

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT
RECORD OF DECISION

LOCATION

Washington Manassas Airport (HEF)
Prince William County, Virginia

INTRODUCTION

This Finding of No Significant Impact/Record of Decision (FONSI/ROD) sets out the Federal Aviation Administration's (FAA) consideration of environmental and other factors for federal funding assistance for the Federal Aviation Regulation (FAR) Part 139 Certification and Terminal Redevelopment Program at the Washington Manassas Airport, in Prince William County, Virginia. The Airport is owned by the City of Manassas (City) and is operated and managed by the Manassas Regional Airport Commission.

This FONSI/ROD is based on the *Washington Manassas Airport (HEF) Part 139 Certification and Terminal Redevelopment Program Programmatic Environmental Assessment (PEA)* prepared for HEF, dated June 2026, which is hereby incorporated by reference.

BACKGROUND

The FAA must comply with the National Environmental Policy Act of 1969 (NEPA) before taking federal actions that allow for the implementation of the Proposed Action. The FAA supervised preparation of the aforementioned PEA in accordance with the NEPA requirements in FAA Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures*, U.S. Department of Transportation (DOT) Order 5610.1D, *DOT's Procedures for Considering Environmental Impacts*, and the guidance in FAA Order 5050.4B, *NEPA Implementing Instructions for Airport Actions*.

The PEA was published for public review and comment from May 7, 2026 through June 15, 2026. No public comments were received. A combined state response was received from the Virginia Office of Environmental Impact Review (OEIR) and is included in Appendix E of the PEA.

PURPOSE AND NEED

The purpose of the Program is to provide a commercial service airport that has acceptable Level of Service (LOS) in its facilities and meets FAA design and certification standards. This effort is being proposed by the City to position HEF to accommodate commercial airline service, and not by an airline seeking new markets. The Purpose of the Program is twofold:

- Achieve Part 139 certification at HEF to support scheduled commercial service; and,
- Expand the existing HEF Airport terminal building and associated airside and landside facilities to support scheduled commercial service.

The Program has been initiated by the City and is specifically intended to utilize the existing airport terminal. Further, all proposed improvements would be constructed within existing HEF property boundaries and/or lease areas. The needs are:

- To safely and efficiently accommodate the projected number of passengers at HEF at an acceptable level of service.
- To meet airfield design standards to accommodate anticipated commercial service.
- To provide efficient and safe terminal roadways and auto parking.
- To construct adequate facilities to support commercial service operations, such as Aircraft Rescue Firefighting (ARFF), deicing pad, and snow removal equipment (SRE) buildings.

DESCRIPTION OF THE PROPOSED ACTION

HEF is a general aviation (GA) airport and serves a variety of GA operations including single-engine light aircraft used for training and corporate jet aircraft. The Airport does not currently have scheduled commercial airline operations; however, scheduled charter airline service under FAR Part 135 rules, Section 308, was provided by Colgan Air for the IBM Corporation starting in 1971 to shuttle employees to New York City. IBM discontinued that service in 1986. Due to population growth in the DC Metropolitan area, the Airport and the City have sought to establish scheduled commercial service. In the Spring of 2023, the City and the Commission issued a Request for Proposals for a provider to enter into a Franchise Agreement to reestablish commercial service. AFCO Avports Management (Avports) was awarded the Franchise Agreement by the City. As part of this agreement, Avports proposed to redevelop and expand the existing terminal building, expand the terminal parking lot, build an economy parking lot, provide support for the reconstruction and strengthening of Runway 16L/34R, and construct a new SRE building.

In a September 20, 2023 report on the results of a Preparatory Part 139 Airport Inspection of HEF, the FAA identified the following modifications and improvements at HEF needed to achieve Part 139 certification: construction of an ARFF building; equipment; personnel training; and Runway 16L/34R signage and lighting. In addition to the FAA Preparatory Part 139 Inspection, the Manassas Regional Airport Master Plan Update, conducted by the Airport, identified projects needed to accommodate scheduled commercial service by air carrier aircraft, which typically includes the Boeing 737-800. Airfield pavements (runway, taxiways and aprons) at HEF must be strengthened to accommodate the heavier 737-800 aircraft expected to be used for commercial service.

In total, a program of sixteen (16) projects have been identified as part of the Proposed Action. Not all of the projects must be completed prior to beginning commercial service. Some of the projects would need to be completed within a five-year period (2026-2030) to initiate commercial service beginning in 2026. Those projects that are not needed to initiate commercial service, but that are needed to support Part 139 certification, and accommodate future growth, can be completed over a longer term, from 2032 to 2036. Tier 1 projects (Years 2026-2030) have sufficient planning and detailed design completed to support development and construction within the next five years. Tier 2 projects (Years 2032-2036) have conceptual planning completed but detailed design is not yet finalized.

The eleven (11) Tier 1 Projects include: 1) Terminal Building Expansion (north, south, and west); 2) West Ramp GA Tie-Down Relocation; 3) East Ramp Strengthening, Reconfiguration, and Rehabilitation; 4) Terminal Parking Lot Rehabilitation and Expansion; 5) Economy Parking Lot Construction; 6) Bridge Rehabilitation: Runway 16L/34R and Taxiway Bravo; 7) Construction of a New SRE Building; 8) Taxiway Bravo Widening; 9) Runway 16L/34R Reconstruction and Strengthening; 10) Taxiway Echo Fillet Widening; and, 11) Taxiway Bravo Reconstruction and Strengthening (south of the bridge).

The five (5) Tier 2 Projects include: 12) Construction of a new East Ramp Taxiway; 13) Runway 16L/34R Widening; 14) Construction of an Aircraft Deicing Pad and Apron Expansion between Taxiways Delta and Echo; 15) Construction of new Expanded East Ramp and Taxilane between Taxiways Delta and Echo; and, 16) Construction of a new ARFF Facility.

PROPOSED FEDERAL ACTIONS

The FAA actions involved in the implementation of the Proposed Action include the following:

- FAA issuance of Part 139 Airport Operating Certificate
- FAA approval of the Airport Layout Plan (ALP) update for the proposed development actions.
- FAA determinations necessary to support requests for funding via federal grant-in-aid programs or related funding programs subject to FAA approval.

ALTERNATIVES

The following alternatives were considered in the PEA.

