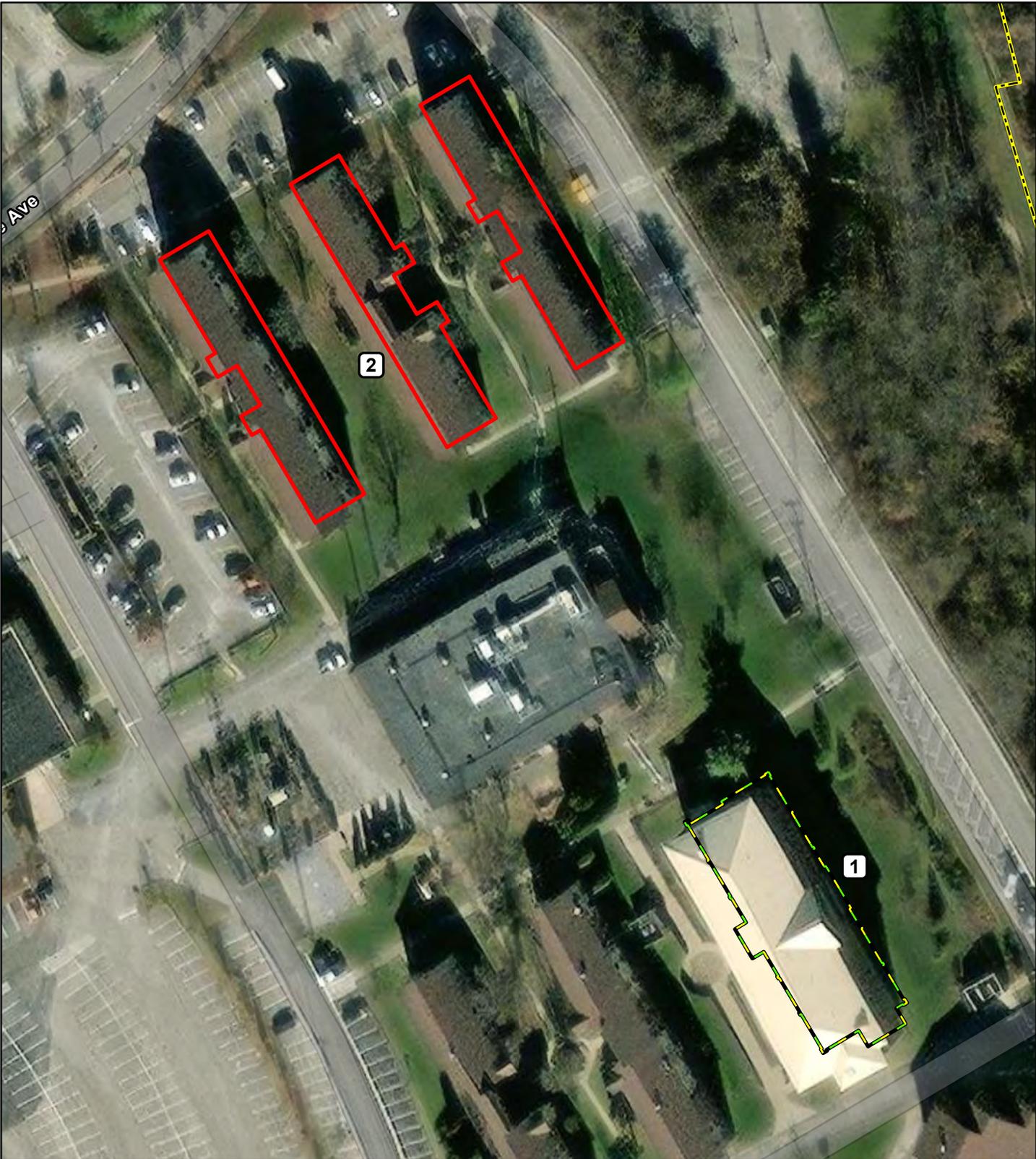
Source: Esri

Project No.
60717608

Prepared by
KAM

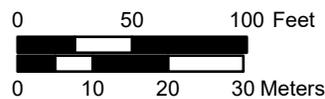
Date
6/17/2024

Figure 2



Legend

-  Installation Boundary
- Proposed Action
-  Demolition
-  Renovation



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

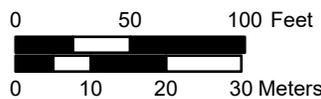
Project 1: Renovate B226
Project 2: Demolish B208, B209, & B210

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 3



Legend

-  Installation Boundary
- Proposed Action
-  Construction
-  Demolition



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project 3: Demolish B403
Project 4: Demolish B405 & Construct
Communications Facility

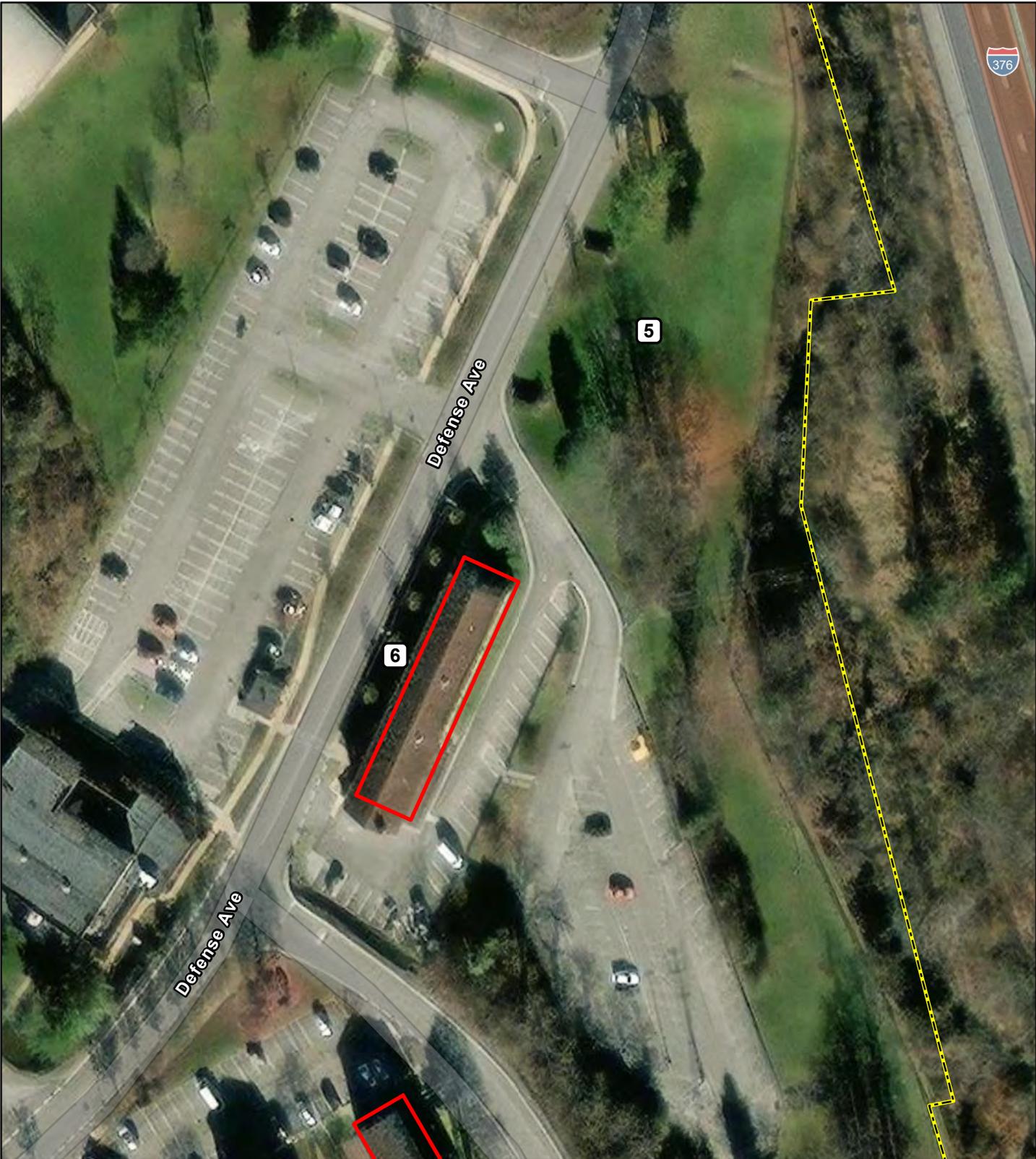
Source: Esri

Project No.
60717608

Prepared by
KAM

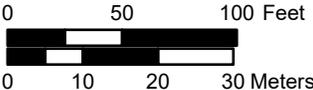
Date
6/17/2024

Figure 4



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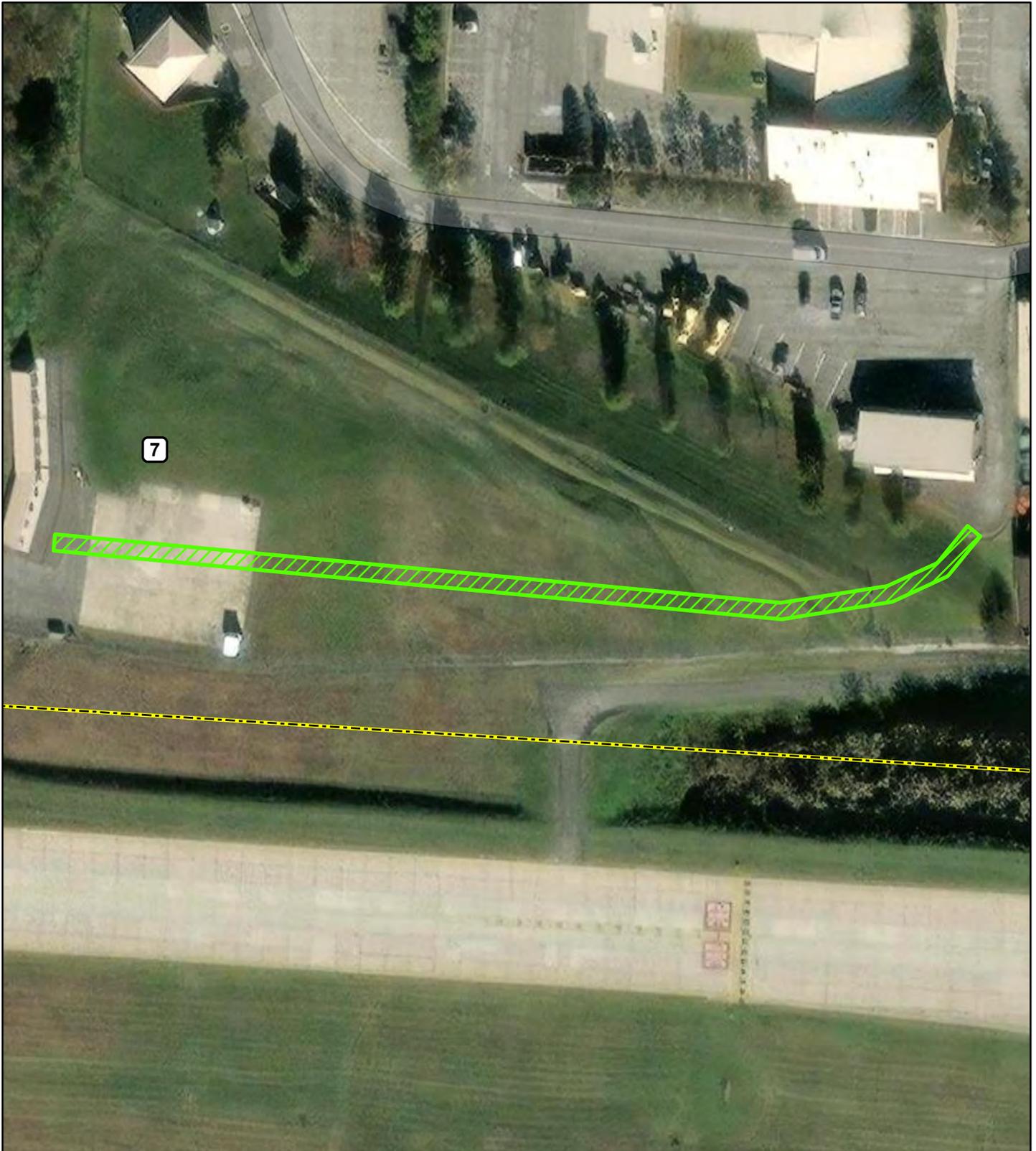
-  Installation Boundary
- Proposed Action
-  Demolition



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

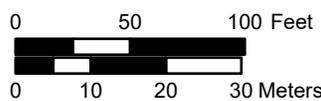
Project 5: Repair Storm Drains
Project 6: Demolish B206

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 5



Legend

-  Installation Boundary
- Proposed Action
-  Construction



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

**Project 7: Construct
Munitions Access Road**

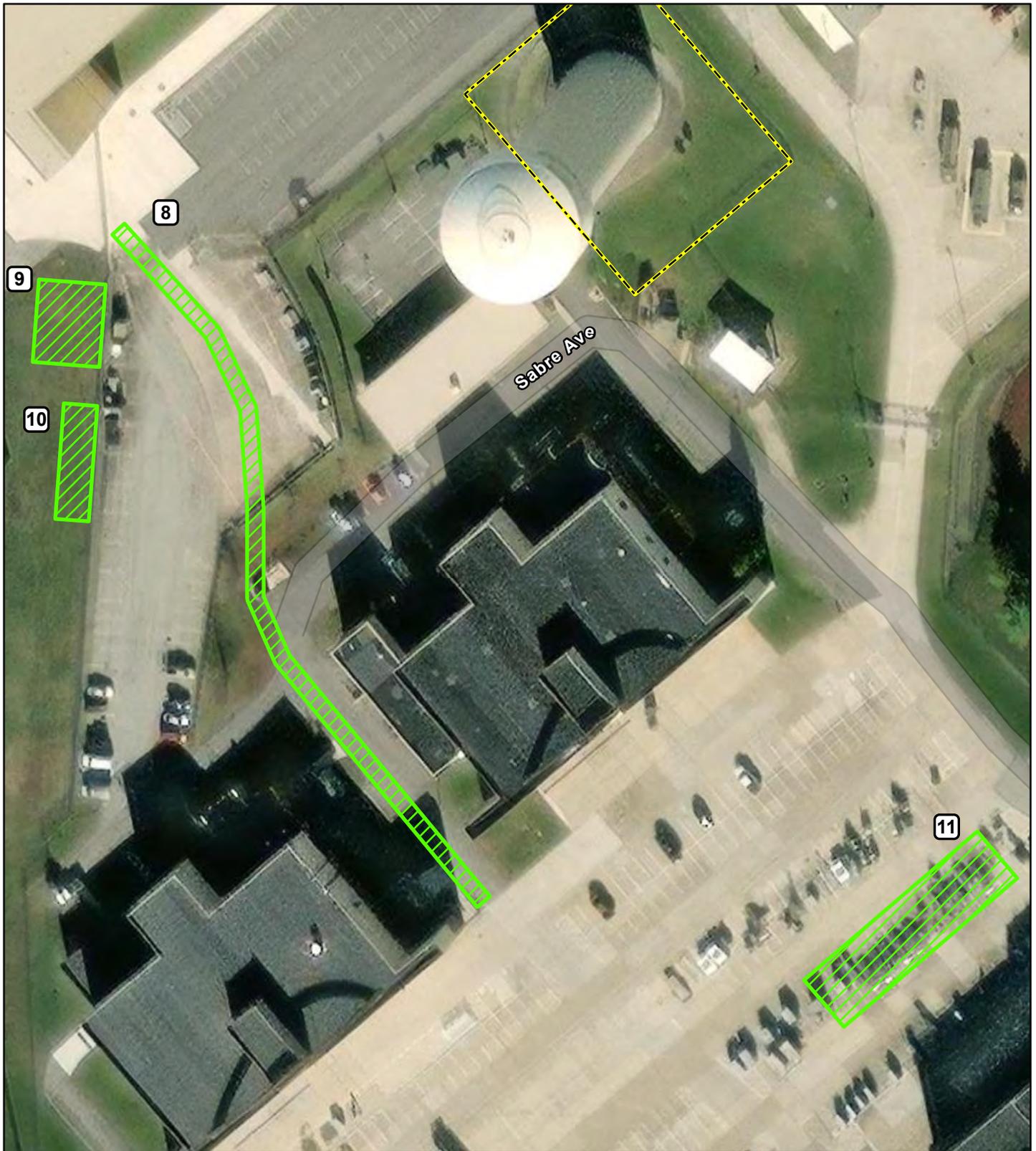
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Project No.
60717608

Prepared by
KAM

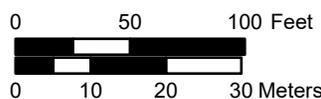
Date
6/17/2024

Figure 6



Legend

-  Installation Boundary
- Proposed Action
-  Construction



AECOM

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Germantown, MD 20876

Project 8: Construct Hangar Access Road
Projects 9, 10, & 11:
Construct Storage Facilities

Source: Esri

Project No.
60717608

Prepared by
KAM

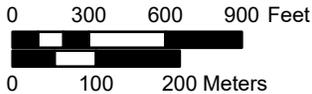
Date
6/17/2024

Figure 7



Legend

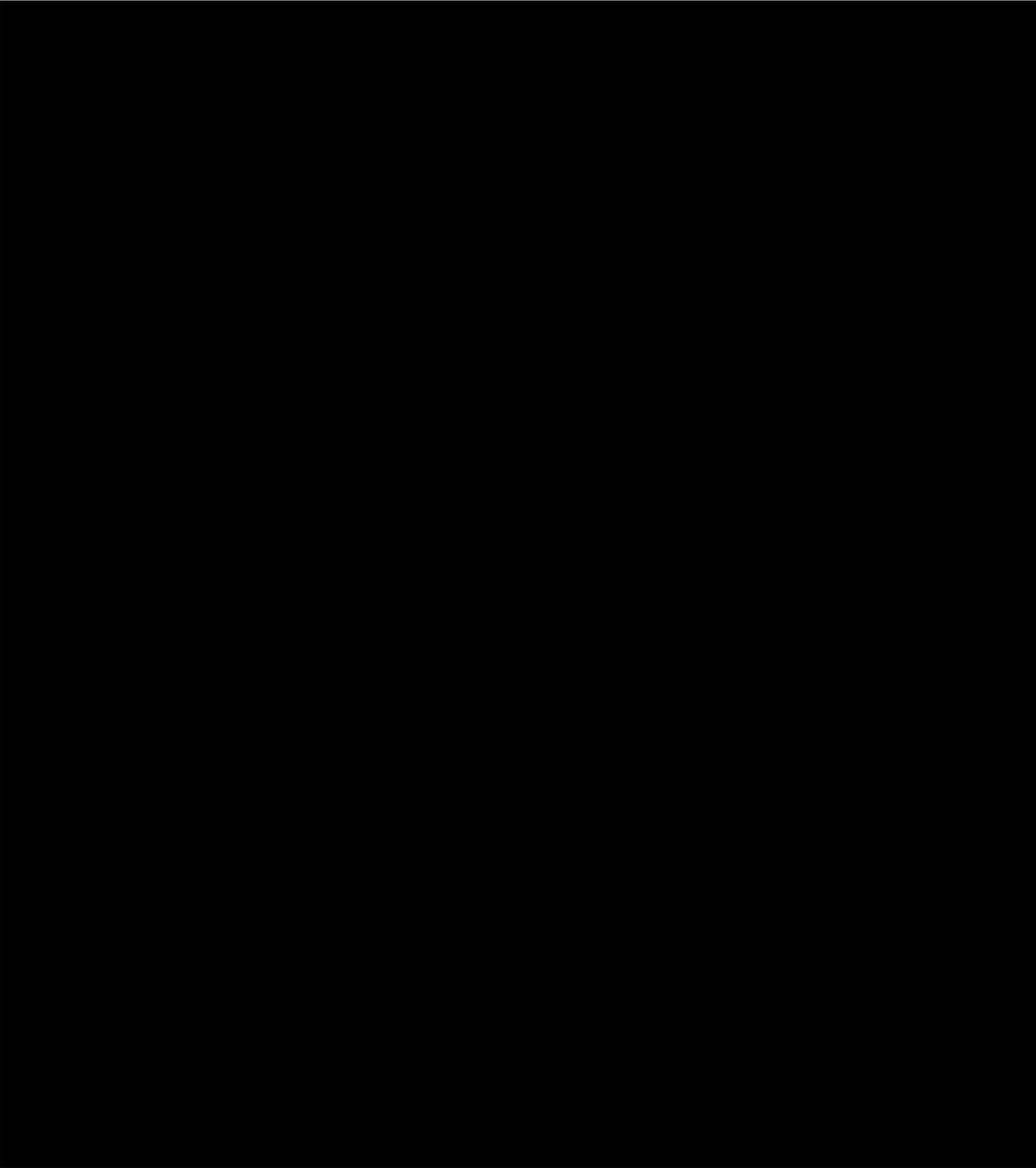
-  Installation Boundary
-  0.25-mi Buffer
-  Resource
-  District
-  Survey



