

**FINAL
FINDING OF NO SIGNIFICANT IMPACT (FONSI)
WESTOVER AIR RESERVE BASE AIRFIELD IMPROVEMENTS
WESTOVER AIR RESERVE BASE, MASSACHUSETTS**

Pursuant to provisions of 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), the United States (U.S.) Air Force Reserve Command (AFRC) prepared the attached Environmental Assessment (EA) to assess the potential environmental consequences associated with the Proposed Action to construct airfield improvements at Westover Air Reserve Base (ARB) to better accommodate training requirements and airfield operations in support of the 439th Airlift Wing's existing C-5M aircraft at Westover ARB, Massachusetts.

Purpose and Need

The 439th Airlift Wing's mission is to organize, train, and provide strategic at-the-ready airlift capabilities. Westover ARB currently lacks the infrastructure necessary to fully conduct C-5M aircraft training requirements and airfield operations. Westover ARB does not have a paved training apron capable of supporting the ground equipment necessary to conduct C-5M aircraft training near Pad 19 and the Dog Patch Training Area, or adequate taxiways to accommodate efficient movement of the C-5M aircraft to Runway 05. The base currently performs contingency training in a designated cantonment area of Westover ARB, which lacks improved grounds needed for training. Additionally, all aircraft at Westover ARB are currently required to back-taxi on the runway surface, which reduces pavement life and available runway time for both military and civilian aircraft.

The *purpose* of the Proposed Action is to make airfield improvements to better accommodate C-5M aircraft training requirements and airfield operations at Westover ARB. The Proposed Action is *needed* because existing infrastructure results in inefficient operations. The 439th Airlift Wing is currently reliant on temporary use of Runway 05 and vacant areas that vary in availability to conduct required training and create inefficient conditions for airfield operations.

Description of Proposed Action and Alternatives

The Proposed Action entails construction of airfield improvements at two locations within the existing airfield at Westover ARB. These improvements would create new hardened areas to better accommodate training requirements and airfield operations at Westover ARB in support of existing C-5M aircraft. Following an evaluation of potential alternatives, the AFRC determined that construction of the airfield improvements best meets the purpose of and need for the Proposed Action (herein referred to as the "Preferred Alternative"). However, the two improvements are not dependent on each other and AFRC may implement one without the other. If so, both projects have each been fully analyzed. In addition to the Preferred Alternative, the No Action Alternative is also being considered.

Preferred Alternative. The Preferred Alternative includes construction of two airfield improvements at Westover ARB: a paved training apron with an associated stormwater feature (bioretention basin), and an extension of an existing taxiway. Construction of the Preferred Alternative would occur within the Dog Patch Training Area and south of Taxiway Golf (G) within the Westover ARB airfield.

Paved Training Apron: In the Dog Patch Training Area, an approximately 1.2-acre concrete training apron and 0.3-acre bioretention basin would be constructed. Construction of the paved training apron would involve removing the existing topsoil, compacting the existing subgrade, and adding new base coarse materials before laying concrete over the area. Maximum excavation depth would be 1 foot for the paved

training apron and up to 7 feet for the bioretention basin. The concrete training apron and bioretention basin would be constructed on an area currently consisting of grassland and surrounded by existing improved surfaces. The paved training apron would connect to Pad 19 to the south and existing roadways to the west and east. The bioretention basin would be constructed as a full exfiltration basin system that relies solely on infiltration to drain the basin; overflows would be conveyed either via spillway or overland flow to adjacent grassy areas. The bioretention basin would not have standing water outside of storm events to prevent attracting birds and wildlife to the airfield. Existing underground utility infrastructure in the proposed Project Sites would remain in place and no changes to existing utility infrastructure would occur under this component of the Preferred Alternative. Construction of the paved training apron would begin in calendar year (CY) 2024 and last for approximately 60 days.