No Action Alternative – HEF would remain as a regional GA airport with no commercial service and no Part 139 certification. This Alternative would result in no new construction or redevelopment of airside and landside facilities nor any accommodation for commercial service. Part 139 Certification would not be achieved. The existing terminal and auto parking would remain unchanged and would continue to operate at the existing site. There would be no capital projects completed except for those needed to maintain state of good repair that are not considered in this PEA (e.g. pavement rehabilitation). The forecast of GA aircraft operations only (not commercial service projections) contained in the Master Plan forecast would be assumed for future growth and comparison with the Alternatives. The No Action Alternative serves as a basis of comparison during the assessment of the impacts associated with the alternatives carried forward for analysis;

Alternative #1 - General Aviation Only - This Alternative is the No Action Alternative plus Project #7 (Construction of a New SRE Building), Project #8 (Taxiway Bravo Widening) and Project #12 (Construction of a new East Ramp Taxiway), in addition to the state of good repair projects. These projects would facilitate continued GA operations at the Airport. Aircraft operations in this alternative would reflect the projections contained in the Master Plan forecast for GA only. There would be no scheduled commercial operations. This alternative would not satisfy the Purpose and Need. However, in the event commercial service does not occur, Project #7, #8 and #12 would be constructed to support GA operations; therefore, this alternative is carried forward for further consideration;

Alternative #2: Commercial Service – This alternative includes all of the sixteen (16) projects listed above. This Alternative would 1) achieve Part 139 certification through the completion of specified projects, and 2) expand the existing Airport terminal building and associated airside and landside facilities to support commercial service. This alternative would expand the existing terminal to 75,099 SF to provide adequate space to accommodate the projected passenger demand at an acceptable LOS and auto parking requirements. For this Alternative, Part 139 certification would be achieved to accommodate scheduled commercial service. For commercial service to proceed, the terminal, roadways and parking must be upgraded and airfield projects must be completed to accommodate 737-800 aircraft. This alternative could satisfy the Purpose and Need and therefore is carried forward for further consideration. This is the Preferred Alternative.

Alternative #3: Use of Another Existing Airport – This alternative involves the use of the existing airports within the passenger catchment area to accommodate the projected passenger demand and scheduled airline service. This alternative considered airfield requirements, availability of existing terminal space with passenger loading gates, holdrooms, security processing, and auto parking space at another existing airport to accommodate the forecasted passenger demand. Any candidate airport would also require adequate airfield capability, to accommodate operations by 737-800 aircraft in accordance with FAA airfield design standards. A detailed analysis of other existing airports within the passenger catchment area found that these airports do not possess the infrastructure needed to support scheduled commercial operations. Further, all the existing airports are outside of the City of Manassas’ jurisdiction. Although Washington Dulles International Airport (IAD) and Ronald Reagan Washington National Airport (DCA) do possess the ability to accommodate scheduled commercial service, DCA is currently capacity constrained through the FAA’s slot administration program and cannot accept additional flights. IAD is not a viable option because it is currently experiencing LOS constraints in key terminal areas and adding more passengers would contribute to further LOS degradation. Therefore, this alternative would not meet the Purpose and Need and is eliminated from further consideration and is not carried forward for further evaluation.

Alternative #4: New Airport Construction -This alternative involves the construction of a new airport within the passenger catchment area to accommodate the future demand at an acceptable LOS. A new airport would require, *at a minimum*, approximately 500 acres of land to support commercial service with a 6,200-ft runway with precision instrument approach procedures, sufficient aircraft parking apron space for 737-800s, terminal space, a roadway network and auto parking areas. The development of a new airport from the planning phase to construction would have a significant cost and potentially would have significant environmental impacts (e.g., land use, noise, air quality). Presently, 500 acres of developable, contiguous land is not available within the City of Manassas as the area is already developed. The planning and development of a new airport likely would take 10 years or more due to the need to select a new airport site, acquire the land (including potential eminent domain efforts that would be disruptive to the community), obtain municipal land use approvals, complete federal environmental reviews, permitting, and construction. The costs of this alternative would be prohibitive. This alternative would not meet the Purpose and Need and is therefore eliminated from further consideration and is not carried forward for further evaluation.

Alternative #5: New Terminal at Alternate Location at HEF -This Alternative considers the construction of a new terminal at HEF, other than at the existing terminal's location. An area on the west side of the Airport was considered. However, this area is currently used for GA operations (flight schools, private aircraft hangars, etc.) and has been identified in the Master Plan for continued GA development. Attempting to develop this area to support scheduled passenger service would conflict with the current plan to continue GA development and activity there. Further, this would require the construction of a new and expanded aircraft parking apron, taxiways suitable for Group III aircraft, and roadways and parking areas for passenger access. Other related supporting functions such as the deicing facility would have to be relocated to the west side of the Airport, further conflicting with light GA activity on the western side of the Airport.

Construction of a new terminal in an area on the east side of the Airport, to the south of the existing terminal, was also examined. This area has been developed for hangars and airport maintenance facilities. Demolishing those facilities would require the relocation and construction of replacement facilities at another area of the Airport. Further south of this area is a large wetland and Broad Run making this area unsuitable for construction of a terminal, parking areas and apron areas. Areas at the north and south ends of the Airport are not suitable sites for a new terminal due to the Runway Protection Zones for Runway 16L/34R. This alternative would not meet the Purpose and Need and is therefore eliminated from further consideration and is not carried forward for further evaluation.

Based on the alternatives analysis, Alternative #2: Commercial Service is the Proposed Action carried forward for the evaluation. In addition to the No Action Alternative, Alternative #1: General Aviation Only, is also being advanced for further analysis in the event commercial service does not occur.

SUMMARY OF NEPA ANALYSIS

The PEA addressed the effects of Alternative # 1 and Alternative #2 on the quality of the human and natural environment and is incorporated into this Finding. The following impact analysis highlights the more thorough analysis presented in the document.

Aviation Emissions and Air Quality

The Airport is located within Prince William County and the City of Manassas, an area that is currently designated by the U.S. Environmental Protection Agency (USEPA) as "moderate" nonattainment for the 2015 8-hour ozone (O₃) standard and as "maintenance" for the 2008 8-hour O₃ National Ambient Air Quality Standards (NAAQS). It is also located within an Ozone Transportation Region (OTR).

Based on generated construction emissions inventories utilizing the Airport Construction Emissions Inventory Tool (ACEIT) and EPA's Motor Vehicle Emission Simulator model (i.e., MOVES, version 4), Alternative #1 would not generate emissions that exceed the Clean Air Act (CAA) General Conformity *de minimis* thresholds; therefore, there are no significant air quality impacts associated with construction when compared to the No Action Alternative. There is no change to operations under Alternative #1 and therefore no related emissions changes compared to No Action Alternative.