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 Germantown, MD 20876

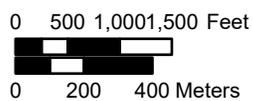
Previous Above-Ground Investigations

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 8



Legend

-  Installation Boundary
-  1-mi Buffer
-  Site
-  Survey

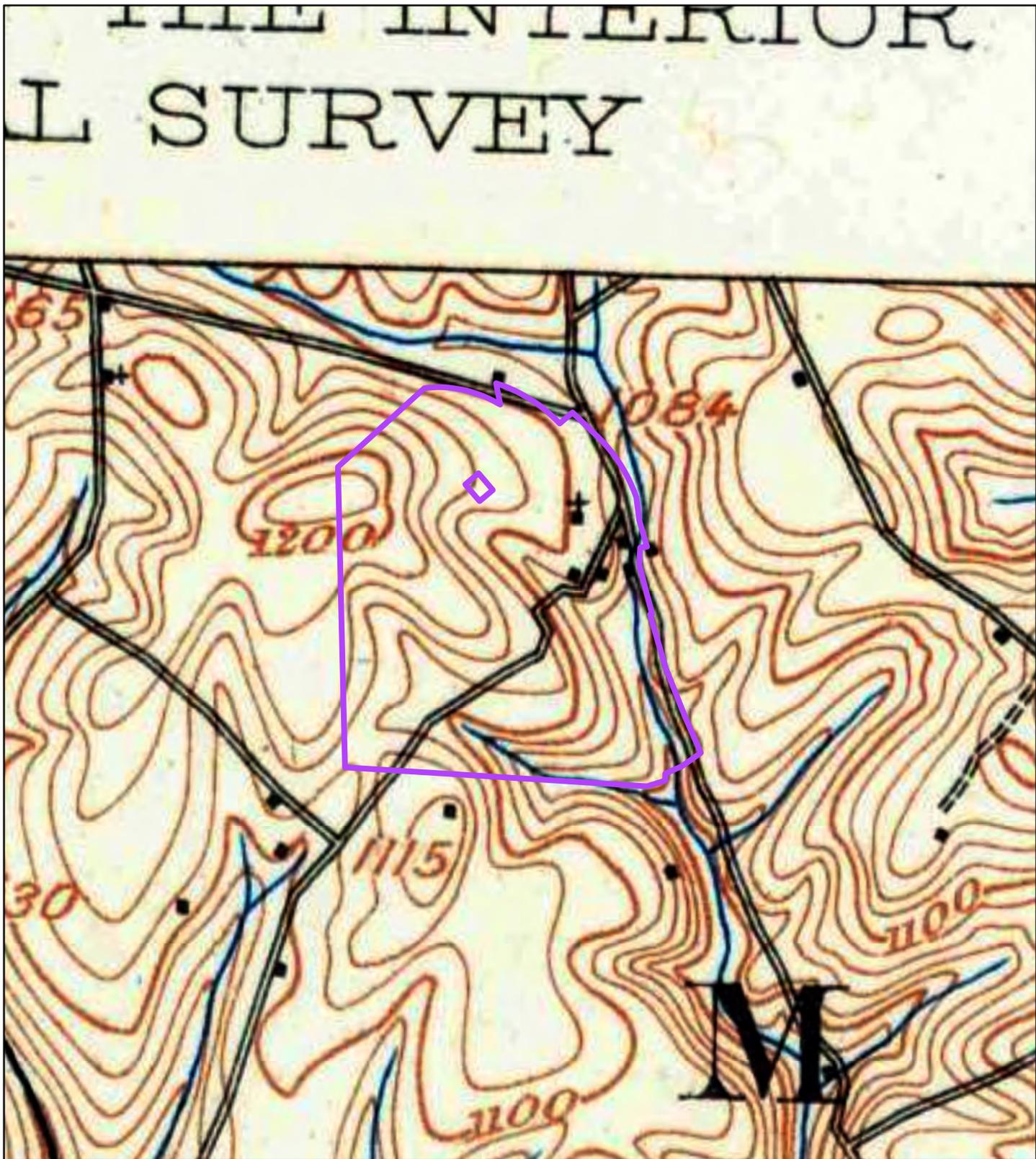


12420 Milestone Center Dr.
Germantown, MD 20876

Previous Archaeological Investigations

Source: Esri

Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 9
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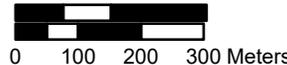


Legend

 Installation Boundary



0 500 1,000 Feet



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project Location on
1904 Carnegie, PA
USGS Topographic Map

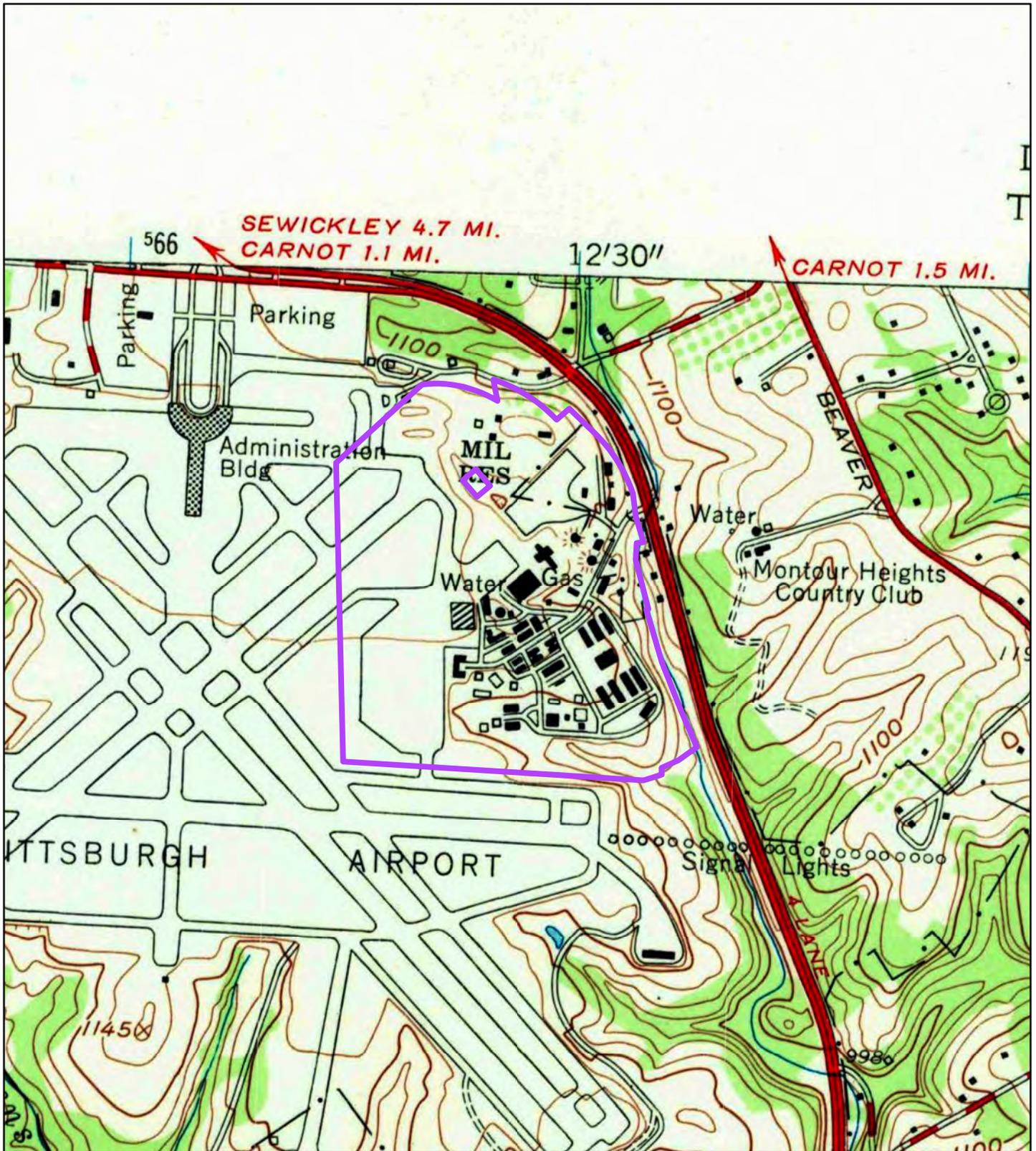
Source: Esri

Project No.
60717608

Prepared by
KAM

Date
6/17/2024

Figure 10



Legend

 Installation Boundary



0 500 1,000 Feet



0 100 200 300 Meters

AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project Location on
1960 Oakdale, PA
USGS Topographic Map

Source: Esri

Project No.
60717608

Prepared by
KAM

Date
6/17/2024

Figure 11

Attachment 2: References Cited

CH2M HILL, Inc.

2022 *Historic Building Inventory Report, Pittsburgh Air Reserve Station*. Prepared for Air Force Reserve Command by CH2M HILL, Inc.,

Engineering-Environmental Management, Inc.

2005 *Cultural Resources Status Report, Pittsburgh International Airport Air Reserve Station, 911th Airlift Wing, Allegheny County, Pennsylvania, 2005-2009*. Report prepared for Headquarters, AFCEE/ISA Environmental Division by Engineering-Environmental Management, Inc., Englewood, Colorado.

Science Applications International Corporation (SAIC)

1998 *Pittsburgh International Airport – Air Reserve Station, 911th Airlift Wing, Historic Building Survey*. Report prepared for Headquarters Air Force Reserve Command by SAIC, Augusta, Georgia.



The information contained in this report reflects the status of the project at the time of printing. It does not represent a completed project.

Project Name: Pittsburgh Air Reserve Station (PARS) 11 FOCUS Study projects

Project Number: 2024PR03549

Project Type: Environmental Review

Project Status: Closed

Project Description: 11 projects to renovate, demolish, and build structures within PARS. See attached project description.

Project Created: 7/30/2024 - Emma Diehl

Project Last Edited: 7/30/2024

Project Closed: 7/30/2024 - Emma Diehl

Submitted from PATH: No

Project Comments:

Environmental Review

Involves Ground Disturbance:

10 or More Resources in the APE:

One or More Above Ground Resources 45 Years in Age or Older: Yes

Approximate Age of Buildings: 70

Present Land Use: Air Force Reserve training facility

Past Land Use: Undeveloped prior to PARS and Pittsburgh International Airport construction in mid-twentieth century

Project includes Construction: Yes

Project includes Demolition: Yes

Project includes Rehabilitation: Yes

Project includes Disposition: No

Opinion: No Historic Properties

Opinion Date: 7/30/2024

Opinion Comment:

APE Location Description: The proposed APE for the undertaking (36 Code of Federal Regulations [CFR] 800.16 (d)) consists of the limits of disturbance (LOD) for the demolition and construction activities and a 0.25-mile radius around the boundary of the LOD to account for visual impacts. Due to the proximity of the 11 projects, a single 0.25-mile radius around all projects was included in the APE, which encompassed the entire PARS facility.

LOD Location Description:

APE Acreage/LOD Acreage: 86.75/NA

Project Address: Pittsburgh Air Reserve Station Pittsburgh PA 15231000

Project Located On Federal: Yes

Project Located On State: No

Project Located On Municipal: No

Project Located On Private: No



The information contained in this report reflects the status of the project at the time of printing. It does not represent a completed project.

Agencies

Name	Type
Department of Defense	Federal

Municipalities

County	Municipality
Allegheny	Moon Township

Project Documents

Name	Type
20240718_PARS EA_Draft v2 SHPO Letter_ToClient_final draft_signed	Correspondence

SHPO Response Attachments

Name	Type	Submission Number
2024PR03549.001 ER Summary Letter	Correspondence	2024PR03549.001

Contacts

Name	Email	Phone
Heather Crowl	heather.crowl@aecom.com	15712860778

Associated Projects

Number	Name	Type
<i>No Records</i>		

Associated Resources

Number	Name	Type
<i>No Records</i>		

Associated Surveys

Number	Name	Type
<i>No Records</i>		

Reports

Number	Title	Date	Author
<i>No Records</i>			

The information contained in this report reflects the status of the project at the time of printing. It does not represent a completed project.

Success Stories

Name	Type
No Records	

Project Map





The information contained in this report reflects the status of the project at the time of printing. It does not represent a completed project.

Project Photos

No Records

Submissions

2024PR03549.001

Type: Initial

Status: Closed

Description: Initial Submission

Reviews:

Above Ground Review

Emma Diehl

No Above Ground Concerns

Archaeology Review

Emma Diehl

No Archaeological Concerns

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**APPENDIX C:
TRIBAL CONSULTATION**

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TRIBAL DISTRIBUTION LIST

Catawba Indian Nation

1536 Tom Steven Road

Rock Hill, SC 29730

POC: Dr. Wenonah G. Haire, THPO and Catawba Cultural Center Executive Director

Email: wenonah.haire@catawba.com

Delaware Nation

P.O. Box 825

Anadarko, OK 73005

POC: Katelyn Lucas, THPO

Email: klucas@delawarenation-nsn.gov

Delaware Tribe of Indians

5100 Tuxedo Blvd

Bartlesville, OK 64006

POC: Susan Bachor, THPO

Email: sbachor@delawaretribe.org

Eastern Shawnee Tribe of Oklahoma

70500 E 128 Rd.

Wyandotte, OK 74370

POC: Lora Nuckolls, THPO/Director of Culture Preservation Programs/NAGPRA

Email: thpo@estoo.net

Osage Nation

Historic Preservation Office

100 W. Main

Pawhuska, OK 74056

POC: Andrea A. Hunter, Director and THPO

Email: HistoricPreservation@osagenation-nsn.gov

Seneca-Cayuga Nation

P.O. Box 453220

Grove, OK 74345

POC: William Tarrant, THPO

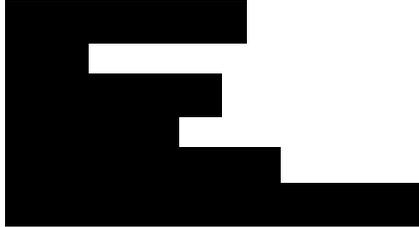
Email: wtarrant@sctribe.com



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND

SAMPLE

7/24/2024



From: 911th AW, Pittsburgh Air Reserve Station

SUBJECT: Eleven (11) Facilities Operations Capability and Utilization Survey (FOCUS) Study projects at Pittsburgh Air Reserve Station

Dear [REDACTED]

The United States Air Force Reserve Command (AFRC) and Pittsburgh Air Reserve Station (PARS) are preparing an Environmental Assessment (EA) to evaluate the potential environmental impacts resulting from the implementation of 11 projects from the PARS Facilities Operations Capability and Utilization Survey (FOCUS) Study in order to meet training requirements and conduct airfield operations to support the 911th Airlift Wing (AW). PARS is collocated with the Pittsburgh International Airport (PIT or the Airport) in Moon Township, Pennsylvania (**Attachment 1: Figure 1**). A FOCUS study was completed for the 911th AW in 2021 to document space utilization and evaluate the condition of AFRC facilities (AFRC 2021). The FOCUS Study resulted in development of a list of over 60 recommended projects over the coming years, with the implementation of 11 recommended projects under current consideration.

Project Details

The Proposed Project (undertaking) includes 11 non-contiguous components and project areas (**Attachment 1: Figures 2 through 7**), described below.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility

This project would consist of an approximately 29,000 square foot (SF) interior renovation of B226 for training and consolidated Wing functions. The renovation would include the demolition of all interior non-load bearing walls and the construction of all supporting utilities, pavements, and landscaping, as well as interior and exterior communications infrastructure. Renovation of the building would improve operations and maintenance, upgrade substandard training facilities, and improve energy efficiency.

2. Demolish B208, B209, and B210 and Construct Parking

B208, B209, and B210 would be demolished, including facility, basement, and foundation components. The site would then be regraded for conversion into a 39,000 SF parking area for the newly renovated B226.

3. Demolish B403 and Construct Parking

B403 would be demolished, and a new 5,400 SF parking area would be constructed in the building's place. Current building operations would be moved to the renovated Consolidated Wing Training Facility.

4. Demolish B405 and Construct Communications Facility

The proposed Communications Facility would be a new, approximately 23,000 SF building constructed for the Communications Squadron. The new facility would accommodate approximately 27 new personnel. The existing Communications Facility housed in B405 lacks the space to support additional growth and fulfill existing mission requirements. B405 would be demolished and converted to an approximately 11,300 SF parking lot for the new facility.

5. Repair Storm Drains and Outfalls

Approximately 360 linear feet of damaged metal corrugated pipe leading to two outfalls would be removed and replaced with a new watertight plastic pipe. A new manhole and catch basin would also be installed and approximately 800 SF of riprap would be removed. The existing damaged pipe is causing soil erosion and loss of bank stability in this location.

6. Demolish B206

B206, a two-story stick-framed building that formerly served as a lodging facility, would be demolished. The building's approximately 17,700 SF parking lot would also be removed, and the site would be regraded, seeded as a lawn, and stabilized. Demolition of the building would reduce operation and maintenance costs.

