FINDING OF NO SIGNIFICANT IMPACT (FONSI)
FOR
NEW ACCESS CONTROL FACILITY FOR RUIZ GATE
HANSCOM AFB, MA

Pursuant to provisions of the National Environmental Policy Act (NEPA), Title 42 United States Code (USC) Sections 4321 to 4347, implemented by Council on Environmental Quality (CEQ) Regulations, Title 40, Code of Federal Regulations (CFR) §1500-1508, and 32 CFR §989, Environmental Impact Analysis Process, the Department of the Air Force (DAF) has prepared an Environmental Assessment (EA) to identify and assess the potential environmental consequences associated with a new access control facility for Ruiz Gate at Hanscom Air Force Base (HAFB), Middlesex County, Massachusetts.

PURPOSE AND NEED FOR ACTION (EA §§ 1.2 through 1.3, Page 2)

The purpose for action is to provide a second entry control point that meets 66 SFS mission needs. The 66 SFS mission statement reads, "Continuously develop superior/competent civilian and military defenders, and effectively utilize provided infrastructure to protect and defend personnel and resources of Hanscom AFB and worldwide expeditionary locations by dominating, detecting, denying and defeating enemy forces to enable mission operations from a safe, secure and uncontested environment."

The action is needed because infrastructure limitations at the Ruiz Gate make it difficult for the 66 SFS to meet mission needs. Ruiz Gate is limited in physical space inside and outside the lanes of traffic. Vehicular traffic backing up at the Ruiz Gate (more than 15 vehicles per lane) tends to hinder civilian traffic on Wood Street in Lexington, MA and increases the overall congestion. Because Ruiz Gate does not have commercial vehicle inspection stations, 66 SFS cannot permit commercial vehicles to enter through Ruiz Gate. The space inside building 1437, the current guard shack at the Ruiz Gate, is inadequate for 66 SFS mission needs in terms of both its size and function.

PROPOSED ACTION (EA § 2.1, Page 6)

The Proposed Action is to provide 66th Civil Engineering Division, 66th Security Forces Squadron (SFS) with a new access control facility that meets Air Force standards.

SELECTION STANDARDS (EA § 2.2, Page 6)

Selection Standards used to determine reasonable alternative(s) for the Proposed Action are presented in Table 2-1 on page 7 and described in EA § 2.2.

DETAILED DESCRIPTION OF ALTERNATIVE(S) (EA § 2.4, Pages 8 to 10)

The analysis of the Proposed Action to construct a new access control facility that meets standards includes five (5) Alternatives. Based on selection standards, only one Alternative is considered reasonable, so the EA considers all potential impacts of Alternative 1 (the Preferred Alternative) and the No-Action Alternative. The EA also considers cumulative environmental impacts with other projects in the Region of Influence.

ALTERNATIVE 1 – (Preferred Alternative) – Construct new access control facility (demolish B1437) and road system within current HAFB boundaries at Ruiz Gate area (Gate 4) (EA § 2.4, Pages 8-9)

The preferred alternative involves the construction of a new access gate facility complex and entry/egress roadway system at the HAFB Ruiz Gate Complex location. This location provides the best means of access and egress on HAFB for commuters traveling along the US Route 3, Interstate 95, and Massachusetts Route 128 traffic corridors without causing negative effects to surrounding abutters. The preferred alternative would realign the intersection of Bestic Drive and Kirtland Street creating a safe traffic situation and allow for final denial barriers to be placed at an appropriate distance from the current gatehouse.

The preferred alternative includes all work required to construct a new entry control facility to meet current requirements. This includes constructing a new gate house, overwatch structure, vehicle inspection area, final denial barriers, fencing, vehicle control gates, area lighting, required utilities and a vehicle rejection lane. The proposed gatehouse would be adequately sized, and adequate space would be provided for compliant ID check areas. The proposed entry control facility would meet all necessary standards.

NO-ACTION ALTERNATIVE (EA § 2.4, Page 9)

The CEQ regulation 40 CFR §1502.14(d) requires the inclusion of a No Action Alternative in the NEPA analysis. The No Action Alternative serves as the baseline against which alternatives can be evaluated to identify impacts to the natural and built environments. Under the No Action Alternative, HAFB would not construct a new access control facility and the road system within current HAFB boundaries at Ruiz Gate area will stay the same.

ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION (EA § 2.5, Pages 9-10):

Four other alternatives were initially considered during the environmental impact analysis process and eliminated from further consideration because they did not meet all of the criteria for the selection standards presented in Table 2-1 on page 9. The following alternatives have been eliminated:

- Alternative 2 - Construct new access control facility (demolish B1437) but leave current road system within current HAFB boundaries at Ruiz Gate.
- Alternative 3 – Construct new access control facility (demolish B1437) and road system on leased land from Lexington, MA on the stretch of Hartwell Ave between HAFB and Wood Street intersection.
- Alternative 4 – Construct new access control facility and road system at Gate 2 area.
- Alternative 5 – Construct new access control facility and road system at Gate 3A area.

SCOPE OF ANALYSIS (EA § 3.1, Page 11)

Regardless of the alternative selected, the following resources would not be affected by the Proposed Action and are not discussed in detail in the EA: Air installation compatible use zone (AICUZ).

ENVIRONMENTAL CONSEQUENCES (EA § 4.0, Page 26)

The Environmental Assessment, incorporated by reference into this finding, analyzes the potential environmental consequences of activities associated with implementing the Preferred Alternative (Alternative 1) Construct new access control facility (demolish B1437) and road system within current HAFB boundaries at Ruiz Gate area. The EA considers all potential impacts of the Preferred Alternative and the No-Action Alternative. The EA also considers cumulative environmental impacts with other

projects in the Region of Influence. The analyses of the affected environment and environmental consequences of implementing the Preferred Alternative presented in the EA concluded that by implementing environmental protection measures, the DAF would be in compliance with all terms and conditions and reporting requirements stipulated by the United States Fish and Wildlife Service (USFWS), and with the conditions stipulated in the Programmatic Agreement (PA) between the HAFB and the Massachusetts State Historic Preservation Office regarding the management of historic properties at HAFB.

The DAF has concluded that no significant adverse effects would result to the following resources from implementation of the Preferred Alternative:

LAND USE (EA § 4.1, Page 26)

The demolition of Building 1437, the construction of a new access control facility, as well as the realignment of internal roadways (the intersection of Bestic Drive and Kirtland Street creating a traffic circle), and a new access road connecting Kirtland Street to Hamilton Street is located in the same area as the current access control facility for the Ruiz gate and consists primarily of buildings, roadways, and related infrastructure. The implementation of the Preferred Alternative is compatible with current land use and future HAFB land use plans. No significant short or long-term land use impacts would be experienced because of the Preferred Alternative.

NOISE (EA § 4.2, Page 27)

Short-term increase in noise may occur during demolition and construction activities. The Preferred Alternative may require grading, paving, demolition, and construction that may utilize specific equipment, such as earth moving, or impact equipment, which would be expected to temporarily increase noise levels. Construction noise is expected to be limited to regular working hours (between 7 AM and 5 PM) on regular workdays (Monday through Friday, excluding federal holidays). The closest residential buildings to the construction area are off-base apartments near Wood Street. The relatively short-term increase in noise levels would not pose significant impacts. Upon completion of construction, noise levels would return to natural ambient noise levels, approximately 55 dB, classified as "quiet" (USEPA 1981). No additional noise would be generated over current conditions as a result of utilizing the buildings; therefore, no significant long-term noise impacts would be experienced as a result of the Preferred Alternative.

AIR QUALITY (EA § 4.3, Pages 28-30)

The potential impacts to air quality as a result of implementing the Preferred Alternative is associated with the emissions related to construction and demolition (C&D). The Air Force Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact(s) associated with the Preferred Alternative in accordance with the Air Force Instruction (AFI) 32-7040, Air Quality Compliance and Resource Management (EIAP, 32 CFR 989); and the General Conformity Rule (GCR), (40 CFR 93 Subpart B).