Taxiway G Extension: This component of the Preferred Alternative entails constructing a new concrete taxiway surface between the existing Taxiway G and Pad 5 within the Westover ARB airfield. This extension would be approximately 3,816 feet long and 175 feet wide including 50-foot shoulders on either side, creating approximately 16.1 acres of impervious surface. The existing Taxiway G parallels approximately two-thirds of the length of the runway, and this project would extend the taxiway to the full length of Runway 05. Construction of the Taxiway G extension would include clearing and grading the site, placement of rigid pavement and associated reinforcement, construction of paved shoulders, construction of new paved access leading to the glide slope antenna, installation of taxiway edge lighting and signage, and all required pavement markings per unified facilities criteria and applicable codes. To facilitate extension of Taxiway G, electrical infrastructure associated with the airfield's glide slope antenna would need to be relocated. The electrical infrastructure is currently located on the southeast side of the access road near the existing hangars and consists of a medium voltage sectionalizing switch; pad-mounted transformer; diesel-fired emergency backup generator; and small concrete masonry unit (CMU) building that contains the switchgear, electrical panels, automatic transfer switch, and communication boxes. Additionally, a secondary circuit in a duct runs from the CMU building to the glide slope antenna. Under the Preferred Alternative, the CMU building would be demolished, and both the medium-voltage electrical equipment and the backup generator would be relocated. Maximum excavation depth would be 13-18 feet below ground surface to facilitate installation of stormwater infrastructure. The site is currently covered by a warm season grassland over previously disturbed soils and existing underground utilities. Existing underground utilities at the proposed site would be relocated or abandoned in place. Construction of the Taxiway G extension would begin in CY 2026 and last approximately nine months.

Construction staging areas for the paved training apron and Taxiway G extension have not yet been identified but would likely occur either within the proposed Project Sites or within adjacent paved areas. AFRC has identified approximate limits of disturbance (LOD) for the Taxiway G extension (75.6 acres) and paved training apron (6.2 acres) construction. These approximate LODs include areas where temporary impacts may occur, such as construction staging and underground utility extensions. These approximate LODs include areas where temporary impacts may occur, such as construction staging and underground utility extensions. These projects are still in the design phase and temporary impacts (e.g., from utility installation) are not quantifiable at this time. Prior to starting construction, all areas that would be disturbed by the Proposed Action would have their existing grassland habitat removed from biological production via methods included in Westover ARB's Vegetation Management Plan (i.e., ongoing and targeted prescribed burning, mowing, or tilling) prior to the start of the nesting season for migratory birds (April 15). Construction activities would be conducted in accordance with the applicable requirements of the United States Environmental Protection Agency's National Pollutant Discharge Elimination System (NPDES) and associated permits to manage the quantity and quality of stormwater discharged from the proposed Project Sites and minimize the potential for pollution and sedimentation.

Once construction of the paved training apron and Taxiway G extension are complete, these new improved areas would be incorporated into the airfield's military and civilian operations, which would include clearing these areas of snow and debris and maintaining pavement markings and stormwater infrastructure. The airfield improvements would be used as needed to ensure C-5M aircraft training and airfield operations at

Westover ARB are conducted efficiently. There would be no change to the type of training activities, number or personnel, number of flights, or number or type of aircraft stationed at Westover ARB.

No Action Alternative. Under the No Action Alternative, AFRC would not construct the paved training apron in the Dog Patch Training Area or the Taxiway G extension. Westover ARB and personnel would not have fully adequate training and operational areas for assigned C-5M aircraft, and associated functions at Westover ARB would continue to be less efficient. While the No Action Alternative would not meet the Proposed Action's purpose and need, it is analyzed in this EA to provide a comparative baseline with the Preferred Alternative.

Summary of Environmental Impacts

The EA evaluates the existing environmental conditions and potential environmental consequences of implementing the Proposed Action with regard to air quality and climate; earth resources; water resources; biological resources; cultural resources; utilities; socioeconomics and environmental justice; and hazardous and toxic materials and waste (HTMW). The AFRC has concluded that the Proposed Action would not affect the following resources: airspace, land use and zoning, visual resources, noise, safety and occupational health, and transportation; thus, these resources were eliminated from detailed analysis in the EA. Environmental impacts are summarized below.