7. Construct Munitions Access Road

A new access road would be constructed between [REDACTED] and [REDACTED] for transporting munitions. Construction would include installing an asphalt drive and concrete curbs as well as a block retaining wall. The project would also require site clearing, preparation, and grading. The current route for transporting munitions is inefficient and runs through the main base.

8. B414 Hangar Access Road and Parking

A new roadway and retaining wall would be constructed for efficient access to B414. The project would require site clearing and preparation, new striping, and the installation of a new security fence along the north and west sides of the hangar. The project would also include installation of necessary stormwater drainage for the roadway and installation of a new dumpster enclosure.

9. Construct Liquid Oxygen (LOX) Storage Facility

A new LOX Storage facility would be constructed to replace the existing storage located in B5519 for safety purposes. Work would include the construction of three masonry- and metal-panel walls with an overhang to accommodate the storage of two 3,000-gallon LOX tanks.

10. Construct LOX Equipment Storage Shelter

A LOX support equipment parking shelter would be constructed to comply with Air Force technical requirements.

11. Construct Aerospace Ground Equipment (AGE) Covered Storage Facility

A new covered parking structure would be constructed for AGE. The project would also add weatherproof lighting and electrical systems. This project would primarily protect flightline-ready AGE from direct weather impacts.

Steps Taken to Identify the Area of Potential Effects (APE):

The proposed APE for the undertaking (36 Code of Federal Regulations [CFR] 800.16 (d)) consists of the limits of disturbance (LOD) for the demolition and construction activities and a 0.25-mile radius around the boundary of the LOD to account for visual impacts. Due to the proximity of the 11 projects, a single 0.25-mile radius around all projects was included in the APE, which encompassed the entire PARS facility.

Potential for Effects to Historic Properties

To assess the potential of the Undertaking to affect historic properties, AFRC contracted AECOM to conduct research and an assessment of archaeological potential. Research included a review of previous investigations, historic maps, aerial photographs, soil data, and other environmental data. Information about previous investigations was obtained from AFRC files and the Pennsylvania Historical and Museum Commission (PHMC) online cultural resources system (PA-Share).

Above-Ground Resources

Two architectural history surveys have taken place within the facility. In 1998, Science Application International Corporation (SAIC) assessed 53 World War II and Cold War architectural resources, with all recommended not eligible for the National Register of Historic Places (NRHP). The installation as a whole was evaluated as a historic district (1998RE01956) and found not eligible for listing in the NRHP. In 2021, AFRC undertook a historic building inventory for the PARS (CH2M Hill 2022). There were a total of 10 buildings and structures over 45 years of age or nearing 45 years of age within PARS assessed as part of this second survey, including nine buildings that had been part of the previous survey in 1998. The resources were recommended not eligible due to a lack of integrity and/or historic or architectural significance within the identified themes.

One additional above-ground resource has been documented outside of PARS but within the 0.25-mile APE (1996RE00474); this resource was located within the adjacent Pittsburgh International Airport and has been demolished. **Attachment 1: Figure 8** shows the location of previously recorded above-ground resources and surveys within the APE. No above-ground resources listed in or eligible for the NRHP are present within the APE.

Archaeological Resources

Proposed projects 1 through 6 include the renovation, demolition, and repair of existing twentieth-century resources and utilities (**Attachment 1: Figures 3 through 5**). Projects 4 and 7 through 11

include new construction of short roadways and small buildings or structures (**Attachment 1: Figures 4, 6, and 7**). The undertaking includes 11 small, non-contiguous LODs.

No archaeological sites have been previously identified within the LODs or anywhere within the PARS facility, and no previous archaeological surveys have taken place. In 2005, Engineering-Environmental Management, Inc., prepared a cultural resource report, noting that the entire PARS property had been extensively disturbed prior to and for facility construction as a result of grading and cut-and-fill; their conclusion was based on a review of historic photographs and a reconnaissance survey. A review of PHMC site files shows that numerous surveys have taken place within a 1-mile radius of the LODs, resulting in the identification of five archaeological sites (**Table 1; Attachment 1: Figure 9**).

Table 1. Archaeological Sites within 1 Mile of the APE

Site #	Description	NRHP Status
36AL0502	Late Archaic Habitation Site	Undetermined
36AL0614	20 th Century Farmstead	Not Eligible
36AL0626	Coffer/Rieck Farm	Not Eligible
36AL0752	19 th to 20 th Century Farmstead	Not Eligible
36AL0753	19 th to 20 th Century Scatter	Not Eligible

The 11 LODs have low archaeological potential, primarily due to previous disturbance. Mapped soil types within the PARS facility consist of Urban land-Culleoka complex, gently sloping (west side) and moderately steep (east side).

Renovation of the interior of B226, which was built c. 2012, (Project 1) will include minimal ground disturbance related to landscaping and utilities (**Attachment 1: Figure 3**). This work will take place within areas previously disturbed for construction of the existing building.

Demolition of B208, B209, and B210, all built c. 1952, and construction of a parking lot in their place (Project 2, **Attachment 1: Figure 3**) will not result in new ground disturbance. The vicinity of the buildings was disturbed during the original construction.

Demolition of B403 (c. 1986; Project 3, **Attachment 1: Figure 4**) and construction of a parking lot in the same location will not result in new ground disturbance because the area was disturbed during construction of the building.

Demolition of B405 (c. 1972; Project 4, **Attachment 1: Figure 4**) and construction of an adjacent communications facility will not result in new ground disturbance because the area was disturbed during construction of the extant building. The proposed new communications facility will be installed immediately north of the current B405 proposed for demolition, within a paved parking lot. No buildings are shown at this location on the 1906 USGS topographic map (**Attachment 1: Figure 10**), but by 1960 the area was developed as part of the Pittsburgh International Airport and military reservation (**Attachment 1: Figure 11**). The area has been previously disturbed.

Repair of the existing storm drains and outfalls (Project 5, **Attachment 1: Figure 5**) located in the northeast portion of the facility does not have the potential to affect significant archaeological sites

with integrity because the work will take place within the right-of-way of existing stormwater pipes and outfalls. The ground has been previously disturbed.

Demolition of B206 (c. 1955) and its parking lot (Project 6, **Attachment 1: Figure 5**) would not result in new ground disturbance because the area was disturbed during the initial construction.

The proposed munitions access road (Project 7) will be constructed on the southern end of the PARS facility (**Attachment 1: Figure 6**). This area was steeply sloped with a small drainage in 1906 (**Attachment 1: Figure 10**) and has since been filled.

The proposed B414 Hangar access road and parking (Project 8) will be constructed between two buildings and across a parking lot (**Attachment 1: Figure 7**). This sloped area had been disturbed during installation of the taxiways for the Pittsburgh International Airport and military reservation by 1960 (**Attachment 1: Figure 11**). The proposed access road is not likely to result in new ground disturbance.

Construction of LOX storage facilities (Projects 9 and 10) is proposed near the south corner of the B414 Hangar (**Attachment 1: Figure 7**). This area had been steeply sloped prior to the air facility construction and was disturbed for installation of taxiways (**Attachment 1: Figures 10 and 11**).

The proposed AGE covered storage facility (Project 11) will be built within a paved parking lot (**Attachment 1: Figure 7**). This area had been steeply sloped prior to the air facility construction (**Attachment 1: Figure 10**).

Determination of Effects

Based on the information presented above, we request your concurrence on the proposed APE and a determination of “no historic properties affected” as described in 36 CFR § 800.4(d)(1) because the location has been surveyed for historic standing structures and has been previously disturbed for archaeology. **Table 2** presents a summary of the proposed projects.

Table 2. Project Summary

Project #	Location	Undertaking	Potential Historic Properties in APE	Potential S106 Effects
1	B226	Renovate interior of B226	None: B226 (c. 2012) is not historic, ground previously disturbed	None
2	B208, B209, and B210	Demolish three buildings, and install a parking area	None: B208 (c. 1952), B209 (c. 1952), and B210 (c. 1952) are not eligible; ground previously disturbed	None
3	B403	Demolish B403 and install a parking area	None: B403 (c. 1986) is not historic; ground previously disturbed	None

Project #	Location	Undertaking	Potential Historic Properties in APE	Potential S106 Effects
4	B405	Demolish B405, install parking area, and build communications facility	None: B405 (c. 1972) has been determined not eligible; ground previously disturbed	None
5	East side of base	Repair storm drains and outfalls	None: Ground previously disturbed	None
6	B206	Demolish B206 and parking lot	None: B206 (c. 1955) is not eligible; ground previously disturbed	None
7	Between [REDACTED] and [REDACTED]	Construct munitions access road	None: ground previously disturbed	None
8	South of B414	Construct B414 hangar access road, parking, and fence	None: ground previously disturbed	None
9	NW corner of facility	Construct LOX storage facility	None: ground previously disturbed	None
10	NW corner of facility	Construct LOX equipment storage facility	None: ground previously disturbed	None
11	NW corner of facility	Construct AGE storage facility	None: ground previously disturbed	None

In accordance with 36 CFR 800.2(c), the Air Force is also consulting the Pennsylvania SHPO. This proposed undertaking is associated with a NEPA environmental assessment. Should your tribe wish to be consulted also under the NEPA planning process, please notify us on that matter. Please submit your comments electronically within 30 days of receipt to: Ms. Sarah Ross, Environmental Engineer, at sarah.ross.11@us.af.mil.

Sincerely,

FORSYTH.THOMAS.G
ORDON.V.1271153585

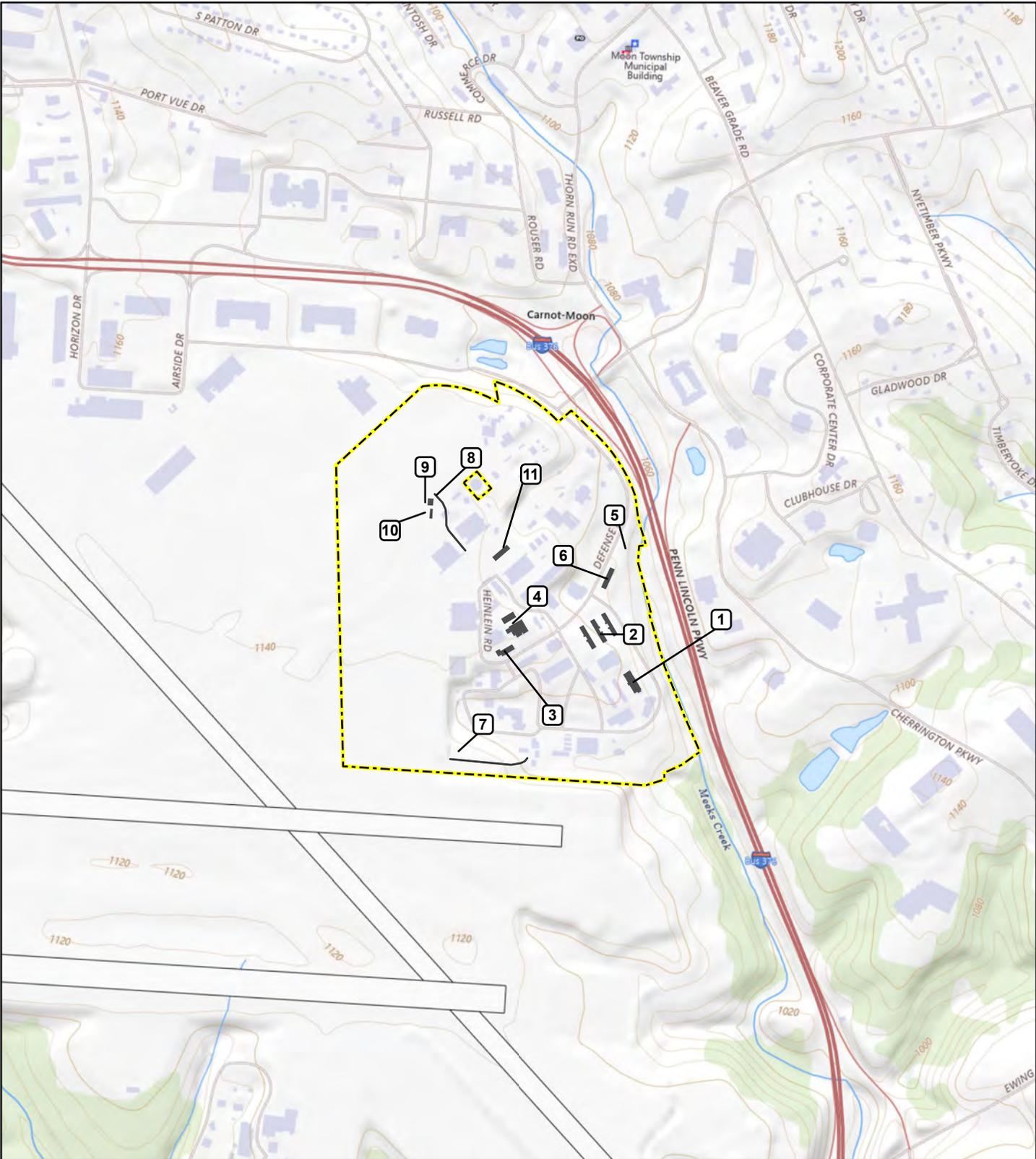
Digitally signed by
FORSYTH.THOMAS.GORDON.V.12
71153585
Date: 2024.07.24 15:28:15 -04'00'

THOMAS G. FORSYTH, P.E.
Base Civil Engineer

Attachments:

1. Figures
2. References Cited

Attachment 1: Figures



Legend

-  Installation Boundary
-  Access Road
-  Facility



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

Project Location

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 1



Legend

- Proposed Action Installation Boundary
- Construction
- Demolition
- Renovation

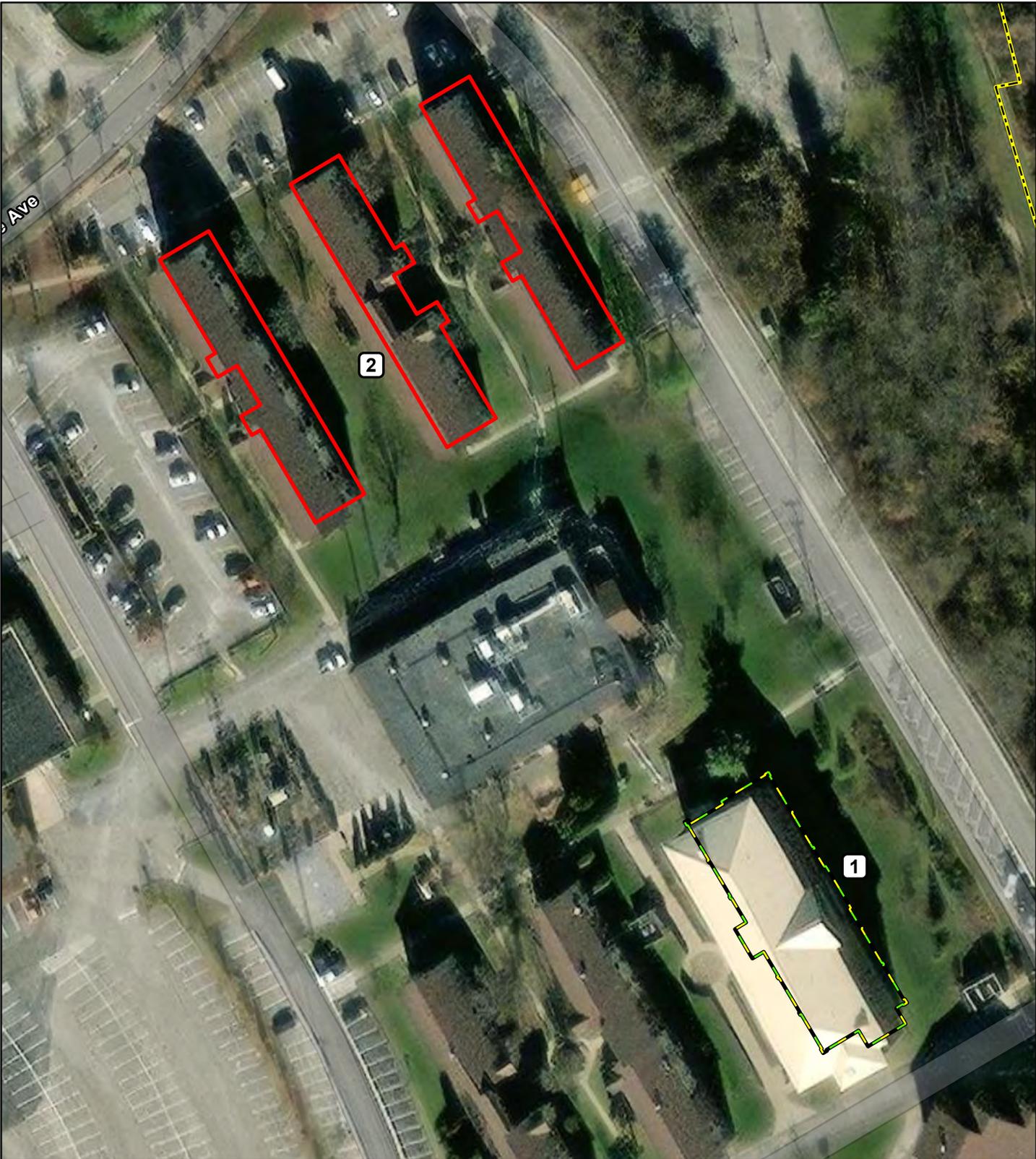


AECOM

12420 Milestone Center Dr.
 Germantown, MD 20876

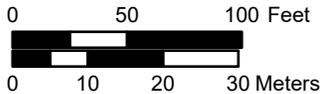
Proposed Actions

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 2



Legend

- Installation Boundary
- Proposed Action
- Demolition
- Renovation



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

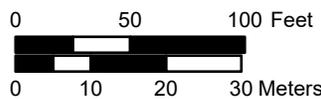
Project 1: Renovate B226
Project 2: Demolish B208, B209, & B210

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 3



Legend

-  Installation Boundary
- Proposed Action
-  Construction
-  Demolition



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project 3: Demolish B403
Project 4: Demolish B405 & Construct
Communications Facility