Analysis with the ACAM software shows that annual emissions of VOC and NOx during the construction phase are well below the applicable annual 50-ton VOC and 100-ton NOx limits. When the building is put into use, there are no stationary emission sources as the new gate buildings will be heated either electrically or by steam provided by the Central Heat Plant and cooled by the Chilled Water Plant. The Preferred Alternative may result in short-term localized air quality impacts. All construction vehicles and some equipment would produce emissions that could temporarily affect air quality. Emissions are however, not anticipated to cause an adverse impact to regional air quality. All equipment and vehicles used during construction would be maintained in good operating condition so that exhaust emissions are minimized. Dust will be controlled on-site using appropriate dust abatement techniques. As a result, no significant short or long-term impacts to air quality are anticipated.

WATER RESOURCES (EA § 4.4, Pages 30 to 32)

No groundwater features, surface water features, wetlands, or floodplains are present within the footprint of the Preferred Alternative. Therefore, it is not anticipated that construction activities would directly affect these resources. However, construction of the realigned roadway system (Hartwell Ave. and Barksdale Street) will result in temporary disturbance within a small portion of the 100-foot wetland buffer zone associated with two separate wetlands. During construction, all activities would be conducted in accordance with best management practices (BMPs) to prevent adverse effects to the identified wetlands in the vicinity of the Preferred Alternative site as well as to the receiving water (Shawsheen River) into which the stormwater system discharges.

SAFETY AND OCCUPATIONAL HEALTH (EA § 4.5, Pages 32 to 33)

Short-term, minor, adverse effects on safety would occur from the Preferred Alternative. Construction and demolition activities would pose an increased risk for related injuries. The risk would be reduced by complying with federal, state, and local safety laws and regulations. All contractors performing construction activities at HAFB are required to comply with OSHA regulations and manage their own occupational health programs including industrial hygiene surveillance, worker health and safety training, hazard abatement, and medical surveillance. Workers would be required to wear the appropriate level and type of Personal Protective Equipment (PPE). The demolition and construction areas would be fenced off with appropriate signage posted. Occupational safety and health procedures would be implemented as part of the preferred alternative to ensure the safety and health of individuals at the worksite. Implementation of the preferred alternative would result in no direct or indirect impact on the safety and health of DAF employees and others.

SOLID AND HAZARDOUS WASTES (EA § 4.6, Pages 33 to 34)

Construction, renovation, and demolition activities within HAFB would result in a short-term increase in solid and hazardous materials and wastes. Hazardous material would be handled, stored, and disposed of in accordance with applicable regulations and approved plans. The increase in hazardous materials would not affect overall management plans or HAFB's ability to handle these materials. The Preferred Alternative will not increase solid or hazardous waste generation for the long term. As a result, no harm to the environment from solid wastes and hazardous wastes are anticipated from the Preferred Alternative.

NATURAL RESOURCES (EA § 4.7, Pages 34 to 36)

Under the Preferred Alternative, potential impacts to the natural vegetation within the ROI from construction activities are anticipated; there will be approximately 1.5 acres of tree and vegetation removed to re-route Barksdale Street to accommodate a curved roadway (and retaining wall).

To avoid impacts to eagles and migratory birds, the following conservation measures will be included in vegetation removal:

- Vegetation removal, trimming, and grading of vegetated areas will be scheduled to take place outside of the peak bird breeding season to the maximum extent practicable;
- When project activities cannot occur outside the bird nesting season, conduct surveys prior to scheduled activity to determine if active nests are present within the area of impact and buffer any nesting locations found during surveys;
- If active nests or breeding behavior (e.g., courtship, nest building, territorial defense, etc.) are detected during these surveys, no vegetation removal activities will be conducted until nestlings have fledged or the nest fails or breeding behaviors are no longer observed. If the activity must occur, establish a buffer zone around the nest and no activities will occur within that zone until

nestlings have fledged and left the nest area. The dimension of the buffer zone will depend on the proposed activity, habitat type, and species present and should be coordinated with the local or regional Service office;

- If establishing a buffer zone is not feasible, the base will contact the USFWS for guidance to minimize impacts to migratory birds associated with the proposed project or removal of an active nest. Active nests may only be removed by a permit from the local USFWS Migratory Bird Permit Office; and
- Avoiding nighttime construction activities (lighting, noise impacts).