Air Quality and Climate: Construction of the Preferred Alternative would result in short-term, insignificant impacts on air quality. Construction activities would temporarily generate fugitive dust from grading, clearing, and site restoration activities, and criteria pollutant emissions and greenhouse gas emissions from the use of diesel-powered and gasoline-powered equipment. Following construction of the paved training apron and Taxiway G extension, the airfield improvements would be used as needed to ensure training and airfield operations are conducted efficiently. There would be no change in current air operations at Westover ARB. Furthermore, since the type of training and operational activities, number of personnel, number of flights, and number and type of aircraft stationed at Westover ARB would remain the same as under existing conditions, no change in existing operational emissions would result under the Preferred Alternative. The AFRC used the Air Conformity Applicability Model (ACAM) to analyze the potential air quality impacts associated with the Preferred Alternative. The ACAM results indicate emissions associated with the Preferred Alternative would not exceed regulatory thresholds or significance indicators, and the potential air quality impact from all criteria pollutants is insignificant. In the short-term, construction of the paved training apron would produce 149 tons of per year of carbon dioxide equivalent and the Taxiway G Extension would produce 1,505.8 tons per year of carbon dioxide equivalent. In the long-term, there would be no steady state greenhouse gas emissions. Potentially relevant long-term climate change areas of concern for the Preferred Alternative include increases in precipitation, heavy rainstorms and flooding, and hotter and drier summers. These potential effects of climate change would have *no long-term impacts* on the Preferred Alternative. Overall, no significant impacts to air quality or climate are anticipated.

Earth Resources: During construction, excavation and soil disturbance/removal would be required up to a depth of 13-18 feet; however, bedrock is not anticipated to be encountered during construction, and no geologic hazards are apparent on the proposed Project Sites. Although the proposed Project Sites are generally flat, minor grading would be necessary for construction of paved surfaces and the bioretention basin. Any such grading would not meaningfully impact the topography of the proposed Project Sites or affect surface drainage and runoff patterns. Construction under the Preferred Alternative would permanently disturb up to 17.6 acres. Disturbed soils would be susceptible to runoff and erosion. Since the proposed Project Sites would exceed 1 acre of land disturbance, adherence to Westover ARB's NPDES General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s) would be required. Coverage under this permit would require adherence to Westover ARB's Stormwater Pollution Prevention Plan (SWPPP), which would identify potential sources of pollutants, describe all pollution prevention activities that would be implemented on the site, and establish erosion and sediment controls to manage stormwater discharges and minimize sedimentation to the extent practicable. The pre-

development hydrology of the proposed Project Site would also be maintained to the maximum extent technically feasible. Additionally, construction activities would not disturb any soils designated by the Natural Resources Conservation Service as prime or unique farmland. Overall, no significant adverse impacts to earth resources are anticipated.

Water Resources: While there are no surface waters within the approximate LODs for the Preferred Alternative, both Cooley Brook and Stony Brook and associated wetlands are within 0.5 mile of the proposed Project Sites and could be impacted indirectly by stormwater runoff during construction. Westover ARB would comply with the provisions included in its NPDES MS4 permit. Stormwater best management practices (BMPs) have been designed in accordance with the 2008 Massachusetts Stormwater Handbook. BMPs are designed to attenuate peak runoff rates from the proposed Project Sites so that post-construction rates are equal to or less than pre-construction rates. BMPs also capture the water quality volume of runoff from the proposed Project Sites. In the Dog Patch Training Area, the water quality depth required is equal to one inch because BMPs exfiltrate to soils with infiltration rate greater than 2.4 inches/hour and due to their proximity to Stony Brook, which is an impaired stream. In the Taxiway G extension area, stormwater requirements would be met by replacing the existing drain line, reconfiguring the existing storm drains, and creating a shallow swale along the northwest side of the taxiway extension. These modifications to the existing stormwater infrastructure would maximize infiltration and result in no increase in peak flow rates during stormwater events. The Preferred Alternative would have negligible impacts on impaired receiving waterbodies as standard erosion and sediment controls would be implemented during construction. No wetlands occur within the proposed Project Sites, and indirect impacts to nearby wetlands would be minimized to the extent practicable through adherence to standard erosion and sediment controls and the SWPPP. No impacts to floodplains would occur as none are located on or in the vicinity of the proposed Project Sites. Accidental spills of petroleum products or other materials, and inadvertent release of potential soil contaminants may result in impacts to groundwater; with adherence to BMPs such as maintaining spill-containment materials on-site and adhering to site-specific HTMW plans, the potential for impacts to groundwater would be minimized. Overall, no significant adverse impacts to water resources are anticipated.