Alternative #2 would also not generate emissions that exceed the CAA General Conformity *de minimis* thresholds; therefore, there are no significant air quality impacts associated with construction when compared to the No Action Alternative. Alternative #2 would add approximately 11 average daily commercial flights, growing to 26 and 29 average daily commercial flights in 2036 and 2041. Due to these changes, aircraft emissions, auxiliary power units (APUs), and ground support equipment (GSE), were estimated for 2026 through 2036, and the future build-out year 2041. The forecasted operations for Alternative #2 for years 2026 through 2036 and 2041 are based on conservative estimates of the number of daily operations (52 daily arrivals and departures by 2036, and 58 daily arrivals and departures by 2041). Emissions associated with changes in passenger motor vehicle activities were also estimated for Alternative #2. Based on the results of the emissions inventory, Alternative #2 would not generate operational emissions that exceed the CAA General Conformity *de minimis* thresholds; therefore, there are no significant operational aviation emissions and air quality impacts compared to the No Action Alternative.

Biological Resources

One federally proposed endangered species, the Tricolored bat (*Perimyotis subflavus*), and one federally proposed threatened species, the Monarch Butterfly (*Danaus Plexippus*), as well as ten (10) species listed by the Virginia Department of Game and Inland Fisheries information tool (VaFWIS) have the potential to occur within the project area. The state-listed brook floater (*Alasmodonta varicosa*) and the yellow lance (*Elliptio lanceolata*) mussel species have been documented previously in Broad Run, within two miles of the Runway 16L/34R and Taxiway Bravo bridge crossings (Project #6); however, they have not been detected within the Airport boundary.

Alternative #1 projects require earth disturbance and new structures and would be built within areas already mowed and managed for existing Airport operations. As minimal habitat for biological resources occurs in these areas, no significant impacts to biological resources are anticipated due to construction. No change in operations would occur due to Alternative #1; therefore, no significant impacts to biological resources are anticipated in comparison to the No Action Alternative.

Alternative #2 would also be built predominantly within areas already mowed and managed for existing Airport operations. Structure removal would be implemented in Project #1, tree removal in Project #5, and stream impacts with Project #6. The U.S. Fish and Wildlife Service (USFWS) indicated that formal consultation is not required, and no further action is necessary while the species remain at proposed status. A Determination Key (DKey) for the tricolored bat resulted in a determination of “may affect”. Potential impacts to bat species would be avoided by restricting clearing of woody vegetation, structure removal or bridge work between April 1 and November 15. In comparison to the No Action Alternative, no significant impacts to the bat populations would occur based on tree removal restrictions implemented under Alternative #2.

The bridge work proposed under Project #6 is being developed so that minimum water flow (determined to be 7-8 cubic feet per second) would be maintained in Broad Run during construction. This minimum flow is sufficient to preserve the freshwater mussels and avoid

impacts to their habitat. During construction, should water flow exceeding the minimum flow occur, the excess would be diverted into the existing bypass channel. Concurrence on this methodology was received from Virginia Department of Wildlife Resources (VADWR). In addition, VADWR requested to have an opportunity to review and comment on the final Project #6 plans before construction to verify the flow monitoring plan. In comparison to the No Action Alternative, no significant impacts to the mussel population in Broad Run would occur based on implementation of a verified flow monitoring plan and maintenance of minimum water flows during construction of Alternative #2.

The Alternative #2 project areas currently experience noise disturbance and light pollution from existing Airport operations; therefore, bat or bird species that may currently occupy the active airport grounds would be accustomed to these disturbances and further adverse effects are not anticipated to be significant. Additionally, due to the hazard presented by bird strike, wildlife populations on and around the airport are actively minimized where they may pose a threat to aviation. The loss of the 12.4-acre forested area adjacent to Cannon Branch under Alternative #2 would reduce the contiguous forest in this area from approximately 60 acres to 50 acres, though it would leave approximately 450-500 ft width of forest remaining. Although the loss would reduce the overall species carrying capacity and force interior species further inward, it leaves the minimum habitat for general forest interior species. Operational impacts to biological resources under Alternative #2 are not anticipated to be significant compared to the No Action Alternative.

Coastal Resources

Both Prince William County and the City of Manassas are within the Northern Virginia Coastal Planning District. The City is not part of the Coastal Zone Program, thus federal consistency review is only required for actions within the County or those that have a “reasonably foreseeable effect on any coastal use or resource”. Only two PEA projects associated with Alternative #2 are subject to consideration: Project #5, located within the County, and Project #6, located within the City but would directly impact the waters and subaqueous bed of Broad Run and the downstream segment of Broad Run which routes through the County.

Construction of Alternative #2, Project #5 is proximate to a resource protection area (RPA), but is designed to avoid the RPA, with retaining walls constructed between the proposed parking lot and the RPA boundary. Erosion and sediment controls would be installed beyond the retaining walls to further protect the area; therefore, no impacts to RPAs are anticipated. The Prince William County Department of Environmental Management concurred with this determination. Construction within Broad Run for Project #6 would take place upstream of where Broad Run enters the County. The construction would adhere to the requirements of the appropriate water encroachment permits from the Virginia Department of Environmental Quality (VADEQ) and U.S. Army Corps of Engineers (USACE), including erosion and sedimentation control, Stormwater Pollution Prevention Plan (SWPPP) and Spill Prevention Control and Countermeasures Plan (SPCC) plan as well as an Oil Discharge Contingency Plan (ODCP) to prevent pollution downstream. Project #5 and Project #6 are not anticipated to have operational effects on coastal resources.

A request for Federal Consistency Certification was developed and submitted to the VADEQ for review and concurrence. In accordance with 15 CFR § 930.2, public notice of the proposed action was published by the VADEQ from June 1, 2026 to June 15, 2026. No public comments were received. The Proposed Action would comply with the enforceable policies of Virginia's CZMP and would be conducted in a manner consistent with the CZMP. The VADEQ concurred that the Proposed Action is consistent with the CZMP provided all applicable permits and approvals are obtained. Significant impacts to coastal resources are not anticipated when compared to the No Action Alternative.

Department of Transportation Section 4(f) Resources and Land and Water Conservation Fund Section 6(f) Resources

U.S. Department of Transportation (USDOT) Section 4(f) resources are identified within the Direct Study Area, Visual Effects Study Area, and Auditory Effects Study Area. One historic battlefield, the Manassas Station Operations battle areas (076-5036), directly overlays the boundaries of the PEA projects. It is a compound battlefield and includes the Civil War battles of Bristoe Station, Bull Run Bridge, Kettle Run, Manassas Station Operations, and Union Mills. The Virginia Department of Historic Resources (DHR) has determined that this compound resource is potentially eligible for listing in the National Register of Historic Places (NRHP).

In addition, five Section 4(f) resources are present in the auditory and visual portions of the Study Areas, including the Bristoe Station Battlefield (076-0024), one archaeological site (44PW0729), and three recreation areas. The Bristoe Station Battlefield (076-0024) was listed in the Virginia Landmarks Register (VLR) but was subsequently delisted due to loss of setting. Archaeological site 44PW0729 is eligible for listing in the NRHP. The three recreation areas in the Study Area are segments of the City of Manassas Nokesville Trail, Gateway Trail, and the Prince William County Broad Run Greenway and Discovery Spur. No Section 6(f) Land and Water of the Conservation Fund (LWCF) resources are identified within the Study Areas.