Tree removal will be scheduled, to the extent feasible, to take place outside of March to August, the nesting period, for migratory birds that may be present in the limits of construction activity. Noise associated with C&D activities could have a minor, short-term impact on local wildlife in the area. However, once development activities are completed, the areas would most likely be re-occupied by local wildlife, due to their tolerance and existing adaptation to living in close proximity to humans and developed areas.

Prior acoustical surveys and studies within the boundaries of HAFB failed to indicate presence of the long-eared bat (NLEB) and showed that no trees that provide habitat, potential maternity roost, or hibernaculum for the NLEB are located within the vicinity. The DAF has determined that proposed undertakings within the boundaries of HAFB would have "no effect" on the NLEB. This determination is documented in a memorandum for record (DAF, 2018), which is included in Appendix C of the EA. The Preferred Alternative will have no known negative impacts on any federal or state threatened or endangered species.

CULTURAL RESOURCES AND TRIBAL CONCERNS (EA § 4.7, Pages 36 to 37)

Potential impacts from the Preferred Alternative to cultural resources include the demolition of existing entry control facility and the relocation and extension of existing utilities, as well as the areas that will be used for the staging of construction equipment.

The Massachusetts Historical Commission (MHC), "indicated that no significant historical or archaeological resources were encountered in the archaeological survey of the 34 area previously determined to have moderate to high potential to contain archaeological resources. MHC concurs with this finding. No further archaeological research is warranted for these surveyed areas" (MHC 1998). Several stone walls were also noted as being located within and adjacent to the project site (Abell et al. 1998). Although they are likely associated with farmsteads during the eighteenth and nineteenth century occupation of the area, no historic archaeological sites were found in association with these stone walls (DAF 2017). The DAF sent a consultation letter to MHC on May 23, 2022, stating that in accordance with Section 106 of the NHPA (5 United States Code 306018) and its implementing regulation at 36 CFR Part 800, the DAF has determined that there are no historic properties present and therefore there would be no adverse effect to historic properties.

Federal agencies are required to consult with tribes when an agency action might affect historic properties of religious and cultural significance to the tribes. Hanscom AFB is unaware of any such properties on the installation, nevertheless, in order to help fulfill that obligation, DAF sent consultation letters to the Wampanoag Tribe of Gay Head (Aquinnah) and the Mashpee Wampanoag Tribe for their assistance in identifying any such properties on Hanscom AFB, and particularly, within the project area that may be of significance to the Tribes. This includes archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, traditional cultural properties and landscapes, plant and animal communities, and buildings and structures with significant tribal association. The provisions for inadvertent discovery or archeological resources would be incorporated into the proposed action, consistent with all ground disturbing projects at Hanscom AFB. In addition, the Preferred Alternative would have No Adverse Effect on historical or cultural resources.

SOCIOECONOMIC RESOURCES AND ENVIRONMENTAL JUSTICE (EA § 4.9, Pages 37 to 42)

The Preferred Alternative is an infrastructure, transportation, and safety-related undertaking providing access to HAFB and is not a broader residential or commercial construction project. As such, the proposed project is not considered to directly alter the residential or commercial building stock throughout any of the ROI communities, in general, or the designated Environmental Justice (EJ) block groups specifically. While it is likely there will be an inconvenience factor related to the proposed project as traffic may be re-routed or otherwise impeded, this is anticipated to be short-lived and have no lingering economic impacts on households and population within the surrounding communities, in general, or the designated EJ populations.

The construction activities are a one-time, temporary event which may last up to 24 months in duration, but post-construction impacts are expected to be resolved and business to return to pre-construction levels pending any unforeseen macro-level changes in the economy or base operations. The Preferred Alternative is not anticipated to have any impacts on the current, or future composition, of the environmental justice population with respect to altering race/ethnicity, income, or English proficiency metrics.

INFRASTRUCTURE (EA § 4.10, Pages 42 to 43)

The Preferred Alternative would support the goals of the DoD, DAF, and HAFB by focusing and sustaining quality mission execution, building a sustainable installation, and improving installation infrastructure, facilities, and services. The Ruiz Gate facility enhancement projects and roadway realignment would maximize installation security.