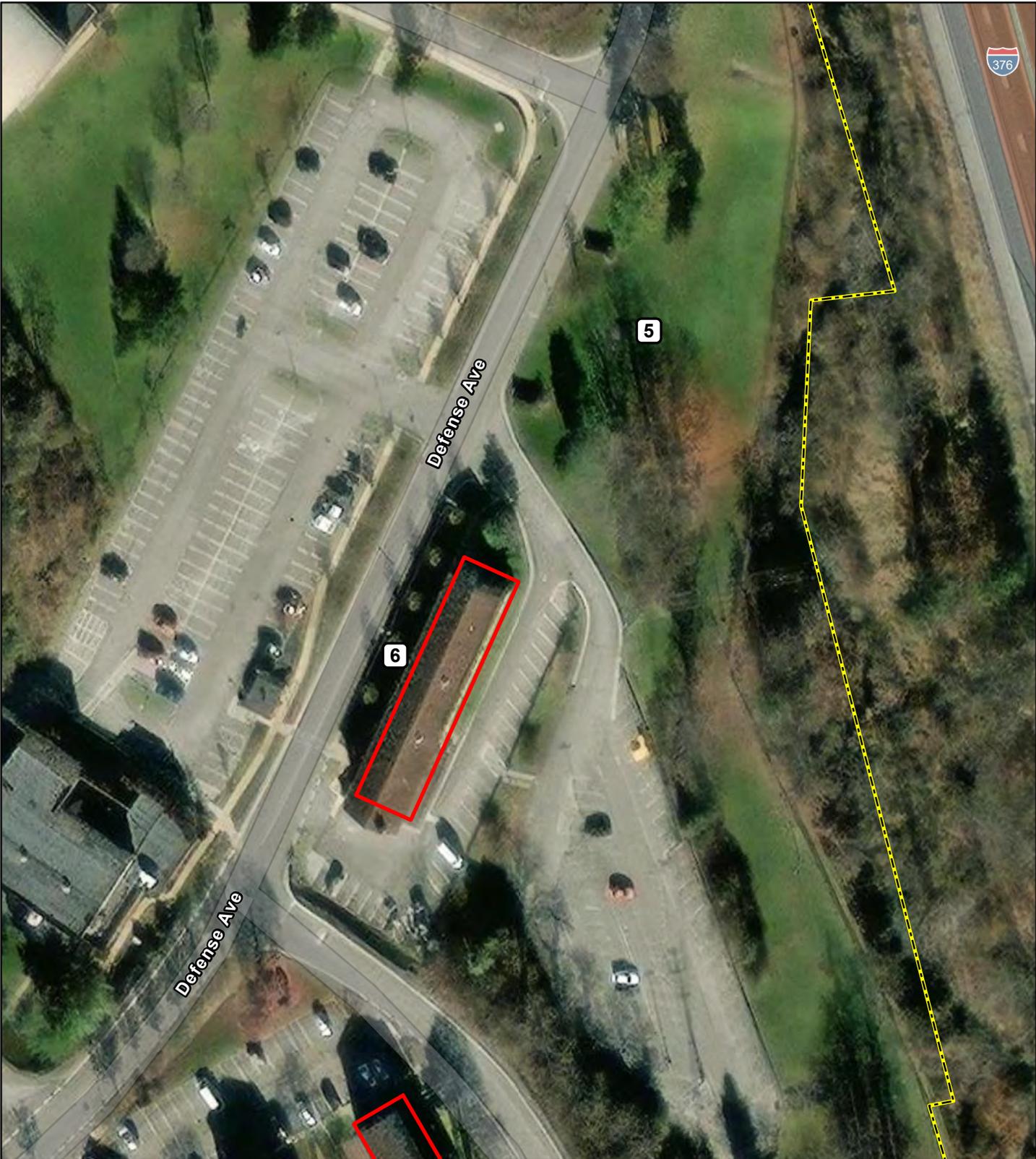
Source: Esri

Project No.
60717608

Prepared by
KAM

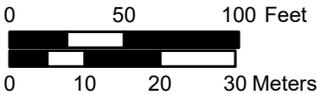
Date
6/17/2024

Figure 4



Legend

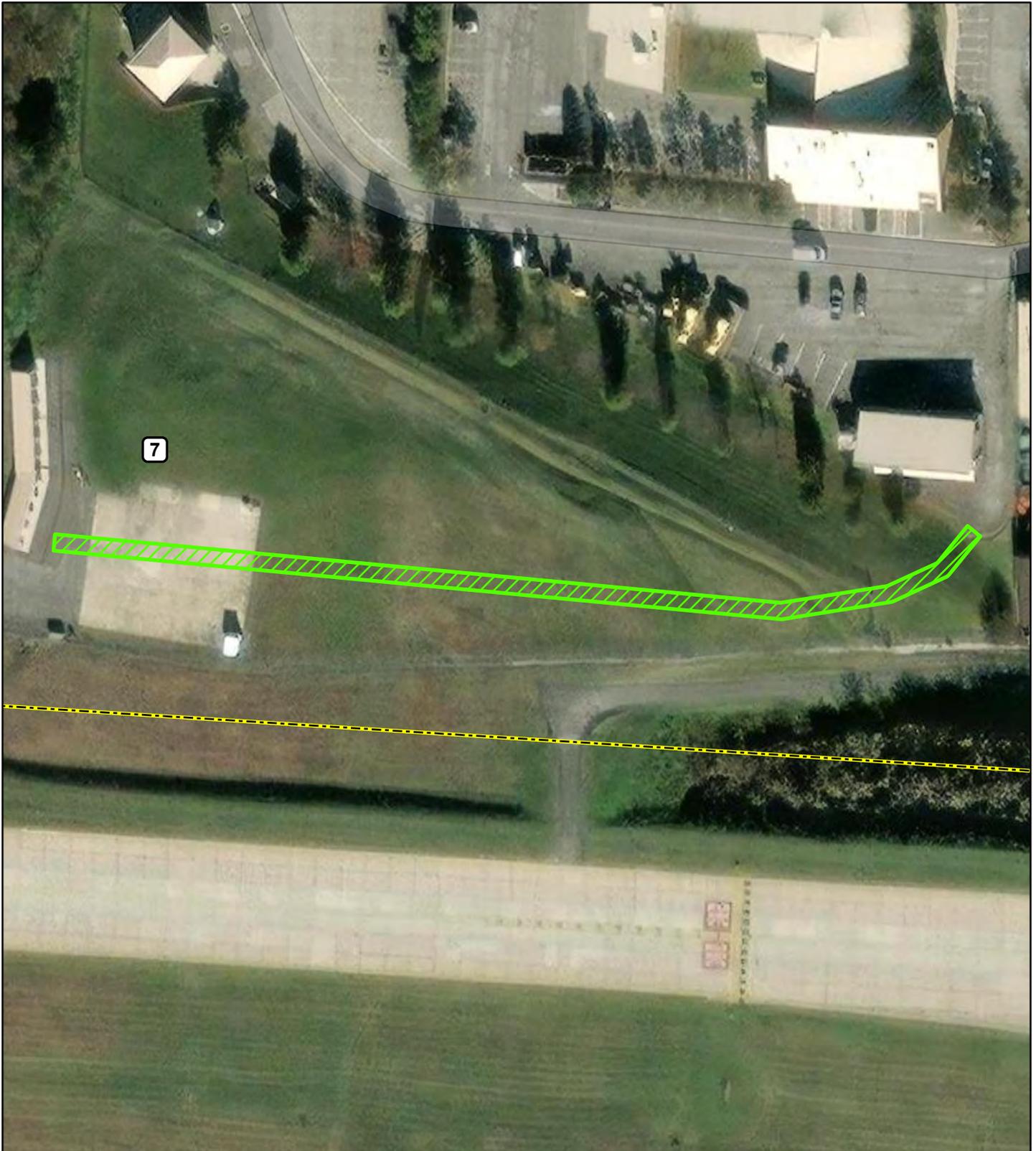
-  Installation Boundary
- Proposed Action
-  Demolition



AECOM 12420 Milestone Center Dr.
Germantown, MD 20876

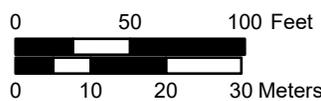
Project 5: Repair Storm Drains
Project 6: Demolish B206

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 5



Legend

-  Installation Boundary
- Proposed Action
-  Construction



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

**Project 7: Construct
Munitions Access Road**

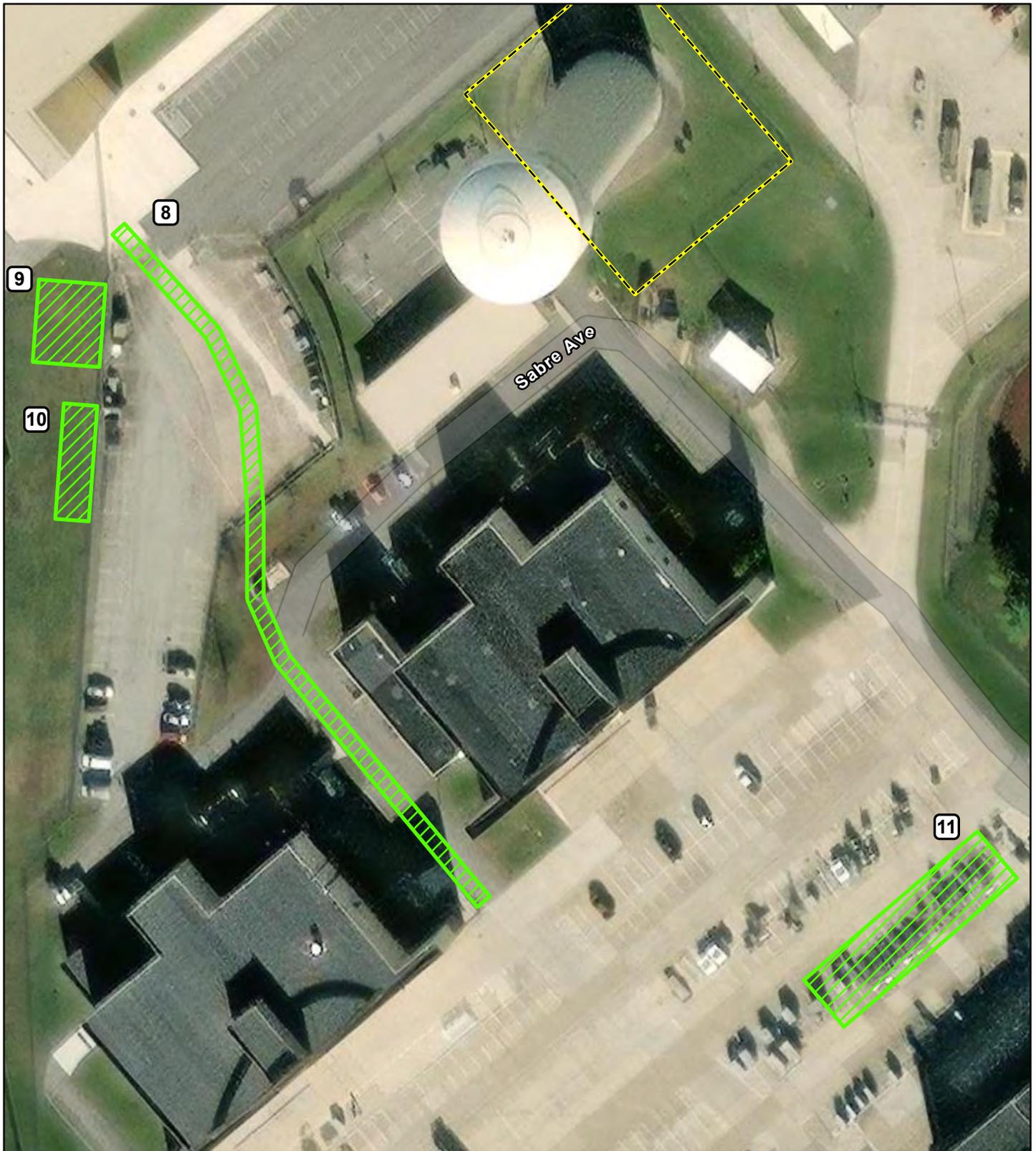
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Project No.
60717608

Prepared by
KAM

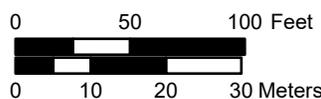
Date
6/17/2024

Figure 6



Legend

-  Installation Boundary
- Proposed Action
-  Construction



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project 8: Construct Hangar Access Road
Projects 9, 10, & 11:
Construct Storage Facilities

Source: Esri

Project No.
60717608

Prepared by
KAM

Date
6/17/2024

Figure 7



Legend

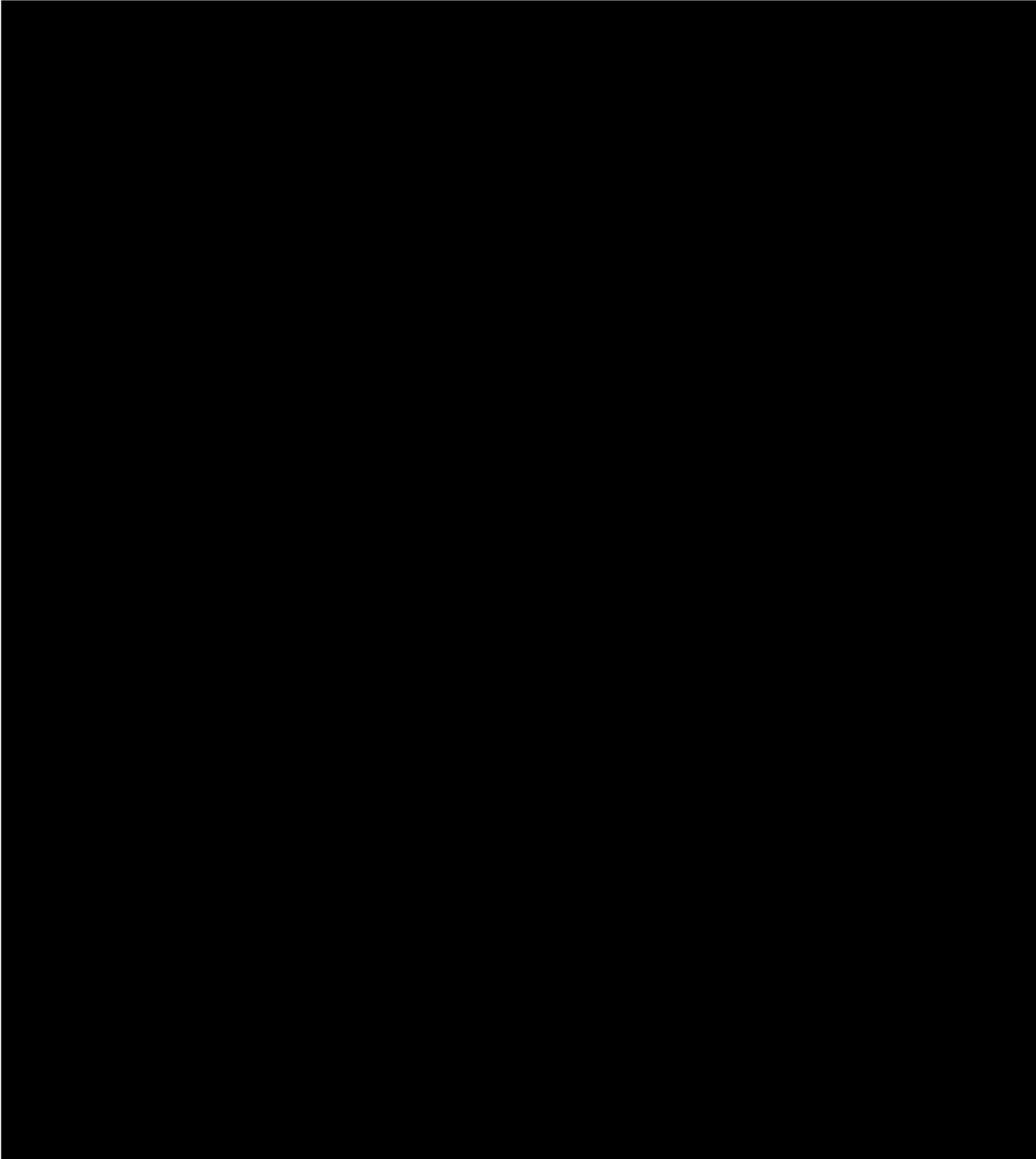
-  Installation Boundary
-  0.25-mi Buffer
-  Resource
-  District
-  Survey



12420 Milestone Center Dr.
 Germantown, MD 20876

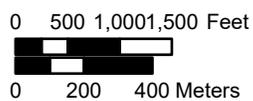
Previous Above-Ground Investigations

Source: Esri			
Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 8



Legend

-  Installation Boundary
-  1-mi Buffer
-  Site
-  Survey

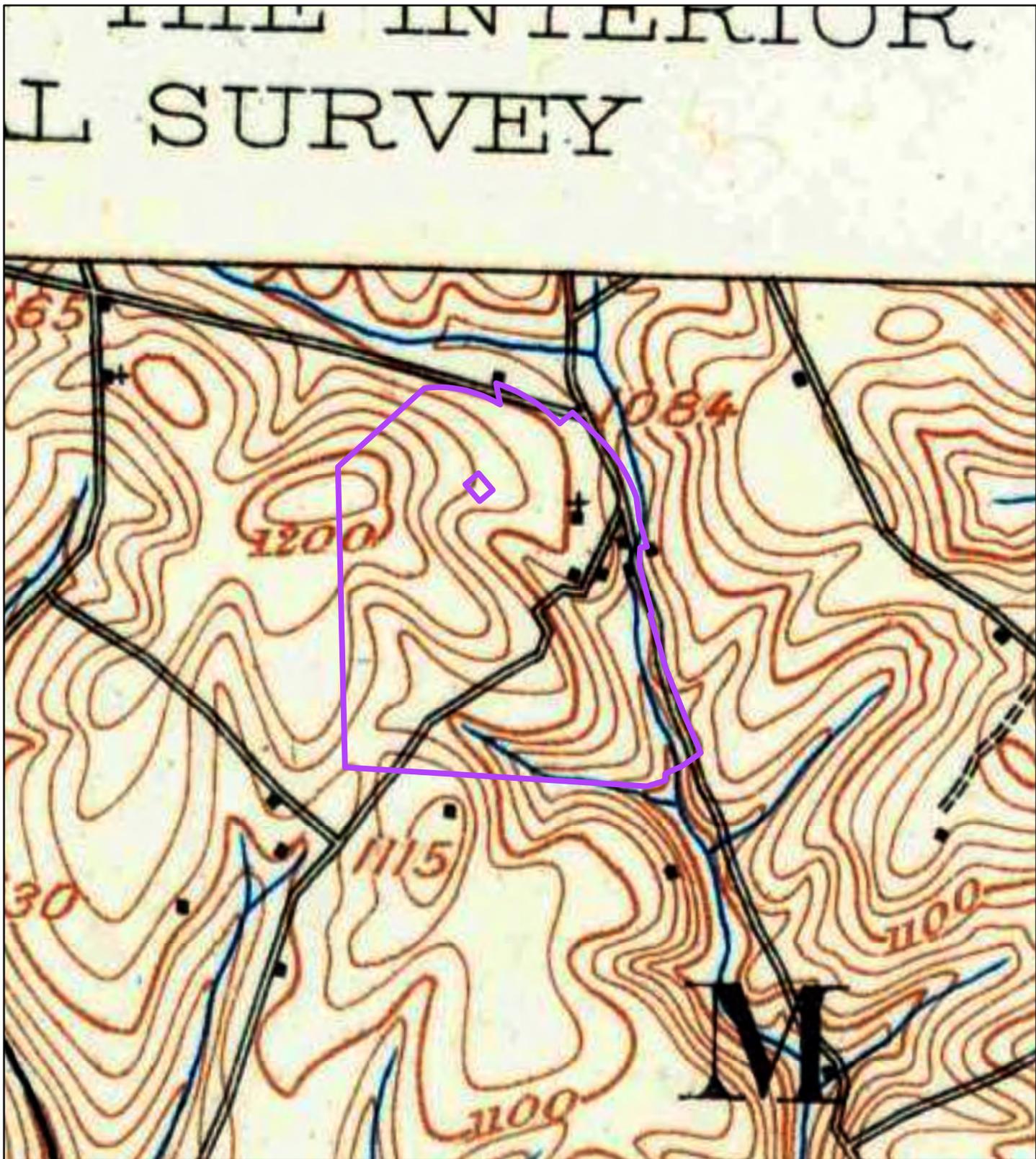


12420 Milestone Center Dr.
Germantown, MD 20876

Previous Archaeological Investigations

Source: Esri

Project No. 60717608	Prepared by KAM	Date 6/17/2024	Figure 9
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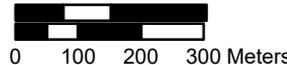