The only Section 4(f) resources within the Alternative #1 Study Area are the existing historic Manassas Station Operations (076-5036). However, given the location of the Alternative #1 projects and previous Airport development, construction activities would have no impact on the historic resource; therefore, construction of the Alternative #1 projects would not result in significant impacts on Section 4(f) resources compared to the No Action Alternative. Operation of Alternative #1 would not disrupt the Section 4(f) resources identified in the Study Area. The nature of Projects #8 and #12 would be consistent with existing operations and would not affect the visual or auditory setting. Project #7, while introducing new development, would have no adverse impact on the visual or auditory setting as determined by the FAA with DHR's concurrence; therefore, Alternative #1 would have no significant impact on Section 4(f) resources in comparison to the No Action Alternative.

Section 4(f) resources in the Alternative #2 Study Area include three recreational resources (Discovery Spur, Nokesville Trail and Gateway Trail, an archaeological site [44PW0729], and the two battlefields). The Discovery Spur and Nokesville Trail are adjacent to Route 28. The Gateway Trail segments are adjacent to Observation Road and Wakeman Drive. The trails would not be impacted by proposed project construction through implementation of measures such as fencing and appropriate setbacks. Construction of Projects #7, #8 and #12 would be the same as

Alternative #1 above. Construction of Projects #4 and #5 would occur adjacent to Gateway Trail and measures would be taken to ensure the trail segment on Wakeman Drive is not obstructed during construction. Archaeological Site 44PW0729 is in an unpaved area west of the West Ramp. There would be no construction associated with Project #2; therefore, there would be no impact to this Site. Construction of Alternative #2 would not result in significant adverse impacts on Section 4(f) resources compared to the No Action Alternative. There would be no operational impacts to Section 4(f) resources by the proposed projects. The recreational trails within the Study Area are not managed for noise. The trails would not exceed the elevations of the buildings or other proposed development. While users of the trails would be able to see the Airport and its buildings and structures, the trails were created after the Airport was constructed and in operation in the mid-1960s. Further DHR concurred that no historic properties would be affected by Alternative #2 and there would be no adverse visual or auditory impacts; therefore, there would be no physical, constructive, or temporary impacts to the Section 4(f) resources compared to the No Action Alternative.

Hazardous Materials, Solid Waste, & Pollution Prevention

A Phase I Environmental Site Assessment (ESA) was conducted to evaluate environmental conditions for 13 of 16 PEA projects, with Projects #2, #6 and #11 subsequently added to the PEA and ESA. The ESA also evaluated adjacent and surrounding properties and areas to determine if any current and/or historic uses may have adversely affected subsurface environmental conditions within the Study Area. No hazardous materials or hazardous waste storage or disposal sites are present within or proximate to the PEA project areas evaluated. Individual tenants that occupy hangar spaces at HEF are registered Resource Conservation and Recovery Act (RCRA) hazardous waste generators due to typical maintenance and general aviation activities. Firefighter training exercises are conducted near HEF ARFF Building C3, located approximately 500 feet southeast of the nearest project areas (Projects #1, #3, and #4). Drums of aqueous film-forming foam (AFFF) containing fluoroalkyl surfactants are present inside that building. Although not located within or proximate to the PEA project footprints, there is documented use of PFAS-containing AFFF used in Airport firefighting operations.

No maintenance or petroleum storage is present within or adjacent to the PEA project footprints. The HEF Fuel Farm, not located within the PEA project footprints, has thirteen aboveground and underground storage tanks (ASTs/USTs) registered with VADEQ. HEF personnel confirmed all former USTs containing petroleum or hazardous materials were removed. Municipal records indicate their status as closed in ground. There are currently no known active releases of hazardous substances at HEF and no remediation activities being conducted at HEF. However, according to the Phase I ESA, residual contaminants in soil and groundwater from documented solvent uses and historical petroleum releases (unrelated to existing tanks) may be present within and/or proximate to the PEA project footprints.

Given the age of existing buildings, they may contain asbestos and electrical components that contain mercury, and polychlorinated biphenyls (PCBs) or lead paint coatings. Project #1 requires demolition or significant alteration of the existing passenger terminal. The terminal was constructed in 1996 and is unlikely to contain asbestos building materials. Subgrade drainage within the PEA project footprints that require modification may contain asbestos piping. Fill

material reportedly sourced from off-site has the potential to contain construction and demolition (C&D) debris containing asbestos, lead paint and/or PCBs.

HEF generates multiple waste streams from the airfield, fixed-based operators, aircraft maintenance hangars, cargo hangars, and concessions. Non-hazardous solid waste generated exclusively at the Airport is handled and carted off-site under contract by American Disposal Services to the Prince William County Municipal Landfill. C&D debris generated at the Airport is recycled off-site in accordance with applicable regulatory requirements.

Pollution prevention is managed by the Airport with a combined SWPPP and SPCC. HEF adheres to an ODCP associated with the fuel farm, which meets the requirements of Article 11 of the State Water Control Law of the Commonwealth of Virginia. The discharge of stormwater is managed through Virginia Pollution Discharge Elimination System (VPDES) General Permit #VAR050985. Stormwater runoff is directed to the south through a series of oil-water separators, stormwater swales and ditches and is discharged to Broad Run, Cannon Branch and their tributaries.

Hazardous materials storage on-site would temporarily increase during Alternative #1 construction activities. Storage of these materials (petroleum and maintenance products) would conform to all applicable local, state and federal regulatory requirements. Soil sampling for reuse and off-site disposal would follow applicable VADEQ and disposal facility-specific protocols, including testing for PFAS, if required. Any PFAS exceeding EPA thresholds would be disposed of off-site at a landfill permitted to accept PFAS-contaminated material. Contaminated fill material, residual contaminants in soil and groundwater may be present within and/or proximate to the Alternative #1 projects. If encountered, contaminated fill, soil or groundwater would be handled under a Soil and Materials Management Plan (SMMP), and a Construction Health and Safety Plan (CHASP) would be followed to mitigate risks to workers. Asbestos piping associated with the existing stormwater drainage system located within the Alternative #1 project areas could be encountered. If confirmed, asbestos abatement would be conducted if necessary during any drainage modifications in accordance with a CHASP and applicable regulatory requirements. Contractors would be responsible for disposing of solid waste in accordance with all local, state and federal regulations, including characterizing all construction and demolition (C&D) debris in accordance with the Commonwealth of Virginia's Solid and Hazardous Waste Management Regulations. Project-specific SWPPPs would be required pursuant to regulatory requirements prior to the start of construction, which would include preventative measures (inlet protection, stockpile management, etc.) to reduce impacts from stormwater runoff. Dewatering may be required for deeper excavations associated with Project #7, which would require compliance with the discharge parameters outlined in the VPDES general permit.