Biological Resources: Prior to starting construction, and outside the migratory bird nesting season, areas that would be disturbed by the Preferred Alternative would have their grassland habitat removed from biological production via methods included in Westover ARB's Vegetation Management Plan, which may include ongoing and targeted prescribed burning, mowing, and tilling. This would temporarily clear grassland vegetation within the LOD to prepare for various ground-disturbing activities such as scraping, excavation, grading, and operation of construction equipment and vehicles. Approximately 1,200 acres of regionally important open grassland are managed at Westover ARB. Overall, the Preferred Alternative would convert up to 17.6 acres, less than 2 percent, of the base's regionally important open grassland areas to pavement. The Preferred Alternative would not substantially diminish the populations of any regionally or locally important vegetation species. Following construction, temporarily disturbed areas would be revegetated with native grassland plants and managed in accordance with Westover ARB's Integrated Natural Resources Management Plan and Vegetation Management Plan and the potential spread of weeds or invasive species during construction would be managed in accordance with Westover ARB's pest management program.

The Preferred Alternative would remove the availability of grassland habitat within the proposed Project Sites for common wildlife species occurring at Westover ARB. Removing the proposed Project Sites from biological production prior to the start of construction would discourage common wildlife species from inhabiting the proposed Project Sites when construction activities are taking place. Although disturbance from construction impacts would constitute an adverse impact, such impacts would occur at the individual

level rather than the population or species levels and would not inhibit the continued presence of common wildlife populations and species near the proposed Project Sites.

AFRC has determined that the Preferred Alternative would have no impact on the federally listed northern long-eared bat and provided its determination to U.S. Fish and Wildlife Service (USFWS) on March 8, 2023. USFWS responded stating that no further action was needed, and the requirements of Section 7 of the Endangered Species Act (ESA) had been met. Potential adverse impacts to the monarch butterfly, a federal candidate species, may result if ground-disturbing activities occurred during this species' active season in Massachusetts, generally between mid-August through early October. However, the proposed Project Sites would be removed from biological production by April 15, which precedes the start of this species' active season in Massachusetts (mid-August); therefore, this species is not likely to be impacted by construction activities. Additionally, milkweed, this species' larval host plant, is not present on the proposed Project Sites due to these areas being periodically mowed and maintained at a height between 7 to 14 inches to decrease attractiveness to wildlife.

Adverse impacts to migratory birds, including those protected by the Migratory Bird Treaty Act and Massachusetts Endangered Species Act, would occur during implementation of the Preferred Alternative, primarily due to loss of up to 17.6 acres grassland habitat. To minimize adverse impacts to protected bird species, AFRC would remove grassland habitat from biological production in areas that would be disturbed via methods included in Westover ARB's Vegetation Management Plan (i.e., ongoing and targeted prescribed burning, mowing, or tilling) prior to the start of the nesting season for migratory birds (April 15). This would ensure that the Preferred Alternative would not interfere with the breeding activities of protected bird species. AFRC would also conduct field inspections on the LOD prior to construction for nesting or breeding birds. Monitoring of any nesting/breeding activity would also be conducted to determine if restrictions are warranted. No impacts to bald eagles are anticipated as no suitable habitat exists on the proposed Project Sites.

The AFRC consulted with the Massachusetts Department of Fish and Wildlife's (MDFW) Natural Heritage & Endangered Species Program to identify potential concerns relating to state-listed species. The MDFW identified six species that would be adversely impacted by the permanent loss of grassland vegetation, including four grassland bird species, one moth, and one butterfly. While Westover ARB is not subject to MESA, it strives to comply with state and local laws governing natural resources to the maximum extent practicable, a goal that is published in Westover ARB's Integrated Natural Resources Management Plan (INRMP). In accordance with the INRMP, AFRC would endeavor to minimize potential impacts to state-protected species, including by implementing environmental protection measures (EPMs) identified below to the maximum extent practicable. Overall, no significant adverse impacts on biological resources would occur.