Legend

 Installation Boundary



0 500 1,000 Feet



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project Location on
1904 Carnegie, PA
USGS Topographic Map

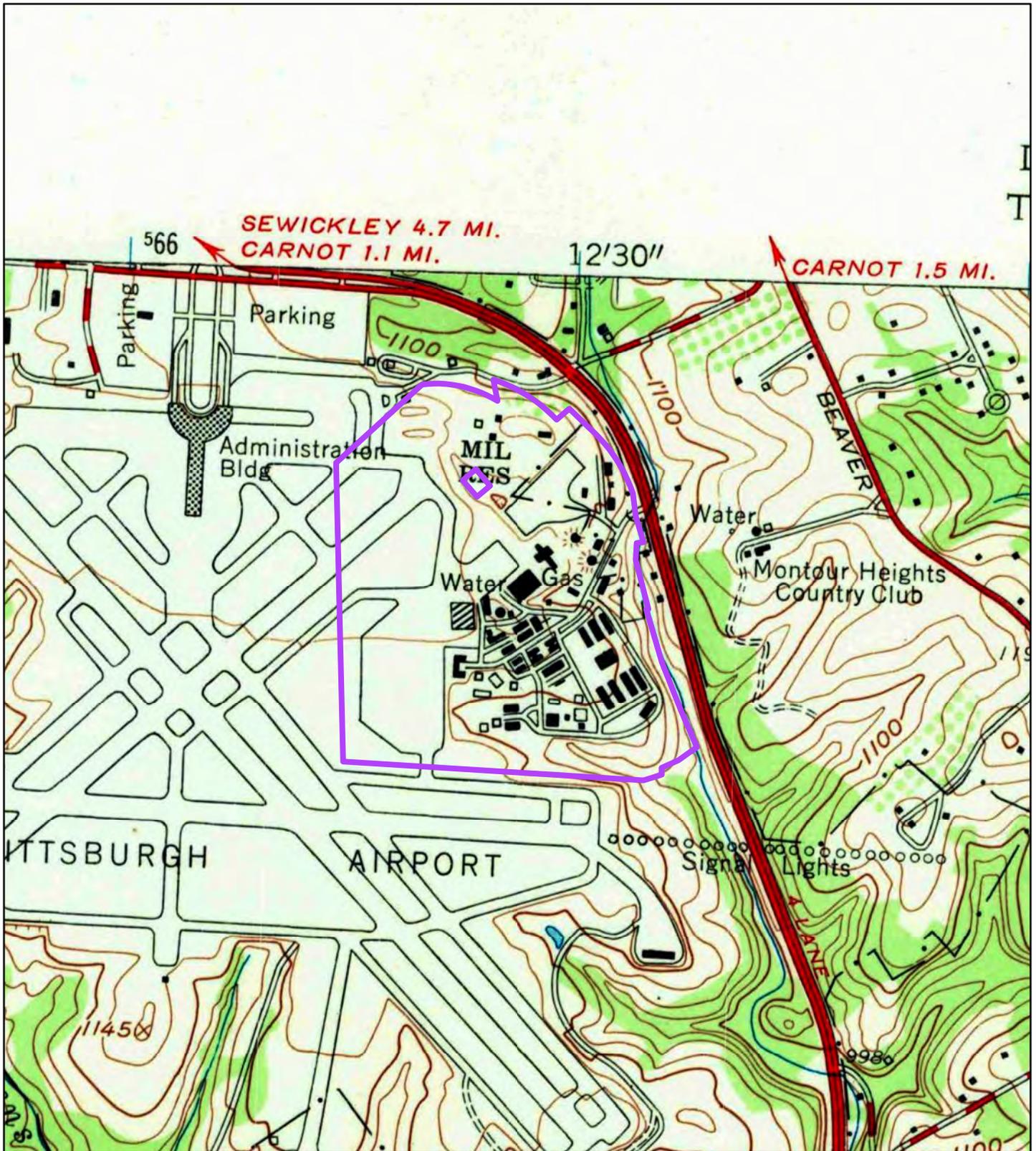
Source: Esri

Project No.
60717608

Prepared by
KAM

Date
6/17/2024

Figure 10



Legend

 Installation Boundary



0 500 1,000 Feet



AECOM

12420 Milestone Center Dr.
Germantown, MD 20876

Project Location on
1960 Oakdale, PA
USGS Topographic Map

Source: Esri

Project No.
60717608

Prepared by
KAM

Date
6/17/2024

Figure 11

Attachment 2: References Cited

CH2M HILL, Inc.

2022 *Historic Building Inventory Report, Pittsburgh Air Reserve Station*. Prepared for Air Force Reserve Command by CH2M HILL, Inc.,

Engineering-Environmental Management, Inc.

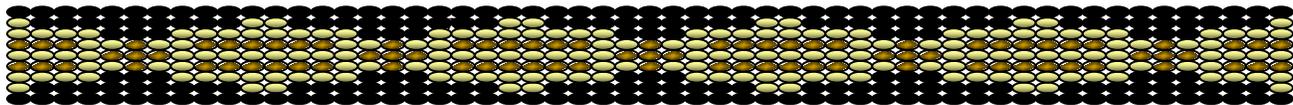
2005 *Cultural Resources Status Report, Pittsburgh International Airport Air Reserve Station, 911th Airlift Wing, Allegheny County, Pennsylvania, 2005-2009*. Report prepared for Headquarters, AFCEE/ISA Environmental Division by Engineering-Environmental Management, Inc., Englewood, Colorado.

Science Applications International Corporation (SAIC)

1998 *Pittsburgh International Airport – Air Reserve Station, 911th Airlift Wing, Historic Building Survey*. Report prepared for Headquarters Air Force Reserve Command by SAIC, Augusta, Georgia.

Catawba Indian Nation
Tribal Historic Preservation Office
1536 Tom Steven Road
Rock Hill, South Carolina 29730

Office 803-328-2427
Fax 803-328-5791



August 28, 2024

Attention: Sarah Ross
Department of the Air Force
Air Force Reserve Command

Re. THPO #	TCNS #	Project Description
2024-1216-2		11 Facilities Operations Capability and Utilization Survey (FOCUS) Study projects at Pittsburgh Air Reserve Station

Dear Ms. Ross,

The Catawba have no immediate concerns with regard to traditional cultural properties, sacred sites or Native American archaeological sites within the boundaries of the proposed project areas. **However, the Catawba are to be notified if Native American artifacts and / or human remains are located during the ground disturbance phase of this project.**

If you have questions please contact Caitlin Rogers at 803-328-2427 ext. 226, or e-mail Caitlin.Rogers@catawba.com.

Sincerely,

Wenonah G. Haire
Tribal Historic Preservation Officer

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APPENDIX D:
**EARLY NOTICE OF A PROPOSED ACTIVITY WITH THE POTENTIAL
TO IMPACT FLOODPLAINS**

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NOTICE OF AVAILABILITY OF DRAFT ENVIRONMENTAL ASSESSMENT FOR PROJECT AT PITTSBURGH AIR RESERVE STATION

Description: Interested parties are hereby notified that a Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI)/Draft Finding of No Practicable Alternative (FONPA) have been prepared for the Proposed Action described below.

Authority: This notice is being issued in accordance with the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code 4321, et seq.), the Council on Environmental Quality (CEQ) NEPA implementing regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508), the Air Force Environmental Impact Analysis Process (32 CFR Part 989), Federal Aviation Administration (FAA) Order 1050.1F, Environmental Impacts: Policies and Procedures, and Executive Order (EO) 11988, Floodplain Management, and Executive Order 11988, Floodplain Management.

Proposed Action: The United States (U.S.) Air Force Reserve Command (AFRC; lead agency), with the Federal Aviation Administration (FAA) acting as a Cooperating Agency, proposes to implement projects outlined in the Facilities Operations Capability and Utilization Survey (FOCUS) study at Pittsburgh Air Reserve Station (PARS). PARS currently lacks the infrastructure necessary to fully meet training requirements and conduct base operations. The Proposed Action would support the operational plans for the AFRC and the 911th Airlift Wing (AW). The Proposed Action involves 11 projects from the FOCUS study: (1) renovate Building (B) 226 for Consolidated Wing Training Facility; (2) demolish B208, B209, and B210 and construct parking; (3) demolish B403 and construct parking; (4) demolish B405 and construct a communications facility; (5) repair two storm drains and outfalls; (6) demolish B206; (7) construct a munitions access road; (8) construct a B414 hangar access road and parking; (9) construct a liquid oxygen (LOX) storage facility; (10) construct a LOX storage equipment shelter; and (11) construct aerospace ground equipment (AGE) covered storage. The AFRC is considering three alternatives: Alternative 1, the Preferred Alternative, which would implement the Proposed Action; Alternative 2, which is the same as Alternative 1 except that B403 and B405 would be renovated instead of demolished, and the communications facility and additional parking would not be constructed; and the No Action Alternative, which would not implement the Proposed Action but provides a comparative baseline for potential impacts as required under CEQ regulations.

The Draft EA evaluates the potential impacts on the environment from implementing the Proposed Action. The evaluation concludes there would be no significant impact, either individually or cumulatively, as a result of implementing the Proposed Action, which includes compliance with all federal and state laws and regulations, including consultation and permitting, and routine best management practices.

The Preferred Alternative would temporarily impact a small floodplain area during construction. A portion of the storm drains and outfalls to be repaired are located in the floodplain. Although no new structures would be built in the floodplain, repairing the existing structures would require construction equipment to work in the floodplain. If the storm drains and outfalls are not repaired, soil will erode from the surrounding area and the pipes will deteriorate, causing ground instability and increased infiltration of foreign objects into the storm drain system. Therefore, there is no practicable alternative to working in the floodplain.

Public Review: The Draft EA and Draft FONSI/FONPA will be available between December 2, 2024, and January 2, 2025, for a 30-day public comment period. The Draft EA and Draft FONSI/FONPA were published digitally on the PARS 911th AW website at <https://www.pittsburgh.afrc.af.mil/>. Printed copies of the Draft EA and Draft FONSI/FONPA are also available for public review at the Moon Township Public Library, 1700 Beaver Grade Road #100, Coraopolis, PA 15108.

Comments: The public may obtain information and submit comments on the Draft EA and Draft FONSI/FONPA during the review period via email to 1st Lt. Marjorie Schurr at marjorie.schurr@us.af.mil. Comments must be received by January 2, 2025.

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APPENDIX E:
AIR CONFORMITY APPLICABILITY MODEL (ACAM) REPORTS

ACAM Detailed Reports are provided in the Administrative Record.

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

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the 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 the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS

State: Pennsylvania

County(s): Allegheny

Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): PREFERRED ALTERNATIVE

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3A. Demolish B403 and Construct Parking [Preferred Alternative]
- 4A. Demolish B405 and Construct Communications Facility [Preferred Alternative]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford

Title: Environmental Planner

Organization: AECOM

Email: paul.sanford@aecom.com

Phone Number: 1-813-675-6843

2. Analysis: Total reasonably foreseeable net change in direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" (highest annual emissions) and "steady state" (no net gain/loss in emission stabilized and the action is fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF CONFORMITY ANALYSIS (ROCA)

All emissions estimates were derived from various sources using the methods, algorithms, and emission factors from the most current *Air Emissions Guide for Air Force Stationary Sources*, *Air Emissions Guide for Air Force Mobile Sources*, and/or *Air Emissions Guide for Air Force Transitory Sources*. For greater details of this analysis, refer to the Detail ACAM Report.

 applicable
X not applicable

Conformity Analysis Summary:

2025

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.706	100	No
NOx	2.304	100	No
CO	3.193		
SOx	0.006	100	No
PM 10	1.269		
PM 2.5	0.085	100	No
Pb	0.000		
NH3	0.013	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.706	50	No
NOx	2.304	100	No
CO	3.193		
SOx	0.006		
PM 10	1.269		
PM 2.5	0.085		
Pb	0.000		
NH3	0.013		
Pittsburgh-Beaver Valley, PA			
VOC	0.706	100	No
NOx	2.304	100	No
CO	3.193		
SOx	0.006	100	No
PM 10	1.269		
PM 2.5	0.085	100	No
Pb	0.000		
NH3	0.013	100	No

2026

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.043	100	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008	100	No
PM 10	-0.006		
PM 2.5	-0.006	100	No
Pb	0.000		
NH3	0.007	100	No

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

Pittsburgh-Beaver Valley, PA			
VOC	0.043	50	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008		
PM 10	-0.006		
PM 2.5	-0.006		
Pb	0.000		
NH3	0.007		
Pittsburgh-Beaver Valley, PA			
VOC	0.043	100	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008	100	No
PM 10	-0.006		
PM 2.5	-0.006	100	No
Pb	0.000		
NH3	0.007	100	No

2027 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.043	100	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008	100	No
PM 10	-0.006		
PM 2.5	-0.006	100	No
Pb	0.000		
NH3	0.007	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.043	50	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008		
PM 10	-0.006		
PM 2.5	-0.006		
Pb	0.000		
NH3	0.007		
Pittsburgh-Beaver Valley, PA			
VOC	0.043	100	No
NOx	-0.152	100	No
CO	0.404		
SOx	0.008	100	No
PM 10	-0.006		
PM 2.5	-0.006	100	No
Pb	0.000		
NH3	0.007	100	No

The Criteria Pollutants (or their precursors) with a General Conformity threshold listed in the table above are pollutants within one or more designated nonattainment or maintenance area/s for the associated National Ambient

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

Air Quality Standard (NAAQS). These pollutants are driving this GCR Applicability Analysis. Pollutants exceeding the GCR thresholds must be further evaluated potentially through a GCR Determination.

The pollutants without a General Conformity threshold are pollutants only within areas designated attainment for the associated NAAQS. These pollutants have an insignificance indicator for VOC, NO_x, CO, SO_x, PM 10, PM 2.5, and NH₃ of 250 ton/yr (Prevention of Significant Deterioration major source threshold) and 25 ton/yr for Pb (GCR de minimis value). Pollutants below their insignificance indicators are at rates so insignificant that they will not cause or contribute to an exceedance of one or more NAAQSs. These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Refer to the *Level II, Air Quality Quantitative Assessment Insignificance Indicators* for further details.

None of the annual net change in estimated emissions associated with this action are above the GCR threshold values established at 40 CFR 93.153 (b); therefore, the proposed Action has an insignificant impact on Air Quality and a General Conformity Determination is not applicable.

Paul Sanford, Environmental Planner
Name, Title

Aug 06 2024
Date

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to estimate GHG emissions and assess the theoretical Social Cost of Greenhouse Gases (SC GHG) associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide. This report provides a summary of GHG emissions and SC GHG analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS
State: Pennsylvania
County(s): Allegheny
Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): PREFERRED ALTERNATIVE

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3A. Demolish B403 and Construct Parking [Preferred Alternative]
- 4A. Demolish B405 and Construct Communications Facility [Preferred Alternative]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford
Title: Environmental Planner
Organization: AECOM
Email: paul.sanford@aecom.com
Phone Number: 1-813-675-6843

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action start through the expected life cycle of the action. The life cycle for Air Force actions with "steady state" emissions (SS, net gain/loss in emission stabilized and the action is fully implemented) is assumed to be 10 years beyond the SS emissions year or 20 years beyond SS emissions year for aircraft operations related actions.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO₂). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO₂ equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO₂. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO₂e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO₂e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected life cycle of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold	Exceedance
2025	584	0.02190708	0.01694522	590	68,039	No
2026	-190	-0.00194462	-0.00373836	-190	68,039	No
2027 [SS Year]	-190	-0.00194462	-0.00373836	-190	68,039	No
2028	-190	-0.00194462	-0.00373836	-190	68,039	No
2029	-190	-0.00194462	-0.00373836	-190	68,039	No
2030	-190	-0.00194462	-0.00373836	-190	68,039	No
2031	-190	-0.00194462	-0.00373836	-190	68,039	No
2032	-190	-0.00194462	-0.00373836	-190	68,039	No
2033	-190	-0.00194462	-0.00373836	-190	68,039	No
2034	-190	-0.00194462	-0.00373836	-190	68,039	No
2035	-190	-0.00194462	-0.00373836	-190	68,039	No
2036	-190	-0.00194462	-0.00373836	-190	68,039	No
2037	-190	-0.00194462	-0.00373836	-190	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. <https://statesummaries.ncics.org/downloads/>).

State's Annual GHG Emissions (mton/yr)				
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e
2025	215,665,398	1,479,944	23,177	217,168,519
2026	215,665,398	1,479,944	23,177	217,168,519
2027 [SS Year]	215,665,398	1,479,944	23,177	217,168,519
2028	215,665,398	1,479,944	23,177	217,168,519
2029	215,665,398	1,479,944	23,177	217,168,519

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2030	215,665,398	1,479,944	23,177	217,168,519
2031	215,665,398	1,479,944	23,177	217,168,519
2032	215,665,398	1,479,944	23,177	217,168,519
2033	215,665,398	1,479,944	23,177	217,168,519
2034	215,665,398	1,479,944	23,177	217,168,519
2035	215,665,398	1,479,944	23,177	217,168,519
2036	215,665,398	1,479,944	23,177	217,168,519
2037	215,665,398	1,479,944	23,177	217,168,519

U.S. Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2025	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2026	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2027 [SS Year]	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2028	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2029	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2030	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2031	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2032	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2033	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2034	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2035	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2036	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2037	5,136,454,179	25,626,912	1,500,708	5,163,581,798

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the degree (intensity) of the proposed action’s effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative’s annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action’s surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area’s ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action’s GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action’s net change in GHG emissions is compared relative to the state (where action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action’s net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

		CO2	CH4	N2O	CO2e
2025-2037	State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
2025-2037	U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
2025-2037	Action	-1,701	-0.001428	-0.027915	-1,686
Percent of State Totals		-0.00006066%	-0.00000001%	-0.00000926%	-0.00005974%
Percent of U.S. Totals		-0.00000255%	0.00000000%	-0.00000014%	-0.00000251%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: - 0.00000034%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Climate Change Assessment (as SC GHG):

On a global scale, the potential climate change effects of an action are indirectly addressed and put into context through providing the theoretical SC GHG associated with an action. The SC GHG is an administrative and theoretical tool intended to provide additional context to a GHG's potential impacts through approximating the long-term monetary damage that may result from GHG emissions affect on climate change. It is important to note that the SC GHG is a monetary quantification, in 2020 U.S. dollars, of the theoretical economic damages that could result from emitting GHGs into the atmosphere.