Operations of Alternative #1 would require compliance with applicable regulatory requirements for any fuel storage that may be necessary. Solid waste is not anticipated to increase from the No Action Alternative. The increase in impervious surface will increase operational runoff which would continue to be managed under VPDES General Permit #VAR050985. Through compliance with stated construction and operational measures, Alternative #1 would not result in significant impacts when compared to the No Action Alternative.

Construction of Alternative #2 would have impacts similar to those described under Alternative #1; however, quantities of stored hazardous materials would be higher given the increased number of PEA projects. Construction activities in Alternative #2 may expose soils and groundwater impacted by PFAS-containing AFFF. A SMMP would be implemented to manage potentially contaminated soil and groundwater (including PFAS), and a CHASP would be followed to mitigate risks to workers. Only Project #1 includes demolition or alteration of existing buildings. The existing terminal may, although unlikely, contain hazardous building materials including asbestos, PCBs or mercury. Contractors would be responsible to ensure waste recycling facilities are permitted and have adequate capacity associated with the short-term increase in the generation of construction-related waste, C&D debris and excess soil that may require off-site disposal. Alternative #2 would require project-specific SWPPPs pursuant to local regulatory requirements prior to the start of construction, which would include preventative requirements to reduce impacts from stormwater runoff. In addition, potential dewatering for deeper excavations associated with Project #1, #7 and #16, would require compliance with the discharge parameters outlined in HEF's VPDES general permit.

Operations of Alternative #2 may require installation of petroleum and/or chemical underground storage tanks (USTs) or above ground storage tanks (ASTs) for Projects #1, #7, and #16 to store diesel for emergency generators, motor oils or fuels associated with operations and maintenance. In addition, an increase in working quantities of maintenance products including household cleaners, paints, thinners and other products is anticipated with the operation of new buildings. Petroleum storage and hazardous materials storage would conform to all applicable regulatory requirements. An increase of municipal solid waste generation is also anticipated which will continue to be carted off-site to the Prince William County Municipal Landfill and an increase in operational stormwater discharges would continue to be managed under VPDES General Permit #VAR050985. Through compliance with stated construction and operational measures, Alternative #2 would not result in significant impacts when compared to the No Action Alternative.

Historic, Architectural, Archaeological and Cultural Resources

Seven archaeological investigations within, and adjacent to, the Airport boundaries were identified in background and literature review. A total of 28 archaeological sites within or adjacent to the Airport were found. Of the total, only six sites (44PW0011, 44PW0012, 44PW0013, 44PW0014, 44PW0015, and 44PW0729) are within the direct or indirect areas of potential effect (APEs). Five of the sites, 44PW0011 through 44PW0015, were identified in 1978. These five sites are on the east side of the Airport in locations that are now fully developed. The sixth site, 44PW0729, was identified in 1994 on the west side of the Airport in a grassy area to the west of Project #2. No buildings/structure surveys have been completed within the Airport's boundary according to the Virginia Cultural Resource System (V-CRIS) survey plots and property listings. There are no buildings and structures in the PEA Study Area that meet the 50-year threshold for inclusion in the NRHP. Locations associated with Bristoe Station Battlefield (076-0024) and the Manassas Operations battle areas (076-5036) are present within the Direct Study Area.

The direct APEs for the three Alternative #1 projects, Projects #7, #8 and #12, have already been disturbed from prior demolition and construction activities which lowered, filled, and regraded to

depths as great as five feet. A viewshed analysis considered the viewsheds from the SRE building in Project #7. The other two projects are linear airfield projects. The analysis resulted in a determination that no visual effects will be incurred to historic resources located within the Study Area. Consultation with DHR resulted in concurrence that no historic archaeological properties would be affected and there would be no adverse effects to historic properties associated with visual and auditory changes; therefore, there would be no significant impact from construction or operations of Alternative #1 compared to the No Action Alternative.

The direct APEs for the Alternative #2 projects have also been previously disturbed. For indirect effects, the viewshed analysis considered the terminal expansion (Project #1) and the new SRE building (Project #7), and the ARFF building (Project #16). The remaining PEA projects are linear airfield pavements. The analysis resulted in a determination that no visual effects will be incurred to historic resources located within the Study Area. Consultation with DHR resulted in concurrence that no historic archaeological properties would be affected and there would be no adverse effects to historic properties associated with visual and auditory changes; therefore, there would be no significant impact from construction or operations of Alternative #2 compared to the No Action Alternative.

Land Use

The Airport makes up approximately 24.5 percent of the land within the Study Area and is zoned for Airport use. Other larger zoning districts within the Study Area include agricultural (34.3 percent of the land within the Study Area), planned business districts (10.4 percent), and heavy industrial areas (9.8 percent) and light industrial areas (8.3 percent). The Agricultural district surrounds the southern and western half of the Airport. Areas to the east, west and north of HEF are zoned as Planned Business District Heavy and Light Industrial.

Industrial/Transportation zoning districts are located adjacent to the Airport, to the northwest, north and east, with a small pocket to the east next to the Planned Business District. There is one Suburban Residential district located on the east side of the Airport, to the east of Prince William Parkway, and a Planned Mixed Residential district next to the Heavy Industrial district to the northwest of the Airport. General Business districts are located to the north of the Airport. There is one day care, the Nanda Learning Center, which is located within the Study Area, adjacent to Pennsylvania Avenue between Nokesville Road and Carolina Dr. There are no other schools, places of worship, playgrounds, or other similar places of interest that would be sensitive to Land Use changes within the Study Area.

Major transportation routes include Route 28, (Nokesville Road), which runs east-west along the north end of the Study Area, and Route 238 (Prince William Parkway) which runs north-south on the east side of the Study Area and crosses Nokesville Road at a grade-separated interchange. The Virginia Railway Express (VRE) runs east-west directly to the north of the Airport, and the Broad Run Train Station is located across from the northwest corner of the Airport to the south of the Railroad tracks, between Observation Road and Piper Lane.

Alternative #1 would occur entirely on Airport property within the city limits and would remain consistent with the current IA: Airport District Land Use Zoning. Construction and operations would not require any changes to zoning in and around the Airport; therefore, there would be no

significant impact to land use from construction or operations of Alternative #1 compared to the No Action Alternative.