Cultural Resources: The Preferred Alternative would have no effect, direct or indirect, on historic properties, as no known historic properties, either above ground or archaeological, occur on or within the vicinity of the proposed Project Sites. AFRC provided its effect determination to SHPO in accordance with Section 106 of the NHPA on July 17, 2023. No response was received. Should any unanticipated cultural resources be encountered during construction or other activities associated with the Preferred Alternative, Westover ARB would immediately cease work and report the discovery to the Massachusetts State Historic Preservation Office and federally recognized tribes for consultation on how to proceed. Overall, no significant adverse impacts on cultural resources would occur.

Utilities: Construction of the Preferred Alternative would involve the relocation or abandonment of utility systems in the vicinity of the Taxiway G extension LOD, including relocating and rewiring existing lighting and electrical infrastructure. In addition, the CMU building, which houses switchgear, electrical panels, an automatic transfer switch, and communication boxes would be demolished, and both the medium-voltage

electrical equipment and the backup generator would be relocated. Chicopee Electric Light would relocate the sectionalizing switch and transformer and install new medium voltage conductors. Drop inlets would also be installed with the Taxiway G extension to replace the existing stormwater line that runs through the Taxiway G extension LOD. Additionally, modification of service lines connecting to the glide slope antenna would also require downtime on the Instrument Landing System (ILS). Construction phasing would be coordinated with Air Operations to minimize disruptions to the ILS. Construction of the paved training apron would not result in any disruptions to aboveground utilities; underground communications and water service lines would need to be avoided during construction. Implementation of the Preferred Alternative would not increase overall utility usage at Westover ARB. Temporary service disruptions to electrical, communications, and airfield lighting would occur during the construction of the Taxiway G extension; however, these disruptions would be minimized by ensuring that existing utilities remain operational until the new utilities are ready to be connected. End users would be given advance notice of anticipated service disruptions. Overall, no significant impacts to utilities would occur.

Socioeconomics and Environmental Justice: As no environmental justice (EJ) communities of concern with respect to race or income are present surrounding the proposed Project Site, there is no potential for the Preferred Alternative to disproportionately impact EJ communities. Implementation of the Preferred Alternative would not adversely affect socioeconomic conditions in the vicinity. Proposed construction activities would likely be completed by local contractors, temporarily increasing employment opportunities, personal incomes, and material purchases within the nearby communities. If non-local contractors support construction, direct economic benefits associated with expenditures on lodging, food, and retail would accrue to the local community. Tax revenues associated with direct and indirect construction expenditures would also benefit local economic conditions. Once construction is complete, the new improved areas would be incorporated into the airfield's military and civilian operations at Westover ARB. Overall, no significant adverse impacts to socioeconomics or EJ communities of concern would occur.

Hazardous and Toxic Materials and Waste: Implementation of the Preferred Alternative at Westover ARB is not anticipated to add any new hazardous materials that exceed the base's current hazardous waste management capacity. The Preferred Alternative would not increase the maximum daily consumption of Jet-A fuel, and no additional hazardous waste storage tanks would be required. Westover ARB would continue to be classified as a large-quantity generator 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 through the base Enterprise, Environmental, Safety, Occupational Health-Management Information System (EESOH-MIS) and Spill Prevention Control and Countermeasure (SPCC) & Facility Response Plan 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. However, all HTMW discovered, generated, or used during construction would be handled, containerized, and disposed of in accordance with Westover ARB's Hazardous Waste Management Plan, SPCC & Facility Response Plan and applicable local, state, and federal regulations. Likewise, all generated project wastes and excavated material, including soil and groundwater, would be sampled for potential polyfluorinated alkyl substances (PFAS) and managed accordingly based on applicable federal and state regulations. Finally, the Preferred Alternative would have no potential to interfere with any of Westover ARB's environmental restoration program sites. Overall, no significant adverse impacts to HTMW would occur.