The SC GHG estimates are derived using the methodology and discount factors in the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990," released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG SC GHGs) in February 2021.

The speciated IWG Annual SC GHG Emission associated with an action (or a lternative) are first estimated as annual unit cost (cost per metric ton, \$/mton). Results of the annual IWG Annual SC GHG Emission Assessments are tabulated in the IWG Annual SC GHG Cost per Metric Ton Table below:

IWG SC GHG Discount Factor: 2.5%

IWG Annual SC GHG Cost per Metric Ton (\$/mton [In 2020 \$])				
YEAR	CO2	CH4	N2O	
2025	\$83.00	\$2,200.00	\$30,000.00	
2026	\$84.00	\$2,300.00	\$30,000.00	
2027 [SS Year]	\$86.00	\$2,300.00	\$31,000.00	
2028	\$87.00	\$2,400.00	\$32,000.00	
2029	\$88.00	\$2,500.00	\$32,000.00	
2030	\$89.00	\$2,500.00	\$33,000.00	
2031	\$91.00	\$2,600.00	\$33,000.00	
2032	\$92.00	\$2,600.00	\$34,000.00	
2033	\$94.00	\$2,700.00	\$35,000.00	
2034	\$95.00	\$2,800.00	\$35,000.00	
2035	\$96.00	\$2,800.00	\$36,000.00	
2036	\$98.00	\$2,900.00	\$36,000.00	
2037	\$99.00	\$3,000.00	\$37,000.00	

Action-related SC GHG were estimated by calendar-year for the projected action's lifecycle. Annual estimates were found by multiplying the annual emission for a given year by the corresponding IWG Annual SC GHG Emission value (see table above).

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Action-Related Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$48.49	\$0.05	\$0.51	\$49.05
2026	(\$16.00)	\$0.00	(\$0.11)	(\$16.11)
2027 [SS Year]	(\$16.38)	\$0.00	(\$0.12)	(\$16.50)
2028	(\$16.57)	\$0.00	(\$0.12)	(\$16.69)
2029	(\$16.76)	\$0.00	(\$0.12)	(\$16.88)
2030	(\$16.95)	\$0.00	(\$0.12)	(\$17.08)
2031	(\$17.33)	(\$0.01)	(\$0.12)	(\$17.46)
2032	(\$17.52)	(\$0.01)	(\$0.13)	(\$17.65)
2033	(\$17.90)	(\$0.01)	(\$0.13)	(\$18.04)
2034	(\$18.09)	(\$0.01)	(\$0.13)	(\$18.23)
2035	(\$18.28)	(\$0.01)	(\$0.13)	(\$18.42)
2036	(\$18.66)	(\$0.01)	(\$0.13)	(\$18.80)
2037	(\$18.85)	(\$0.01)	(\$0.14)	(\$19.00)

The following two tables summarize the U.S. and State's Annual SC GHG by calendar-year. The U.S. and State's Annual SC GHG are in 2020 dollars and were estimated by each year for the projected action lifecycle. Annual SC GHG estimates were found by multiplying the U.S. and State's annual five-year average GHG emissions for a given year by the corresponding IWG Annual SC GHG Cost per Metric Ton value.

State's Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
2026	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
2027 [SS Year]	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2028	\$18,762,889.66	\$3,551,864.51	\$741,664.07	\$23,056,418.24
2029	\$18,978,555.06	\$3,699,858.86	\$741,664.07	\$23,420,078.00
2030	\$19,194,220.46	\$3,699,858.86	\$764,841.08	\$23,658,920.40
2031	\$19,625,551.26	\$3,847,853.22	\$764,841.08	\$24,238,245.55
2032	\$19,841,216.66	\$3,847,853.22	\$788,018.08	\$24,477,087.95
2033	\$20,272,547.45	\$3,995,847.57	\$811,195.08	\$25,079,590.10
2034	\$20,488,212.85	\$4,143,841.92	\$811,195.08	\$25,443,249.86
2035	\$20,703,878.25	\$4,143,841.92	\$834,372.08	\$25,682,092.26
2036	\$21,135,209.05	\$4,291,836.28	\$834,372.08	\$26,261,417.41
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16

U.S. Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
2026	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
2027 [SS Year]	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2028	\$446,871,513.57	\$61,504,588.03	\$48,022,644.35	\$556,398,745.96
2029	\$452,007,967.75	\$64,067,279.20	\$48,022,644.35	\$564,097,891.30
2030	\$457,144,421.93	\$64,067,279.20	\$49,523,351.99	\$570,735,053.12
2031	\$467,417,330.29	\$66,629,970.37	\$49,523,351.99	\$583,570,652.65
2032	\$472,553,784.47	\$66,629,970.37	\$51,024,059.62	\$590,207,814.46
2033	\$482,826,692.83	\$69,192,661.54	\$52,524,767.26	\$604,544,121.62
2034	\$487,963,147.01	\$71,755,352.70	\$52,524,767.26	\$612,243,266.97
2035	\$493,099,601.18	\$71,755,352.70	\$54,025,474.90	\$618,880,428.78
2036	\$503,372,509.54	\$74,318,043.87	\$54,025,474.90	\$631,716,028.31
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Relative Comparison of SC GHG:

To provide additional real-world context to the potential climate change impact associated with an action, a Relative Comparison of SC GHG Assessment is also performed. While the SC GHG estimates capture an indirect approximation of global climate damages, the Relative Comparison of SC GHG Assessment provides a better perspective from a regional and global scale.

The Relative Comparison of SC GHG Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the SC GHG as the degree (intensity) of the proposed action's effects. The Relative Comparison Assessment provides real-world context and allows for a reasoned choice among alternatives through a relative contrast analysis which weighs each alternative's SC GHG proportionally against (or relative to) existing global, national, and regional SC GHG. The below table provides a relative comparison between an action's SC GHG vs. state and U.S. projected SC GHG for the same time period:

Total SC-GHG (\$K [In 2020 \$])					
		CO2	CH4	N2O	GHG
2025-2037	State Total	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
2025-2037	U.S. Total	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05
2025-2037	Action	(\$160.78)	(\$0.01)	(\$1.00)	(\$161.79)
Percent of State Totals		-0.00006307%	-0.00000003%	-0.00000996%	-0.00005141%
Percent of U.S. Totals		-0.00000265%	0.00000000%	-0.00000015%	-0.00000213%

From a global context, the action's total SC GHG percentage of total global SC GHG for the same time period is: -0.00000029%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Paul Sanford, Environmental Planner
Name, Title

Aug 06 2024
Date

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

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the 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 the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS

State: Pennsylvania

County(s): Allegheny

Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): ALTERNATIVE 2

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3B. Renovate B403 [Alternative 2]
- 4B. Renovate B405 [Alternative 2]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford

Title: Environmental Planner

Organization: AECOM

Email: paul.sanford@aecom.com

Phone Number: 1-813-675-6843

2. Analysis: Total reasonably foreseeable net change in direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" (highest annual emissions) and "steady state" (no net gain/loss in emission stabilized and the action is fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

AIR CONFORMITY APPLICABILITY MODEL REPORT

RECORD OF CONFORMITY ANALYSIS (ROCA)

All emissions estimates were derived from various sources using the methods, algorithms, and emission factors from the most current *Air Emissions Guide for Air Force Stationary Sources*, *Air Emissions Guide for Air Force Mobile Sources*, and/or *Air Emissions Guide for Air Force Transitory Sources*. For greater details of this analysis, refer to the Detail ACAM Report.

 applicable
X not applicable

Conformity Analysis Summary:

2025

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.400	100	No
NOx	2.069	100	No
CO	2.792		
SOx	0.005	100	No
PM 10	0.878		
PM 2.5	0.076	100	No
Pb	0.000		
NH3	0.009	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.400	50	No
NOx	2.069	100	No
CO	2.792		
SOx	0.005		
PM 10	0.878		
PM 2.5	0.076		
Pb	0.000		
NH3	0.009		
Pittsburgh-Beaver Valley, PA			
VOC	0.400	100	No
NOx	2.069	100	No
CO	2.792		
SOx	0.005	100	No
PM 10	0.878		
PM 2.5	0.076	100	No
Pb	0.000		
NH3	0.009	100	No

2026

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	-0.007	100	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003	100	No
PM 10	-0.012		
PM 2.5	-0.012	100	No
Pb	0.000		
NH3	0.000	100	No

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

Pittsburgh-Beaver Valley, PA			
VOC	-0.007	50	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003		
PM 10	-0.012		
PM 2.5	-0.012		
Pb	0.000		
NH3	0.000		
Pittsburgh-Beaver Valley, PA			
VOC	-0.007	100	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003	100	No
PM 10	-0.012		
PM 2.5	-0.012	100	No
Pb	0.000		
NH3	0.000	100	No

2027 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	-0.007	100	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003	100	No
PM 10	-0.012		
PM 2.5	-0.012	100	No
Pb	0.000		
NH3	0.000	100	No
Pittsburgh-Beaver Valley, PA			
VOC	-0.007	50	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003		
PM 10	-0.012		
PM 2.5	-0.012		
Pb	0.000		
NH3	0.000		
Pittsburgh-Beaver Valley, PA			
VOC	-0.007	100	No
NOx	-0.207	100	No
CO	-0.178		
SOx	0.003	100	No
PM 10	-0.012		
PM 2.5	-0.012	100	No
Pb	0.000		
NH3	0.000	100	No

The Criteria Pollutants (or their precursors) with a General Conformity threshold listed in the table above are pollutants within one or more designated nonattainment or maintenance area/s for the associated National Ambient

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

Air Quality Standard (NAAQS). These pollutants are driving this GCR Applicability Analysis. Pollutants exceeding the GCR thresholds must be further evaluated potentially through a GCR Determination.

The pollutants without a General Conformity threshold are pollutants only within areas designated attainment for the associated NAAQS. These pollutants have an insignificance indicator for VOC, NO_x, CO, SO_x, PM 10, PM 2.5, and NH₃ of 250 ton/yr (Prevention of Significant Deterioration major source threshold) and 25 ton/yr for Pb (GCR de minimis value). Pollutants below their insignificance indicators are at rates so insignificant that they will not cause or contribute to an exceedance of one or more NAAQSs. These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Refer to the *Level II, Air Quality Quantitative Assessment Insignificance Indicators* for further details.

None of the annual net change in estimated emissions associated with this action are above the GCR threshold values established at 40 CFR 93.153 (b); therefore, the proposed Action has an insignificant impact on Air Quality and a General Conformity Determination is not applicable.

Paul Sanford, Environmental Planner
Name, Title

Aug 06 2024
Date

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to estimate GHG emissions and assess the theoretical Social Cost of Greenhouse Gases (SC GHG) associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide. This report provides a summary of GHG emissions and SC GHG analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS
State: Pennsylvania
County(s): Allegheny
Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): ALTERNATIVE 2

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3B. Renovate B403 [Alternative 2]
- 4B. Renovate B405 [Alternative 2]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford
Title: Environmental Planner
Organization: AECOM
Email: paul.sanford@aecom.com
Phone Number: 1-813-675-6843

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action start through the expected life cycle of the action. The life cycle for Air Force actions with "steady state" emissions (SS, net gain/loss in emission stabilized and the action is fully implemented) is assumed to be 10 years beyond the SS emissions year or 20 years beyond SS emissions year for aircraft operations related actions.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO₂). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO₂ equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO₂. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO₂e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO₂e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected life cycle of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold	Exceedance
2025	497	0.01913415	0.01276552	501	68,039	No
2026	-249	-0.00463948	-0.00470752	-249	68,039	No
2027 [SS Year]	-249	-0.00463948	-0.00470752	-249	68,039	No
2028	-249	-0.00463948	-0.00470752	-249	68,039	No
2029	-249	-0.00463948	-0.00470752	-249	68,039	No
2030	-249	-0.00463948	-0.00470752	-249	68,039	No
2031	-249	-0.00463948	-0.00470752	-249	68,039	No
2032	-249	-0.00463948	-0.00470752	-249	68,039	No
2033	-249	-0.00463948	-0.00470752	-249	68,039	No
2034	-249	-0.00463948	-0.00470752	-249	68,039	No
2035	-249	-0.00463948	-0.00470752	-249	68,039	No
2036	-249	-0.00463948	-0.00470752	-249	68,039	No
2037	-249	-0.00463948	-0.00470752	-249	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. <https://statesummaries.ncics.org/downloads/>).

State's Annual GHG Emissions (mton/yr)				
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e
2025	215,665,398	1,479,944	23,177	217,168,519
2026	215,665,398	1,479,944	23,177	217,168,519
2027 [SS Year]	215,665,398	1,479,944	23,177	217,168,519
2028	215,665,398	1,479,944	23,177	217,168,519
2029	215,665,398	1,479,944	23,177	217,168,519

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2030	215,665,398	1,479,944	23,177	217,168,519
2031	215,665,398	1,479,944	23,177	217,168,519
2032	215,665,398	1,479,944	23,177	217,168,519
2033	215,665,398	1,479,944	23,177	217,168,519
2034	215,665,398	1,479,944	23,177	217,168,519
2035	215,665,398	1,479,944	23,177	217,168,519
2036	215,665,398	1,479,944	23,177	217,168,519
2037	215,665,398	1,479,944	23,177	217,168,519

U.S. Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2025	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2026	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2027 [SS Year]	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2028	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2029	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2030	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2031	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2032	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2033	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2034	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2035	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2036	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2037	5,136,454,179	25,626,912	1,500,708	5,163,581,798

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the degree (intensity) of the proposed action’s effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative’s annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action’s surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area’s ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action’s GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action’s net change in GHG emissions is compared relative to the state (where action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action’s net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

Total GHG Relative Significance (mton)

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

		CO2	CH4	N2O	CO2e
2025-2037	State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
2025-2037	U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
2025-2037	Action	-2,488	-0.03654	-0.043725	-2,483
Percent of State Totals		-0.00008876%	-0.00000019%	-0.00001451%	-0.00008796%
Percent of U.S. Totals		-0.00000373%	-0.00000001%	-0.00000022%	-0.00000370%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: - 0.00000050%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Climate Change Assessment (as SC GHG):

On a global scale, the potential climate change effects of an action are indirectly addressed and put into context through providing the theoretical SC GHG associated with an action. The SC GHG is an administrative and theoretical tool intended to provide additional context to a GHG's potential impacts through approximating the long-term monetary damage that may result from GHG emissions affect on climate change. It is important to note that the SC GHG is a monetary quantification, in 2020 U.S. dollars, of the theoretical economic damages that could result from emitting GHGs into the atmosphere.

The SC GHG estimates are derived using the methodology and discount factors in the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990," released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG SC GHGs) in February 2021.

The speciated IWG Annual SC GHG Emission associated with an action (or a lternative) are first estimated as annual unit cost (cost per metric ton, \$/mton). Results of the annual IWG Annual SC GHG Emission Assessments are tabulated in the IWG Annual SC GHG Cost per Metric Ton Table below:

IWG SC GHG Discount Factor: 2.5%

IWG Annual SC GHG Cost per Metric Ton (\$/mton [In 2020 \$])				
YEAR	CO2	CH4	N2O	
2025	\$83.00	\$2,200.00	\$30,000.00	
2026	\$84.00	\$2,300.00	\$30,000.00	
2027 [SS Year]	\$86.00	\$2,300.00	\$31,000.00	
2028	\$87.00	\$2,400.00	\$32,000.00	
2029	\$88.00	\$2,500.00	\$32,000.00	
2030	\$89.00	\$2,500.00	\$33,000.00	
2031	\$91.00	\$2,600.00	\$33,000.00	
2032	\$92.00	\$2,600.00	\$34,000.00	
2033	\$94.00	\$2,700.00	\$35,000.00	
2034	\$95.00	\$2,800.00	\$35,000.00	
2035	\$96.00	\$2,800.00	\$36,000.00	
2036	\$98.00	\$2,900.00	\$36,000.00	
2037	\$99.00	\$3,000.00	\$37,000.00	

Action-related SC GHG were estimated by calendar-year for the projected action's lifecycle. Annual estimates were found by multiplying the annual emission for a given year by the corresponding IWG Annual SC GHG Emission value (see table above).

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Action-Related Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$41.25	\$0.04	\$0.38	\$41.68
2026	(\$20.90)	(\$0.01)	(\$0.14)	(\$21.05)
2027 [SS Year]	(\$21.40)	(\$0.01)	(\$0.15)	(\$21.55)
2028	(\$21.64)	(\$0.01)	(\$0.15)	(\$21.81)
2029	(\$21.89)	(\$0.01)	(\$0.15)	(\$22.06)
2030	(\$22.14)	(\$0.01)	(\$0.16)	(\$22.31)
2031	(\$22.64)	(\$0.01)	(\$0.16)	(\$22.81)
2032	(\$22.89)	(\$0.01)	(\$0.16)	(\$23.06)
2033	(\$23.39)	(\$0.01)	(\$0.16)	(\$23.56)
2034	(\$23.63)	(\$0.01)	(\$0.16)	(\$23.81)
2035	(\$23.88)	(\$0.01)	(\$0.17)	(\$24.07)
2036	(\$24.38)	(\$0.01)	(\$0.17)	(\$24.56)
2037	(\$24.63)	(\$0.01)	(\$0.17)	(\$24.82)

The following two tables summarize the U.S. and State's Annual SC GHG by calendar-year. The U.S. and State's Annual SC GHG are in 2020 dollars and were estimated by each year for the projected action lifecycle. Annual SC GHG estimates were found by multiplying the U.S. and State's annual five-year average GHG emissions for a given year by the corresponding IWG Annual SC GHG Cost per Metric Ton value.