Construction of Alternative #2 projects, other than Project #5, would take place entirely within Airport property within the City and would remain consistent with the current IA: Airport District Land Use Zoning. Project #5, also within Airport property, but in the County, would occur within the M/T Industrial/Transportation District, on undeveloped land and would remain consistent with the M/T Industrial/Transportation District Zoning. Land Use for Project #5 would change from undeveloped to developed land but would remain consistent with existing zoning. Aircraft operations would change as a result of Alternative #2. Proposed Airport operations would remain consistent with the current zoning. Alternative #2 would be compatible with the surrounding land uses and consistent with local plans or laws related to land use and development; therefore, there would be no significant impact to land use from construction or operations of Alternative #2 compared to the No Action Alternative.

Natural Resources & Energy Supply

Natural resources (e.g., water, asphalt, aggregate, etc.) and energy use (e.g., fuel, electricity, etc.) at an airport are a function of the needs of aircraft, support vehicles, airport facilities, support structures, and terminals. Airport personnel and tenants regularly use consumable materials to maintain the airport. Those materials may include asphalt, concrete, aggregate for sub-base materials, various metals associated with such maintenance, and fuels associated with the operation of aircraft and vehicles.

Energy use at the Airport includes electricity, natural gas, aircraft fuel, and equipment fuel. Electricity is required to operate facilities (e.g., terminal building, hangars, airfield lighting). Fuel is used for aircraft (Jet-A and Avgas), aircraft support vehicles/equipment (gasoline and diesel), and Airport maintenance vehicles/equipment (gasoline and diesel). Electrical power is provided by the City of Manassas through a cooperative agreement with Dominion Power to the Airport. Washington Gas Company provides natural gas services to the City of Manassas and the Airport. Water is sourced from the Potomac River and Lake Manassas and is treated at either Fairfax Water's *James J. Corbalis, Jr.* Water Treatment Plant or the City of Manassas' water treatment plant. The City of Manassas Utilities Department provides water and Prince William County Service Authority provides sewer services.

The proposed Alternative #1 construction activities would require use of steel, gravel, sand, aggregate, concrete, asphalt, water, prefabricated building components and other construction materials. These materials are not in short supply in Northern Virginia and consumption of these materials is not expected to deplete or cause a shortage of existing supplies. The net change in electricity use for the SRE building is minimal and can be accommodated with the existing supply. The new building would utilize energy conservation features. Natural gas use would be limited to building heating and water heating. The change in natural gas use for SRE building size can be accommodated with the existing supply. Projects #8 and #12 are both airfield paving projects that would require the taxiway lighting system to be modified. This would require new electrical cabling, conduits and taxiway lighting fixtures and signs. These materials are in adequate supply. The existing HEF Fuel Farm has adequate supplies of diesel and gasoline for general aviation operational growth. Construction and operations of Alternative #1 will not result

in a significant impact to natural resources and energy supply compared to the No Action Alternative.

Alternative #2 construction activities would require natural resources such as steel, gravel, sand, aggregate, concrete, asphalt, water, prefabricated building components and other construction materials. Construction is anticipated to be conducted over a ten-year period thereby avoiding a surge in demand of these materials that could occur if the construction period was condensed. These materials are not in short supply in Northern Virginia and consumption of these materials is not expected to deplete or cause a shortage of existing supplies. No unique or rare natural resources are required for construction of this Alternative.

Electricity would be needed to power and light the buildings, aircraft parking apron, parking lots and airfield lighting. This would require the installation and expansion of the existing electrical distribution system with new electrical cabling, conduits and taxiway lighting fixtures. These materials are in adequate supply. There would be an increase in demand for natural gas for Alternative #2. Natural gas use would be needed for the Terminal building, SRE building, and ARFF building for heating and water heating purposes. The existing natural gas service in the terminal is adequate for the proposed expansion as the terminal was originally constructed for commercial service. There is a network of gas main lines serving the Terminal and along the east side of the Airport. The ARFF building and SRE building have limited natural gas demand, and the existing system is more than adequate to accommodate these two buildings; therefore, no additional natural gas capacity would be needed. The existing HEF Fuel Farm has adequate storage to accommodate the introduction of commercial passenger aircraft and growth in general aviation operations; therefore, an expansion of the fuel farm is not required. Construction and operations of Alternative #2 will not result in a significant impact to natural resources and energy supply compared to the No Action Alternative.

Noise and Noise-Compatible Land Use

The Aviation Environmental Design Tool (AEDT version 3f) was utilized to produce DNL 65, 70, and 75 dBA noise contours. The existing (2023) 65-70 DNL contour encompasses 164 acres, the 70-75 DNL contour encompasses 73 acres, and the 75+ DNL contour encompasses 63 acres. There are currently no non-compatible land uses or populations exposed to aircraft within the DNL 65 dBA contour. The existing DNL 65 dBA contour is largely confined to airport property with the exception of two acres of non-airport, industrial property located on the north end of Runways 16L and 16R.

Construction and operational noise analysis is limited to Alternative #2. Construction noise for Alternative #1 contains a subset of construction activities of Alternative #2. Noise levels for construction equipment were obtained from the FHWA-approved Roadway Construction Noise Model. The nearest residential land uses are located approximately 2,300 ft to 6,400 ft away from the project sites depending on the receptor site and the locations of the various construction projects on the Airport. Although not subject to the maximum permissible daytime sound pressure levels within the county as a public project (60 dBA), the predicted future construction-related noise levels at each noise-sensitive receptor site during the construction period are below 60 dBA; therefore, construction noise for both alternatives will not result in significant noise impacts compared to the No Action Alternative.

Operationally, Alternative #1 has the same anticipated GA growth as the No Action Alternative; therefore, there will be no significant noise and noise compatible land use impacts compared to the No Action Alternative. Alternative #2 was modeled for 2036 and 2041 utilizing the worst-case scenario associated with the increase in operations and the introduction of commercial service. In 2036, approximately 35 percent of commercial service are anticipated to be Airbus A320-NEO aircraft, and 12 percent A321-NEO aircraft, both of which are certified as Noise Stage 5, the quietest aircraft noise certification standard currently in effect. In 2041, these proportions increase to approximately 36 percent A320-NEO and 21 percent A321-NEO. However, AEDT does not include specific noise profiles for the A320-NEO or A321-NEO aircraft. Instead, AEDT applies noise profiles for surrogate aircraft that are louder (certified to Stage 3 and 4 noise standards) and have older generation engines. Consequently, nearly half (47 percent) of the operations modeled in 2036, and more than half (57 percent) of the operations modeled in 2041 are represented by aircraft that are louder than those actually anticipated to operate at the airport.