Environmental Protection Measures and Mitigation Measures

The AFRC would comply with all federal and state laws and regulations, including consultation and applicable requirements. With implementation of these measures and other design commitments mentioned in the EA, the Preferred Alternative would be anticipated to have no significant impacts. As such, no resource-specific mitigation measures are recommended.

AFRC has identified EPMs to reduce potential impacts to biological resources that may result from implementation of the Preferred Alternative. Specifically, AFRC is working with the MDFW Natural Heritage & Endangered Species Program to identify EPMs to reduce potential adverse impacts on the state-listed upland sandpiper, vesper sparrow, grasshopper sparrow, eastern meadowlark, frosted elfin butterfly, and phyllira tiger moth. To the maximum extent practicable, AFRC would implement the following EPMs to reduce potential adverse impacts on these species protected by MESA, and to advance the base's goal of remaining in compliance with federal, state, and local laws and regulations governing natural resources.

1) Conduct a grassland survey across Westover ARB to assess current grasslands on base and identify areas of potential improvement for species of concern, consistent with airfield management requirements.

2) Create a long-term grassland management plan identifying actions to increase quantity and quality of warm season grassland cover on Westover ARB. This plan may include measures such as applying soil amendments and direct seeding desired grassland species (e.g., little bluestem) to areas where grassland cover is in poor condition, and converting areas currently developed or consisting of tree stands to grasslands. This long-term grassland management plan would include an implementation schedule and be incorporated into Westover ARB's INRMP, which is periodically reviewed and approved by USFWS and MDFW. Potential grassland improvement projects pursuant to this proposed plan are not within the scope of the EA and would require separate environmental analyses in accordance with federal regulations prior to implementation.

Cumulative Effects

The AFRC identified and reviewed past, present, and reasonably foreseeable actions that have or are planned to occur within the Preferred Alternative's vicinity and analyzed the potential for the Preferred Alternative to have cumulative effects with these other reasonably foreseeable actions. Implementation of the Preferred Alternative when taken into consideration with reasonably foreseeable future projects could lead to cumulative impacts to air quality and climate; earth resources; water resources; biological resources; cultural resources; utilities; socioeconomics and environmental justice; and HTMW. These impacts would be minimized to the extent practicable through implementation of BMPs and adherence to regulatory guidelines under the Preferred Alternative. No significant adverse impacts would occur.

Public Review

AFRC published a Notice of Availability (NOA) of the Draft EA and Draft FONSI in the *Wilbraham-Hampden Times* on September 28, 2023, and the *Chicopee Register* on September 29, 2023. These documents were available for public review and comment for 30 days through October 28, 2023. No comments were received during the public review period.

The Final EA and Final FONSI are available on the Westover ARB 439th Airlift Wing website at <https://www.westover.afrc.af.mil/About-Us/Resources/Environmental-and-Noise/>, and printed copies of the Final EA and Final FONSI are available at the Chicopee Fairview Branch Library, 402 Britton Street, Chicopee, Massachusetts 01020.

Interagency and Intergovernmental Coordination for Environmental Planning

AFRC coordinated with 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. The AFRC also consulted with federally recognized tribes that are historically affiliated with the geographic region of Westover ARB regarding the potential for the Proposed Action to affect properties of cultural, historical, or religious significance to the tribes. Responses have been considered and incorporated in the EA, as appropriate. Records of agency and tribal correspondence are included in **Appendix A**, **Appendix B**, and **Appendix C** of the EA.

Findings

Finding of No Significant Impact. After review of the EA prepared in accordance with the requirements of NEPA and CEQ regulations, and which is hereby incorporated by reference, I have determined that the proposed Westover ARB Airfield Improvements , whether implemented together or independently, will not have a significant impact on the quality of the human or natural environment with implementation of the regulatory compliance measures and BMPs identified. Accordingly, an Environmental Impact Statement is not required. This decision has been made after taking into account all submitted information and considering a full range of practical alternatives that meet project requirements and are within the legal authority of the AFRC. The signing of this FONSI completes the environmental impact analysis process.

GREGORY D. BUCHANAN, Colonel, USAF
Commander

Date

Attachment: Final Environmental Assessment for Westover Air Reserve Base Airfield Improvements