The Preferred Alternative would enhance existing infrastructure and roadway networks, to allow for efficient and secure access and egress to the base. Potential impacts would be temporary and limited to construction phases. Any short-term, construction related, impacts would be mitigated by the planning and project approval requirements of HAFB, which are in place to ensure appropriate levels of base resources. To avoid temporary disturbances, existing buildings, roadways, and associated utilities noted for demolition would be removed will be coordinated with surrounding buildings to ensure critical infrastructure remains in service. Therefore, no significant short-term infrastructure related concerns would be experienced because of implementing the Preferred Alternative.

TRAFFIC (EA § 4.11, Pages 43 to 49)

The transportation impacts associated with the Preferred Alternative on the roadway system around the base and within the base have been assessed in the EA by a qualitative geometric assessment of the alternate routes to access HAFB due to temporary (construction related) closure of the Ruiz Gate and a traffic capacity analysis providing a quantitative assessment of the changes in delay at key intersections on- and off-base during the hours when the Ruiz Gate is closed. Together, these two components provide a detailed understanding of the impacts of the construction. In an effort to assess any potential traffic impacts due to complete or partial closure of the Ruiz Gate, two scenarios were chosen for analysis: 1) 100% diversion of traffic from Ruiz to Sartain (during gate closure) scenario, and 2) a 75% typical diversion of traffic from Ruiz to Sartain (during construction) scenario.

Based on the likely scenario of 75% diversion of traffic entering/exiting from Ruiz Gate to be diverted to Sartain Gate, minor operation issues are expected at the study area intersections south and southeast of Hanscom AFB. With diversion of traffic to Sartain Gate, these particular intersections can be expected to become saturated during the AM and PM peak hours, with heavier than normal traffic congestion projected at the unsignalized study area intersections. Traffic analyses took into consideration the peak congestion times of the day, and therefore resulted in conservative projections of traffic impact. While the delays resulting from construction will be intermittent, the proposed operational changes to HAFB access and egress during this construction period will have a temporary impact on traffic in the surrounding area. The

areas affected currently experience high traffic during the morning and evening commutes. No changes to the traffic pattern or circulations will be implemented either on a temporary or permanent basis. The primary temporary effect as a result of this construction period rerouting will be longer backups at major intersections. The general contractor will implement the following construction phase management practices to minimize potential transportation-related impacts for intersections South of HAFB:

- HAFB will coordinate with the surrounding communities to discuss transportation-related construction-period impacts;
- Designated truck routes will be established to govern how trucks access the Project sites;
- Police detail officers will be used as necessary to facilitate and maintain safe and efficient passage of vehicles and pedestrians during construction;
- Prior to of the start of construction, the general contractor will submit a Construction Period Traffic Management Plan to surrounding communities;
- The plan will identify designated construction truck routes while maintaining safe and efficient passage for vehicles, pedestrians, and bicyclists; and
- The project will avoid full or partial street closures to the extent possible. Should a partial street closure be necessary to accommodate materials transport or construction-related activities, the closure will be limited to off-peak hours.

Based on these factors, and the temporary nature of the traffic diversion during construction, there would be no significant impacts on traffic as a result of implementing the Preferred Alternative.

PUBLIC REVIEW / INTERAGENCY COORDINATION (EA §§ 1.5, 1.6, Pages 3-5)

A notice of availability was published in the Lexington Minuteman and Concord Journal on XX XX, 2023, inviting the public to review the Draft EA and draft Finding of No Significant Impact (FONSI) for a 30-day comment period. In addition, the DAF issued a press release on XX XX, 2023 announcing the availability of the Draft EA & FONSI. Copies were posted to the HAFB public facing website (https://www.hanscom.af.mil/About-Us/Fact-Sheets/Display/Article/379486/civil-engineering) for download and review. The public comment period closed on XX XX, 2023 and XX comments were received.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Based on my review of the facts and analyses contained in the *New Access Control Facility For Ruiz Gate* EA, conducted under the provisions of NEPA, CEQ Regulations, and 32 CFR §989, I conclude that the Preferred Alternative would not have a significant environmental impact, either by itself or cumulatively with other known projects. Accordingly, an Environmental Impact Statement is not required. The signing of this Finding of No Significant Impact completes the environmental impact analysis process.

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THOMAS J. SCHLUCKEBIER, P.E., CFM, LEED AP Date
Base Civil Engineer