In 2036 the DNL 65 dBA contour encompasses 87 acres of non-airport property, an increase of 80 acres when compared to the 2036 No Action Alternative contour. North of Runway 16L and 16R most of the land use within the 2036 DNL 65 dBA contour is industrial and open space. Southwest of Runway 34R, the land use within the contour is agricultural. One residential property is located south of the Runway 34R on Alessi Drive. The residential property is expected to experience an increase in DNL of 4.8 dBA compared to the No Action Alternative and would be newly exposed to DNL 65 dBA. In 2041 the DNL 65 dBA contour encompasses 101 acres of non-airport property, an increase of 92 acres when compared to the 2041 No Action Alternative contour. The increase in the DNL 65 dBA contour is due to the expected increase in commercial aircraft operations. Two residential properties south of Runway 34R will be impacted, one located on Alessi Drive, and the one on Flint Rock Road. The properties would experience an overall increase in DNL of 5.0 dBA and 5.1 dBA compared to the No Action Alternative and would be newly exposed to DNL 65 dBA. The Airport is committed to reaching out to the two property owners in the future to conduct indoor noise measurements, if commercial service comes to HEF, and operational levels reach the predicted point of potentially causing adverse effects. Mitigation measures, such as land acquisition or sound insulation, may be implemented to minimize the effects of the aviation noise to less than significant.

Socioeconomics and Children's Environmental Health and Safety Risks

The socioeconomics Study Area encompasses 100.3 square miles, has a combined population of 28,604, and an average density of 285.2 people per square mile. In 2022, there were 15,624 individuals employed in the Study Area with an average unemployment rate of 2.7 percent. Housing vacancy rates were approximately 2.1 percent. There is one day-care, the Nanda Learning Center, which is located within the Study Area, adjacent to Pennsylvania Avenue between Nokesville Road and Carolina Drive.

Construction of the three Alternative #1 Projects would create temporary jobs and would likely increase expenditures on local services and materials and thus support the local economy. All construction would occur within Airport property and would not impact off-Airport populations or businesses. The transportation network would be impacted by construction traffic; however,

these impacts would be temporary. Under Alternative #1, there would be no changes to Airport operations compared to the No Action Alternative. There would be no potential new businesses at the Airport as a result of Alternative #1 and no changes to children's health and safety risks; therefore, there would be no significant construction or operational impacts compared to the No Action Alternative.

The 10-year construction period for Alternative #2 would create temporary jobs and would likely increase expenditures on local services and materials, supporting the local economy. Construction would result in generation of solid waste and potentially hazardous materials requiring proper disposal. However applicable federal, state, or local laws or regulations regarding hazardous materials, solid waste, and pollution prevention would be followed and that potential discharges are prevented or mitigated. In addition, air emissions from construction for Alternative #2 conform with Virginia's state implementation plan, and therefore, would not adversely impact children's health and safety risks. The transportation network would be impacted by construction traffic resulting in temporary increases in delay and queuing at Prince William Parkway and Clover Hill Road. Maintenance and Protection of Traffic Plans would be developed during the design phase to help control, minimize or mitigate any potential disruptions to the traveling public. Traffic operations would be monitored and any signal timing modifications implemented would be coordinated with the construction schedule. Construction of Alternative #2 would therefore not have significant impacts compared to the No Action Alternative.

Operationally, the Airport would continue to support existing jobs and would create new jobs through the introduction of commercial service and therefore increase economic activity. The net change in operational emissions would be below *de minimis* thresholds for all pollutants. Land use in the immediate vicinity of the Airport, in particular, the area through which traffic destined to the Airport would be routed, is primarily industrial in nature. Based on the traffic analysis conducted for the project, all unsignalized and signalized intersections would be expected to operate at overall LOS B or better during the 2036 and 2041 peak hours. The Nanda Learning Center would not be significantly impacted by vehicles traveling to and from the Airport and there would be no expectation of conflicts with children's activities. There are no other parks, playgrounds, schools, daycares within the Study Area. HEF is not within an area on the EPA's list of contaminated sites that warrant further environmental investigation. None of the PEA projects, or sites identified within a 0.5-mile radius of HEF, have hazardous waste cleanup locations at, or within, one mile of the proposed PEA projects, and therefore would not have an impact on children's health and safety risks. Alternative #2 would also comply with all applicable water quality standards. Operation of Alternative #2 would not have significant impacts compared to the No Action Alternative.

Visual Effects

The Airport's built environment includes linear resources, existing buildings and structures, and aircraft and vehicle parking spaces. No new types of facilities are being introduced by the PEA projects. Light Emission, Visual Resource, and Visual Character effects are considered as they are related to both Section 4(f) and Section 106 resources. The Study Area and APE for Visual Effects are the same for both Section 4(f) and Section 106 resources: the footprint of each PEA project, a 100-foot buffer around the footprint of each PEA project, and auditory and visual

effects areas. There are Section 4(f) recreation areas and Section 106 historic sites in the Study Area. There are no listed and eligible buildings and structures in the Study Area, but the Study Area/APE can clearly be seen by listed and eligible properties that are located upslope from the Airport in the surrounding highlands. A viewshed analysis completed for the project determined that the proposed undertaking will result in no adverse effect to historic properties.

Visual Effects associated with the construction of Alternative #1 would be short-term and confined to the construction area of each Alternative #1 project. Alternative #1 would alter the viewshed by introducing the new SRE building, widening an existing taxiway, and constructing a new ramp. The viewshed summary indicated that the view of the SRE building to the east and north is blocked by undulating terrain, transportation infrastructure (roadways and railroad) and vegetation. The linear structures would not disrupt the visual character of the Airport because they are consistent with other existing Airport structures, including ramps, taxiways, and runways. Lighting associated with each project would conform to FAA guidance and standards and would be similar to existing lighting at the Airport. Further, FAA determined there would be no visual or auditory adverse effects to historic properties and DHR concurred; therefore, there will be no significant visual effects from construction and operations of Alternative #1 compared to the No Action Alternative.

Visual effects associated with the construction of Alternative #2 projects would include the demolition of Building 13, the exterior modifications to the existing terminal with the introduction of the terminal extension and walkway, the introductions of the new SRE building and ARFF building, and tree removal associated with Project #5. Operationally, Alternative #2 would introduce the three new buildings into the viewshed (terminal expansion, SRE, and ARFF), as well as new linear features including parking lots (Projects #4 and #5), and modifications to existing linear structures including bridges. The viewshed summary found that the view of the new buildings would be blocked by higher buildings, changes in line-of-sight, and view distances. The linear structures add to but do not disrupt the visual character of the Airport because they are consistent with other existing Airport structures, including ramps, taxiways, and runways. Lighting associated with each project would conform to FAA guidance and standards and would be similar to existing lighting at the Airport. Further, FAA determined there would be no visual or auditory adverse effects to historic properties and DHR concurred; therefore, there will be no significant visual effects from construction and operations of Alternative #2 compared to the No Action Alternative.