State's Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
2026	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
2027 [SS Year]	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2028	\$18,762,889.66	\$3,551,864.51	\$741,664.07	\$23,056,418.24
2029	\$18,978,555.06	\$3,699,858.86	\$741,664.07	\$23,420,078.00
2030	\$19,194,220.46	\$3,699,858.86	\$764,841.08	\$23,658,920.40
2031	\$19,625,551.26	\$3,847,853.22	\$764,841.08	\$24,238,245.55
2032	\$19,841,216.66	\$3,847,853.22	\$788,018.08	\$24,477,087.95
2033	\$20,272,547.45	\$3,995,847.57	\$811,195.08	\$25,079,590.10
2034	\$20,488,212.85	\$4,143,841.92	\$811,195.08	\$25,443,249.86
2035	\$20,703,878.25	\$4,143,841.92	\$834,372.08	\$25,682,092.26
2036	\$21,135,209.05	\$4,291,836.28	\$834,372.08	\$26,261,417.41
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16

U.S. Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
2026	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
2027 [SS Year]	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2028	\$446,871,513.57	\$61,504,588.03	\$48,022,644.35	\$556,398,745.96
2029	\$452,007,967.75	\$64,067,279.20	\$48,022,644.35	\$564,097,891.30
2030	\$457,144,421.93	\$64,067,279.20	\$49,523,351.99	\$570,735,053.12
2031	\$467,417,330.29	\$66,629,970.37	\$49,523,351.99	\$583,570,652.65
2032	\$472,553,784.47	\$66,629,970.37	\$51,024,059.62	\$590,207,814.46
2033	\$482,826,692.83	\$69,192,661.54	\$52,524,767.26	\$604,544,121.62
2034	\$487,963,147.01	\$71,755,352.70	\$52,524,767.26	\$612,243,266.97
2035	\$493,099,601.18	\$71,755,352.70	\$54,025,474.90	\$618,880,428.78
2036	\$503,372,509.54	\$74,318,043.87	\$54,025,474.90	\$631,716,028.31
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Relative Comparison of SC GHG:

To provide additional real-world context to the potential climate change impact associated with an action, a Relative Comparison of SC GHG Assessment is also performed. While the SC GHG estimates capture an indirect approximation of global climate damages, the Relative Comparison of SC GHG Assessment provides a better perspective from a regional and global scale.

The Relative Comparison of SC GHG Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the SC GHG as the degree (intensity) of the proposed action's effects. The Relative Comparison Assessment provides real-world context and allows for a reasoned choice among alternatives through a relative contrast analysis which weighs each alternative's SC GHG proportionally against (or relative to) existing global, national, and regional SC GHG. The below table provides a relative comparison between an action's SC GHG vs. state and U.S. projected SC GHG for the same time period:

Total SC-GHG (\$K [In 2020 \$])					
		CO2	CH4	N2O	GHG
2025-2037	State Total	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
2025-2037	U.S. Total	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05
2025-2037	Action	(\$232.17)	(\$0.10)	(\$1.52)	(\$233.79)
Percent of State Totals		-0.00009108%	-0.00000021%	-0.00001510%	-0.00007429%
Percent of U.S. Totals		-0.00000382%	-0.00000001%	-0.00000023%	-0.00000308%

From a global context, the action's total SC GHG percentage of total global SC GHG for the same time period is: -0.00000041%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Paul Sanford, Environmental Planner
Name, Title

Aug 06 2024
Date

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

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the 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 the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS

State: Pennsylvania

County(s): Allegheny

Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): Scenario 2: Alternative 2 for Project 3, Preferred Alternative for All Other Projects

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3B. Renovate B403 [Alternative 2]
- 4A. Demolish B405 and Construct Communications Facility [Preferred Alternative]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford

Title: Environmental Planner

Organization: AECOM

Email: paul.sanford@aecom.com

Phone Number: 1-813-675-6843

2. Analysis: Total reasonably foreseeable net change in direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" (highest annual emissions) and "steady state" (no net gain/loss in emission stabilized and the action is fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

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

All emissions estimates were derived from various sources using the methods, algorithms, and emission factors from the most current *Air Emissions Guide for Air Force Stationary Sources*, *Air Emissions Guide for Air Force Mobile Sources*, and/or *Air Emissions Guide for Air Force Transitory Sources*. For greater details of this analysis, refer to the Detail ACAM Report.

 applicable
X not applicable

Conformity Analysis Summary:

2025

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.704	100	No
NOx	2.134	100	No
CO	3.128		
SOx	0.005	100	No
PM 10	1.223		
PM 2.5	0.067	100	No
Pb	0.000		
NH3	0.013	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.704	50	No
NOx	2.134	100	No
CO	3.128		
SOx	0.005		
PM 10	1.223		
PM 2.5	0.067		
Pb	0.000		
NH3	0.013		
Pittsburgh-Beaver Valley, PA			
VOC	0.704	100	No
NOx	2.134	100	No
CO	3.128		
SOx	0.005	100	No
PM 10	1.223		
PM 2.5	0.067	100	No
Pb	0.000		
NH3	0.013	100	No

2026

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.044	100	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009	100	No
PM 10	-0.004		
PM 2.5	-0.004	100	No
Pb	0.000		

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

NH3	0.007	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.044	50	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009		
PM 10	-0.004		
PM 2.5	-0.004		
Pb	0.000		
NH3	0.007		
Pittsburgh-Beaver Valley, PA			
VOC	0.044	100	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009	100	No
PM 10	-0.004		
PM 2.5	-0.004	100	No
Pb	0.000		
NH3	0.007	100	No

2027 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.044	100	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009	100	No
PM 10	-0.004		
PM 2.5	-0.004	100	No
Pb	0.000		
NH3	0.007	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.044	50	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009		
PM 10	-0.004		
PM 2.5	-0.004		
Pb	0.000		
NH3	0.007		
Pittsburgh-Beaver Valley, PA			
VOC	0.044	100	No
NOx	-0.127	100	No
CO	0.425		
SOx	0.009	100	No
PM 10	-0.004		
PM 2.5	-0.004	100	No
Pb	0.000		
NH3	0.007	100	No

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

The Criteria Pollutants (or their precursors) with a General Conformity threshold listed in the table above are pollutants within one or more designated nonattainment or maintenance area/s for the associated National Ambient Air Quality Standard (NAAQS). These pollutants are driving this GCR Applicability Analysis. Pollutants exceeding the GCR thresholds must be further evaluated potentially through a GCR Determination.

The pollutants without a General Conformity threshold are pollutants only within areas designated attainment for the associated NAAQS. These pollutants have an insignificance indicator for VOC, NO_x, CO, SO_x, PM 10, PM 2.5, and NH₃ of 250 ton/yr (Prevention of Significant Deterioration major source threshold) and 25 ton/yr for Pb (GCR de minimis value). Pollutants below their insignificance indicators are at rates so insignificant that they will not cause or contribute to an exceedance of one or more NAAQSs. These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Refer to the *Level II, Air Quality Quantitative Assessment Insignificance Indicators* for further details.

None of the annual net change in estimated emissions associated with this action are above the GCR threshold values established at 40 CFR 93.153 (b); therefore, the proposed Action has an insignificant impact on Air Quality and a General Conformity Determination is not applicable.

Paul Sanford, Environmental Planner

Aug 06 2024

Name, Title

Date

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to estimate GHG emissions and assess the theoretical Social Cost of Greenhouse Gases (SC GHG) associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide. This report provides a summary of GHG emissions and SC GHG analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS

State: Pennsylvania

County(s): Allegheny

Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): Scenario 2: Alternative 2 for Project 3, Preferred Alternative for All Other Projects

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3B. Renovate B403 [Alternative 2]
- 4A. Demolish B405 and Construct Communications Facility [Preferred Alternative]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford

Title: Environmental Planner

Organization: AECOM

Email: paul.sanford@aecom.com

Phone Number: 1-813-675-6843

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action start through the expected life cycle of the action. The life cycle for Air Force actions with "steady state" emissions (SS, net gain/loss in emission stabilized and the action is fully implemented) is assumed to be 10 years beyond the SS emissions year or 20 years beyond SS emissions year for aircraft operations related actions.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO₂). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO₂ equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO₂. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO₂e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO₂e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected life cycle of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold	Exceedance
2025	295	0.01717816	0.01097359	300	68,039	No
2026	-163	-0.00142058	-0.00321432	-162	68,039	No
2027 [SS Year]	-163	-0.00142058	-0.00321432	-162	68,039	No
2028	-163	-0.00142058	-0.00321432	-162	68,039	No
2029	-163	-0.00142058	-0.00321432	-162	68,039	No
2030	-163	-0.00142058	-0.00321432	-162	68,039	No
2031	-163	-0.00142058	-0.00321432	-162	68,039	No
2032	-163	-0.00142058	-0.00321432	-162	68,039	No
2033	-163	-0.00142058	-0.00321432	-162	68,039	No
2034	-163	-0.00142058	-0.00321432	-162	68,039	No
2035	-163	-0.00142058	-0.00321432	-162	68,039	No
2036	-163	-0.00142058	-0.00321432	-162	68,039	No
2037	-163	-0.00142058	-0.00321432	-162	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. <https://statesummaries.ncics.org/downloads/>).

State's Annual GHG Emissions (mton/yr)				
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e
2025	215,665,398	1,479,944	23,177	217,168,519
2026	215,665,398	1,479,944	23,177	217,168,519
2027 [SS Year]	215,665,398	1,479,944	23,177	217,168,519
2028	215,665,398	1,479,944	23,177	217,168,519

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2029	215,665,398	1,479,944	23,177	217,168,519
2030	215,665,398	1,479,944	23,177	217,168,519
2031	215,665,398	1,479,944	23,177	217,168,519
2032	215,665,398	1,479,944	23,177	217,168,519
2033	215,665,398	1,479,944	23,177	217,168,519
2034	215,665,398	1,479,944	23,177	217,168,519
2035	215,665,398	1,479,944	23,177	217,168,519
2036	215,665,398	1,479,944	23,177	217,168,519
2037	215,665,398	1,479,944	23,177	217,168,519

U.S. Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2025	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2026	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2027 [SS Year]	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2028	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2029	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2030	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2031	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2032	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2033	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2034	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2035	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2036	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2037	5,136,454,179	25,626,912	1,500,708	5,163,581,798

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Total GHG Relative Significance (mton)					
		CO2	CH4	N2O	CO2e
2025-2037	State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
2025-2037	U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
2025-2037	Action	-1,656	0.000131	-0.027598	-1,642
Percent of State Totals		-0.00005908%	0.00000000%	-0.00000916%	-0.00005816%
Percent of U.S. Totals		-0.00000248%	0.00000000%	-0.00000014%	-0.00000245%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: - 0.00000033%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Climate Change Assessment (as SC GHG):

On a global scale, the potential climate change effects of an action are indirectly addressed and put into context through providing the theoretical SC GHG associated with an action. The SC GHG is an administrative and theoretical tool intended to provide additional context to a GHG's potential impacts through approximating the long-term monetary damage that may result from GHG emissions affect on climate change. It is important to note that the SC GHG is a monetary quantification, in 2020 U.S. dollars, of the theoretical economic damages that could result from emitting GHGs into the atmosphere.

The SC GHG estimates are derived using the methodology and discount factors in the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990," released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG SC GHGs) in February 2021.

The speciated IWG Annual SC GHG Emission associated with an action (or a lternative) are first estimated as annual unit cost (cost per metric ton, \$/mton). Results of the annual IWG Annual SC GHG Emission Assessments are tabulated in the IWG Annual SC GHG Cost per Metric Ton Table below:

IWG SC GHG Discount Factor: 2.5%

IWG Annual SC GHG Cost per Metric Ton (\$/mton [In 2020 \$])			
YEAR	CO2	CH4	N2O
2025	\$83.00	\$2,200.00	\$30,000.00
2026	\$84.00	\$2,300.00	\$30,000.00
2027 [SS Year]	\$86.00	\$2,300.00	\$31,000.00
2028	\$87.00	\$2,400.00	\$32,000.00
2029	\$88.00	\$2,500.00	\$32,000.00
2030	\$89.00	\$2,500.00	\$33,000.00
2031	\$91.00	\$2,600.00	\$33,000.00
2032	\$92.00	\$2,600.00	\$34,000.00
2033	\$94.00	\$2,700.00	\$35,000.00
2034	\$95.00	\$2,800.00	\$35,000.00
2035	\$96.00	\$2,800.00	\$36,000.00
2036	\$98.00	\$2,900.00	\$36,000.00
2037	\$99.00	\$3,000.00	\$37,000.00

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Action-related SC GHG were estimated by calendar-year for the projected action's lifecycle. Annual estimates were found by multiplying the annual emission for a given year by the corresponding IWG Annual SC GHG Emission value (see table above).

Action-Related Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$24.47	\$0.04	\$0.33	\$24.83
2026	(\$13.66)	\$0.00	(\$0.10)	(\$13.76)
2027 [SS Year]	(\$13.98)	\$0.00	(\$0.10)	(\$14.09)
2028	(\$14.15)	\$0.00	(\$0.10)	(\$14.25)
2029	(\$14.31)	\$0.00	(\$0.10)	(\$14.41)
2030	(\$14.47)	\$0.00	(\$0.11)	(\$14.58)
2031	(\$14.80)	\$0.00	(\$0.11)	(\$14.91)
2032	(\$14.96)	\$0.00	(\$0.11)	(\$15.07)
2033	(\$15.28)	\$0.00	(\$0.11)	(\$15.40)
2034	(\$15.45)	\$0.00	(\$0.11)	(\$15.56)
2035	(\$15.61)	\$0.00	(\$0.12)	(\$15.73)
2036	(\$15.93)	\$0.00	(\$0.12)	(\$16.05)
2037	(\$16.10)	\$0.00	(\$0.12)	(\$16.22)

The following two tables summarize the U.S. and State's Annual SC GHG by calendar-year. The U.S. and State's Annual SC GHG are in 2020 dollars and were estimated by each year for the projected action lifecycle. Annual SC GHG estimates were found by multiplying the U.S. and State's annual five-year average GHG emissions for a given year by the corresponding IWG Annual SC GHG Cost per Metric Ton value.

State's Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
2026	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
2027 [SS Year]	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2028	\$18,762,889.66	\$3,551,864.51	\$741,664.07	\$23,056,418.24
2029	\$18,978,555.06	\$3,699,858.86	\$741,664.07	\$23,420,078.00
2030	\$19,194,220.46	\$3,699,858.86	\$764,841.08	\$23,658,920.40
2031	\$19,625,551.26	\$3,847,853.22	\$764,841.08	\$24,238,245.55
2032	\$19,841,216.66	\$3,847,853.22	\$788,018.08	\$24,477,087.95
2033	\$20,272,547.45	\$3,995,847.57	\$811,195.08	\$25,079,590.10
2034	\$20,488,212.85	\$4,143,841.92	\$811,195.08	\$25,443,249.86
2035	\$20,703,878.25	\$4,143,841.92	\$834,372.08	\$25,682,092.26
2036	\$21,135,209.05	\$4,291,836.28	\$834,372.08	\$26,261,417.41
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16

U.S. Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
2026	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
2027 [SS Year]	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2028	\$446,871,513.57	\$61,504,588.03	\$48,022,644.35	\$556,398,745.96
2029	\$452,007,967.75	\$64,067,279.20	\$48,022,644.35	\$564,097,891.30
2030	\$457,144,421.93	\$64,067,279.20	\$49,523,351.99	\$570,735,053.12
2031	\$467,417,330.29	\$66,629,970.37	\$49,523,351.99	\$583,570,652.65
2032	\$472,553,784.47	\$66,629,970.37	\$51,024,059.62	\$590,207,814.46
2033	\$482,826,692.83	\$69,192,661.54	\$52,524,767.26	\$604,544,121.62
2034	\$487,963,147.01	\$71,755,352.70	\$52,524,767.26	\$612,243,266.97
2035	\$493,099,601.18	\$71,755,352.70	\$54,025,474.90	\$618,880,428.78

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2036	\$503,372,509.54	\$74,318,043.87	\$54,025,474.90	\$631,716,028.31
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29

Relative Comparison of SC GHG:

To provide additional real-world context to the potential climate change impact associated with an action, a Relative Comparison of SC GHG Assessment is also performed. While the SC GHG estimates capture an indirect approximation of global climate damages, the Relative Comparison of SC GHG Assessment provides a better perspective from a regional and global scale.

The Relative Comparison of SC GHG Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the SC GHG as the degree (intensity) of the proposed action's effects. The Relative Comparison Assessment provides real-world context and allows for a reasoned choice among alternatives through a relative contrast analysis which weighs each alternative's SC GHG proportionally against (or relative to) existing global, national, and regional SC GHG. The below table provides a relative comparison between an action's SC GHG vs. state and U.S. projected SC GHG for the same time period:

		Total SC-GHG (\$K [In 2020 \$])			
		CO2	CH4	N2O	GHG
2025-2037	State Total	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
2025-2037	U.S. Total	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05
2025-2037	Action	(\$154.22)	(\$0.01)	(\$0.97)	(\$155.20)
Percent of State Totals		-0.00006050%	-0.00000001%	-0.00000964%	-0.00004932%
Percent of U.S. Totals		-0.00000254%	0.00000000%	-0.00000015%	-0.00000205%

From a global context, the action's total SC GHG percentage of total global SC GHG for the same time period is: -0.00000027%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Paul Sanford, Environmental Planner
Name, Title

Aug 06 2024
Date

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

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform a net change in emissions analysis to assess the potential air quality impact/s associated with the action. The analysis was performed in accordance with the 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 the *USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide*. This report provides a summary of the ACAM analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS
State: Pennsylvania
County(s): Allegheny
Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): Scenario 3: Alternative 2 for Project 4, Preferred Alternative for All Other Projects

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3A. Demolish B403 and Construct Parking [Preferred Alternative]
- 4B. Renovate B405 [Alternative 2]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford
Title: Environmental Planner
Organization: AECOM
Email: paul.sanford@aecom.com
Phone Number: 1-813-675-6843

2. Analysis: Total reasonably foreseeable net change in direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" (highest annual emissions) and "steady state" (no net gain/loss in emission stabilized and the action is fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

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

All emissions estimates were derived from various sources using the methods, algorithms, and emission factors from the most current *Air Emissions Guide for Air Force Stationary Sources*, *Air Emissions Guide for Air Force Mobile Sources*, and/or *Air Emissions Guide for Air Force Transitory Sources*. For greater details of this analysis, refer to the Detail ACAM Report.

 applicable
X not applicable

Conformity Analysis Summary:

2025

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	0.386	100	No
NOx	1.945	100	No
CO	2.610		
SOx	0.004	100	No
PM 10	0.901		
PM 2.5	0.071	100	No
Pb	0.000		
NH3	0.009	100	No
Pittsburgh-Beaver Valley, PA			
VOC	0.386	50	No
NOx	1.945	100	No
CO	2.610		
SOx	0.004		
PM 10	0.901		
PM 2.5	0.071		
Pb	0.000		
NH3	0.009		
Pittsburgh-Beaver Valley, PA			
VOC	0.386	100	No
NOx	1.945	100	No
CO	2.610		
SOx	0.004	100	No
PM 10	0.901		
PM 2.5	0.071	100	No
Pb	0.000		
NH3	0.009	100	No

2026

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	-0.008	100	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003	100	No
PM 10	-0.014		
PM 2.5	-0.014	100	No
Pb	0.000		

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

NH3	0.000	100	No
Pittsburgh-Beaver Valley, PA			
VOC	-0.008	50	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003		
PM 10	-0.014		
PM 2.5	-0.014		
Pb	0.000		
NH3	0.000		
Pittsburgh-Beaver Valley, PA			
VOC	-0.008	100	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003	100	No
PM 10	-0.014		
PM 2.5	-0.014	100	No
Pb	0.000		
NH3	0.000	100	No

2027 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Allegheny, PA			
VOC	-0.008	100	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003	100	No
PM 10	-0.014		
PM 2.5	-0.014	100	No
Pb	0.000		
NH3	0.000	100	No
Pittsburgh-Beaver Valley, PA			
VOC	-0.008	50	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003		
PM 10	-0.014		
PM 2.5	-0.014		
Pb	0.000		
NH3	0.000		
Pittsburgh-Beaver Valley, PA			
VOC	-0.008	100	No
NOx	-0.233	100	No
CO	-0.199		
SOx	0.003	100	No
PM 10	-0.014		
PM 2.5	-0.014	100	No
Pb	0.000		
NH3	0.000	100	No

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

The Criteria Pollutants (or their precursors) with a General Conformity threshold listed in the table above are pollutants within one or more designated nonattainment or maintenance area/s for the associated National Ambient Air Quality Standard (NAAQS). These pollutants are driving this GCR Applicability Analysis. Pollutants exceeding the GCR thresholds must be further evaluated potentially through a GCR Determination.

The pollutants without a General Conformity threshold are pollutants only within areas designated attainment for the associated NAAQS. These pollutants have an insignificance indicator for VOC, NO_x, CO, SO_x, PM 10, PM 2.5, and NH₃ of 250 ton/yr (Prevention of Significant Deterioration major source threshold) and 25 ton/yr for Pb (GCR de minimis value). Pollutants below their insignificance indicators are at rates so insignificant that they will not cause or contribute to an exceedance of one or more NAAQSs. These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Refer to the *Level II, Air Quality Quantitative Assessment Insignificance Indicators* for further details.

None of the annual net change in estimated emissions associated with this action are above the GCR threshold values established at 40 CFR 93.153 (b); therefore, the proposed Action has an insignificant impact on Air Quality and a General Conformity Determination is not applicable.

Paul Sanford, Environmental Planner

Aug 06 2024

Name, Title

Date

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to estimate GHG emissions and assess the theoretical Social Cost of Greenhouse Gases (SC GHG) associated with the action. The analysis was performed in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the USAF Air Quality Environmental Impact Analysis Process (EIAP) Guide. This report provides a summary of GHG emissions and SC GHG analysis.

Report generated with ACAM version: 5.0.23a

a. Action Location:

Base: PITTSBURGH JARS

State: Pennsylvania

County(s): Allegheny

Regulatory Area(s): Allegheny, PA; Pittsburgh-Beaver Valley, PA

b. Action Title: Environmental Assessment for FOCUS Study Implementation at Pittsburgh Air Reserve Station

c. Project Number/s (if applicable): Scenario 3: Alternative 2 for Project 4, Preferred Alternative for All Other Projects

d. Projected Action Start Date: 1 / 2025

e. Action Description:

The Proposed Action involves 11 total projects from the FOCUS study.

1. Renovate Building (B) 226 for Consolidated Wing Training Facility (CWTF) [Preferred Alternative]
2. Demolish B208, B209, and B210 and Construct Parking [Preferred Alternative]
- 3A. Demolish B403 and Construct Parking [Preferred Alternative]
- 4B. Renovate B405 [Alternative 2]
5. Repair Storm Drains and Outfalls [Preferred Alternative]
6. Demolish B206 [Preferred Alternative]
7. Construct Munitions Access Road [Preferred Alternative]
8. Construct B414 Hangar Access Road and Parking [Preferred Alternative]
9. Construct Liquid Oxygen (LOX) Storage Facility [Preferred Alternative]
10. Construct LOX Equipment Storage Shelter [Preferred Alternative]
11. Construct Aerospace Ground Equipment (AGE) Covered Storage [Preferred Alternative]

Projects 3 and 4 include a Preferred Alternative and an Alternative 2. All other projects include only a Preferred Alternative.

f. Point of Contact:

Name: Paul Sanford

Title: Environmental Planner

Organization: AECOM

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Phone Number: 1-813-675-6843

2. Analysis: Total combined direct and indirect GHG emissions associated with the action were estimated through ACAM on a calendar-year basis from the action start through the expected life cycle of the action. The life cycle for Air Force actions with "steady state" emissions (SS, net gain/loss in emission stabilized and the action is fully implemented) is assumed to be 10 years beyond the SS emissions year or 20 years beyond SS emissions year for aircraft operations related actions.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

GHG Emissions Analysis Summary:

GHGs produced by fossil-fuel combustion are primarily carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (NO₂). These three GHGs represent more than 97 percent of all U.S. GHG emissions. Emissions of GHGs are typically quantified and regulated in units of CO₂ equivalents (CO₂e). The CO₂e takes into account the global warming potential (GWP) of each GHG. The GWP is the measure of a particular GHG's ability to absorb solar radiation as well as its residence time within the atmosphere. The GWP allows comparison of global warming impacts between different gases; the higher the GWP, the more that gas contributes to climate change in comparison to CO₂. All GHG emissions estimates were derived from various emission sources using the methods, algorithms, emission factors, and GWPs from the most current Air Emissions Guide for Air Force Stationary Sources, Air Emissions Guide for Air Force Mobile Sources, and/or Air Emissions Guide for Air Force Transitory Sources.

The Air Force has adopted the Prevention of Significant Deterioration (PSD) threshold for GHG of 75,000 ton per year (ton/yr) of CO₂e (or 68,039 metric ton per year, mton/yr) as an indicator or "threshold of insignificance" for NEPA air quality impacts in all areas. This indicator does not define a significant impact; however, it provides a threshold to identify actions that are insignificant (de minimis, too trivial or minor to merit consideration). Actions with a net change in GHG (CO₂e) emissions below the insignificance indicator (threshold) are considered too insignificant on a global scale to warrant any further analysis. Note that actions with a net change in GHG (CO₂e) emissions above the insignificance indicator (threshold) are only considered potentially significant and require further assessment to determine if the action poses a significant impact. For further detail on insignificance indicators see Level II, Air Quality Quantitative Assessment, Insignificance Indicators (April 2023).

The following table summarizes the action-related GHG emissions on a calendar-year basis through the projected life cycle of the action.

Action-Related Annual GHG Emissions (mton/yr)						
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e	Threshold	Exceedance
2025	465	0.0178172	0.01269127	470	68,039	No
2026	-277	-0.00516352	-0.00523156	-277	68,039	No
2027 [SS Year]	-277	-0.00516352	-0.00523156	-277	68,039	No
2028	-277	-0.00516352	-0.00523156	-277	68,039	No
2029	-277	-0.00516352	-0.00523156	-277	68,039	No
2030	-277	-0.00516352	-0.00523156	-277	68,039	No
2031	-277	-0.00516352	-0.00523156	-277	68,039	No
2032	-277	-0.00516352	-0.00523156	-277	68,039	No
2033	-277	-0.00516352	-0.00523156	-277	68,039	No
2034	-277	-0.00516352	-0.00523156	-277	68,039	No
2035	-277	-0.00516352	-0.00523156	-277	68,039	No
2036	-277	-0.00516352	-0.00523156	-277	68,039	No
2037	-277	-0.00516352	-0.00523156	-277	68,039	No

The following U.S. and State's GHG emissions estimates (next two tables) are based on a five-year average (2016 through 2020) of individual state-reported GHG emissions (Reference: State Climate Summaries 2022, NOAA National Centers for Environmental Information, National Oceanic and Atmospheric Administration. <https://statesummaries.ncics.org/downloads/>).

State's Annual GHG Emissions (mton/yr)				
YEAR	CO ₂	CH ₄	N ₂ O	CO ₂ e
2025	215,665,398	1,479,944	23,177	217,168,519
2026	215,665,398	1,479,944	23,177	217,168,519
2027 [SS Year]	215,665,398	1,479,944	23,177	217,168,519
2028	215,665,398	1,479,944	23,177	217,168,519

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2029	215,665,398	1,479,944	23,177	217,168,519
2030	215,665,398	1,479,944	23,177	217,168,519
2031	215,665,398	1,479,944	23,177	217,168,519
2032	215,665,398	1,479,944	23,177	217,168,519
2033	215,665,398	1,479,944	23,177	217,168,519
2034	215,665,398	1,479,944	23,177	217,168,519
2035	215,665,398	1,479,944	23,177	217,168,519
2036	215,665,398	1,479,944	23,177	217,168,519
2037	215,665,398	1,479,944	23,177	217,168,519

U.S. Annual GHG Emissions (mton/yr)				
YEAR	CO2	CH4	N2O	CO2e
2025	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2026	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2027 [SS Year]	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2028	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2029	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2030	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2031	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2032	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2033	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2034	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2035	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2036	5,136,454,179	25,626,912	1,500,708	5,163,581,798
2037	5,136,454,179	25,626,912	1,500,708	5,163,581,798

GHG Relative Significance Assessment:

A Relative Significance Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the degree (intensity) of the proposed action's effects. The Relative Significance Assessment provides real-world context and allows for a reasoned choice against alternatives through a relative comparison analysis. The analysis weighs each alternative's annual net change in GHG emissions proportionally against (or relative to) global, national, and regional emissions.

The action's surroundings, circumstances, environment, and background (context associated with an action) provide the setting for evaluating the GHG intensity (impact significance). From an air quality perspective, context of an action is the local area's ambient air quality relative to meeting the NAAQSs, expressed as attainment, nonattainment, or maintenance areas (this designation is considered the attainment status). GHGs are non-hazardous to health at normal ambient concentrations and, at a cumulative global scale, action-related GHG emissions can only potentially cause warming of the climatic system. Therefore, the action-related GHGs generally have an insignificant impact to local air quality.

However, the affected area (context) of GHG/climate change is global. Therefore, the intensity or degree of the proposed action's GHG/climate change effects are gauged through the quantity of GHG associated with the action as compared to a baseline of the state, U.S., and global GHG inventories. Each action (or alternative) has significance, based on their annual net change in GHG emissions, in relation to or proportionally to the global, national, and regional annual GHG emissions.

To provide real-world context to the GHG and climate change effects on a global scale, an action's net change in GHG emissions is compared relative to the state (where action will occur) and U.S. annual emissions. The following table provides a relative comparison of an action's net change in GHG emissions vs. state and U.S. projected GHG emissions for the same time period.

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

Total GHG Relative Significance (mton)					
		CO2	CH4	N2O	CO2e
2025-2037	State Total	2,803,650,180	19,239,266	301,301	2,823,190,747
2025-2037	U.S. Total	66,773,904,327	333,149,852	19,509,199	67,126,563,378
2025-2037	Action	-2,854	-0.044145	-0.050087	-2,849
Percent of State Totals		-0.00010179%	-0.00000023%	-0.00001662%	-0.00010092%
Percent of U.S. Totals		-0.00000427%	-0.00000001%	-0.00000026%	-0.00000424%

From a global context, the action's total GHG percentage of total global GHG for the same time period is: - 0.00000057%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

Climate Change Assessment (as SC GHG):

On a global scale, the potential climate change effects of an action are indirectly addressed and put into context through providing the theoretical SC GHG associated with an action. The SC GHG is an administrative and theoretical tool intended to provide additional context to a GHG's potential impacts through approximating the long-term monetary damage that may result from GHG emissions affect on climate change. It is important to note that the SC GHG is a monetary quantification, in 2020 U.S. dollars, of the theoretical economic damages that could result from emitting GHGs into the atmosphere.

The SC GHG estimates are derived using the methodology and discount factors in the "Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide Interim Estimates under Executive Order 13990," released by the Interagency Working Group on Social Cost of Greenhouse Gases (IWG SC GHGs) in February 2021.

The speciated IWG Annual SC GHG Emission associated with an action (or a lternative) are first estimated as annual unit cost (cost per metric ton, \$/mton). Results of the annual IWG Annual SC GHG Emission Assessments are tabulated in the IWG Annual SC GHG Cost per Metric Ton Table below:

IWG SC GHG Discount Factor: 2.5%

IWG Annual SC GHG Cost per Metric Ton (\$/mton [In 2020 \$])			
YEAR	CO2	CH4	N2O
2025	\$83.00	\$2,200.00	\$30,000.00
2026	\$84.00	\$2,300.00	\$30,000.00
2027 [SS Year]	\$86.00	\$2,300.00	\$31,000.00
2028	\$87.00	\$2,400.00	\$32,000.00
2029	\$88.00	\$2,500.00	\$32,000.00
2030	\$89.00	\$2,500.00	\$33,000.00
2031	\$91.00	\$2,600.00	\$33,000.00
2032	\$92.00	\$2,600.00	\$34,000.00
2033	\$94.00	\$2,700.00	\$35,000.00
2034	\$95.00	\$2,800.00	\$35,000.00
2035	\$96.00	\$2,800.00	\$36,000.00
2036	\$98.00	\$2,900.00	\$36,000.00
2037	\$99.00	\$3,000.00	\$37,000.00

AIR CONFORMITY APPLICABILITY MODEL REPORT

GREENHOUSE GAS (GHG) EMISSIONS

Action-related SC GHG were estimated by calendar-year for the projected action's lifecycle. Annual estimates were found by multiplying the annual emission for a given year by the corresponding IWG Annual SC GHG Emission value (see table above).

Action-Related Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$38.63	\$0.04	\$0.38	\$39.05
2026	(\$23.24)	(\$0.01)	(\$0.16)	(\$23.40)
2027 [SS Year]	(\$23.79)	(\$0.01)	(\$0.16)	(\$23.96)
2028	(\$24.07)	(\$0.01)	(\$0.17)	(\$24.25)
2029	(\$24.34)	(\$0.01)	(\$0.17)	(\$24.52)
2030	(\$24.62)	(\$0.01)	(\$0.17)	(\$24.80)
2031	(\$25.17)	(\$0.01)	(\$0.17)	(\$25.36)
2032	(\$25.45)	(\$0.01)	(\$0.18)	(\$25.64)
2033	(\$26.00)	(\$0.01)	(\$0.18)	(\$26.20)
2034	(\$26.28)	(\$0.01)	(\$0.18)	(\$26.48)
2035	(\$26.56)	(\$0.01)	(\$0.19)	(\$26.76)
2036	(\$27.11)	(\$0.01)	(\$0.19)	(\$27.31)
2037	(\$27.39)	(\$0.02)	(\$0.19)	(\$27.59)

The following two tables summarize the U.S. and State's Annual SC GHG by calendar-year. The U.S. and State's Annual SC GHG are in 2020 dollars and were estimated by each year for the projected action lifecycle. Annual SC GHG estimates were found by multiplying the U.S. and State's annual five-year average GHG emissions for a given year by the corresponding IWG Annual SC GHG Cost per Metric Ton value.

State's Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$17,900,228.07	\$3,255,875.80	\$695,310.07	\$21,851,413.94
2026	\$18,115,893.47	\$3,403,870.15	\$695,310.07	\$22,215,073.69
2027 [SS Year]	\$18,547,224.27	\$3,403,870.15	\$718,487.07	\$22,669,581.49
2028	\$18,762,889.66	\$3,551,864.51	\$741,664.07	\$23,056,418.24
2029	\$18,978,555.06	\$3,699,858.86	\$741,664.07	\$23,420,078.00
2030	\$19,194,220.46	\$3,699,858.86	\$764,841.08	\$23,658,920.40
2031	\$19,625,551.26	\$3,847,853.22	\$764,841.08	\$24,238,245.55
2032	\$19,841,216.66	\$3,847,853.22	\$788,018.08	\$24,477,087.95
2033	\$20,272,547.45	\$3,995,847.57	\$811,195.08	\$25,079,590.10
2034	\$20,488,212.85	\$4,143,841.92	\$811,195.08	\$25,443,249.86
2035	\$20,703,878.25	\$4,143,841.92	\$834,372.08	\$25,682,092.26
2036	\$21,135,209.05	\$4,291,836.28	\$834,372.08	\$26,261,417.41
2037	\$21,350,874.44	\$4,439,830.63	\$857,549.09	\$26,648,254.16

U.S. Annual SC GHG (\$K/yr [In 2020 \$])				
YEAR	CO2	CH4	N2O	GHG
2025	\$426,325,696.86	\$56,379,205.70	\$45,021,229.08	\$527,726,131.63
2026	\$431,462,151.04	\$58,941,896.86	\$45,021,229.08	\$535,425,276.98
2027 [SS Year]	\$441,735,059.39	\$58,941,896.86	\$46,521,936.72	\$547,198,892.97
2028	\$446,871,513.57	\$61,504,588.03	\$48,022,644.35	\$556,398,745.96
2029	\$452,007,967.75	\$64,067,279.20	\$48,022,644.35	\$564,097,891.30
2030	\$457,144,421.93	\$64,067,279.20	\$49,523,351.99	\$570,735,053.12
2031	\$467,417,330.29	\$66,629,970.37	\$49,523,351.99	\$583,570,652.65
2032	\$472,553,784.47	\$66,629,970.37	\$51,024,059.62	\$590,207,814.46
2033	\$482,826,692.83	\$69,192,661.54	\$52,524,767.26	\$604,544,121.62
2034	\$487,963,147.01	\$71,755,352.70	\$52,524,767.26	\$612,243,266.97
2035	\$493,099,601.18	\$71,755,352.70	\$54,025,474.90	\$618,880,428.78

AIR CONFORMITY APPLICABILITY MODEL REPORT GREENHOUSE GAS (GHG) EMISSIONS

2036	\$503,372,509.54	\$74,318,043.87	\$54,025,474.90	\$631,716,028.31
2037	\$508,508,963.72	\$76,880,735.04	\$55,526,182.53	\$640,915,881.29

Relative Comparison of SC GHG:

To provide additional real-world context to the potential climate change impact associated with an action, a Relative Comparison of SC GHG Assessment is also performed. While the SC GHG estimates capture an indirect approximation of global climate damages, the Relative Comparison of SC GHG Assessment provides a better perspective from a regional and global scale.

The Relative Comparison of SC GHG Assessment uses the rule of reason and the concept of proportionality along with the consideration of the affected area (yGba.e., global, national, and regional) and the SC GHG as the degree (intensity) of the proposed action's effects. The Relative Comparison Assessment provides real-world context and allows for a reasoned choice among alternatives through a relative contrast analysis which weighs each alternative's SC GHG proportionally against (or relative to) existing global, national, and regional SC GHG. The below table provides a relative comparison between an action's SC GHG vs. state and U.S. projected SC GHG for the same time period:

Total SC-GHG (\$K [In 2020 \$])					
		CO2	CH4	N2O	GHG
2025-2037	State Total	\$254,916,500.95	\$49,726,103.09	\$10,058,819.01	\$314,701,423.04
2025-2037	U.S. Total	\$6,071,288,839.58	\$861,064,232.45	\$651,307,114.02	\$7,583,660,186.05
2025-2037	Action	(\$265.37)	(\$0.12)	(\$1.73)	(\$267.23)
Percent of State Totals		-0.00010410%	-0.00000025%	-0.00001723%	-0.00008491%
Percent of U.S. Totals		-0.00000437%	-0.00000001%	-0.00000027%	-0.00000352%

From a global context, the action's total SC GHG percentage of total global SC GHG for the same time period is: -0.00000047%.*

* Global value based on the U.S. emits 13.4% of all global GHG annual emissions (2018 Emissions Data, Center for Climate and Energy Solutions, accessed 7-6-2023, <https://www.c2es.org/content/international-emissions>).

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Aug 06 2024
Date