Water Resources

Wetlands

Seventeen (17) wetlands totaling 16.2 acres are identified within the Study Area. A Virginia Department of Transportation (VDOT) wetland mitigation bank (“VDOT Mitigation Site”) is adjacent to the Airport, to the east of the confluence of Cannon Branch and Broad Run. The Virginia Natural Landscape Assessment (VaNLA) maps two Ecological Core areas (large patches of natural land with at least one hundred acres of interior cover) on the non-airport side of Broad Run. The wetlands within the County do not have associated resource protection areas (RPAs) within the Study Area per correspondence with Prince William County. Property within the City does not consider RPAs.

A small (0.13-acre) herbaceous wetland (Wetland B) occurs in the area of Project #7 and would be permanently removed through Alternative #1 construction. A VADEQ Virginia Water Protection General Permit would be obtained prior to removal of Wetland B. Since more than 0.1 acre of wetlands would be impacted by Project #7, mitigation for the loss of this wetland would be required at a 1:1 ratio. HEF would satisfy this mitigation requirement by purchasing wetland mitigation credits through a local mitigation bank. Numerous banks are available in the area to support the purchase of the 0.13 credits required (e.g. the Laws Ford Bank has 4.37 credits available, and the Foggy Bottom Bank has 12.77). No operational impacts to wetlands would be incurred. Because removal of Wetland B would be permitted by VADEQ, and mitigation for the loss of this wetland would be secured prior to construction, there will be no significant impacts to wetlands from Alternative #1 compared to the No Action Alternative.

As with the permanent removal of Wetland B under Alternative #1, Alternative #2 requires the permanent removal of two additional wetlands for the construction of Project #14 (Wetland C) and Project #15 (Wetland D). The Project #6 bypass channel would be utilized to carry additional flow in excess of the seasonal low flow during bridge construction. Wetland X occurs in the bypass channel. This wetland currently provides the same function during Broad Run's heavy flood events and thus is already adapted to this occasional flow. Temporary impacts may also occur to offsite portions of Wetland I as this area may need to be temporarily disturbed for equipment access during construction. These temporarily impacted wetlands would be restored through application of a wetland grass seed mix and subsequent monitoring to ensure proper germination.

Cumulative impacts to wetlands and surface waters would be permitted through a VADEQ Individual Permit (IP) since overall wetland impacts would exceed two acres. As the overall permanent wetland impacts would exceed 0.1 acres, the loss of the additional 0.33 acres of wetlands would require mitigation at a 1:1 ratio pursuant to VADEQ requirements. This requirement would be satisfied by purchasing credits through a local mitigation bank. At the federal level, wetland and surface water impacts would be permitted under a USACE Nationwide Permit (NWP) or State Programmatic General Permit (SPGP), based on final impacts amounts. No USACE Permits would be required for removal of Wetlands C and D, but an approved jurisdictional determination (AJD) would need to be obtained prior to construction. The VDOT Mitigation Site and the Ecological Core areas are downstream of this action; however, there would be no hydrologic impacts during construction because standard low flow conditions would remain in Broad Run. No operational impacts would be incurred; therefore, through purchase of wetland credits, implementation restoration measures, and maintenance of low flow conditions, there will be no significant impacts to wetlands from Alternative #2 compared to the No Action Alternative.

Floodplains

According to the Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Maps, approximately 69 acres of the Airport are mapped within the "1 percent annual chance flood" (also known as the 100-year flood) of Cannon Branch and Broad Run. Portions of Projects #2, #6, #8, #9, #12, and #13 occur within the Broad Run 100-year flood area.

Alternative #1 is at a planning stage of development and advanced engineering designs have not yet been developed; however, at the current level of design, construction of Project #8 and Project #12 (airfield pavements) would require the placement of fill within the one percent annual chance flood mapped to raise surfaces above the base flood elevation. Floodplain impacts due to these projects would amount to 0.2 percent of the flood-mapped areas of the Airport. As a mitigative measure, calculated increases in flood elevations would be offset by soil removal (floodplain balancing) in uplands within the bypass channel resulting in no net rise and no increase in the 1 percent annual chance flood elevation. As such, the floodplain changes would not contribute to the loss of human life, would not carry substantial encroachment costs, nor would it result in notable adverse impacts on floodplain values.

The City of Manassas Engineering Department indicated the proposed development is consistent with the City's Comprehensive Plan and the HEF Master Plan and that floodplain impacts would need to comply with FEMA's National Flood Insurance Program requirements. A Conditional Letter of Map Revisions (CLOMR) would be coordinated with FEMA when details are available. Through offsetting loss of floodplain storage and further agency coordination, it is not anticipated the construction and operations of Alternative #1 would significantly impact floodplains in comparison to the No Action Alternative.

For Alternative #2, Projects #2, #6, #8, #9, #12 and #13 portions of the projects occur within the one percent annual chance flood-mapped areas of Broad Run. All of these are airfield projects, not buildings and as the Airport currently maintains airfield operations (runways and taxiways) within, but elevated from, the 1 percent annual floodplain of Broad Run, no practicable alternatives exist to improve and expand existing airport infrastructure without siting such improvements and expansions in the floodplain. Alternative #2 is at a planning stage of development. Project #8, Project #12 and Project #13 would require the placement of fill within the one percent annual chance flood mapped areas to raise surfaces above the base flood elevation. Floodplain impacts due to these projects would amount to 0.32 acres of the flood-mapped areas of the Airport. These project areas occur within existing and actively used portions of the airfield, immediately surrounding and/or between existing paved surfaces (runways and taxiways). The proposed projects are similar in nature (airfield pavements) to existing paved surfaces, and these projects are fixed by function due to FAA airfield design standards (runway to taxiway separation). Therefore, there are no practicable alternate locations for these projects on the airfield. Impacts calculated for PEA Projects would be offset by soil removal (floodplain balancing) in uplands within the bypass channel, resulting in no net rise and no increase in the 1 percent annual chance flood elevation. As such, the floodplain changes would not contribute to the loss of human life, would not carry substantial encroachment costs, nor would it result in notable adverse impacts on floodplain values.

Project #5's avoidance of the Cannon Branch was submitted to Prince William County as this is the only part of the PEA Projects under their jurisdiction. Based on this consultation, Prince William County determined that no further floodplain studies are required but that a Flood Hazard Use Permit must be filed prior to construction. The City of Manassas Engineering Department indicated the proposed development is consistent with the City's Comprehensive Plan and the HEF Master Plan and that floodplain impacts would need to comply with FEMA's National Flood Insurance Program requirements. A Conditional Letter of Map Revisions (CLOMR) would be coordinated with FEMA when details are available. Through offsetting loss

of floodplain storage and further agency permitting and coordination, it is not anticipated the construction and operations of Alternative #2 would significantly impact floodplains in comparison to the No Action Alternative.

Surface Waters

A surface water delineation within the Study Area documented two major perennial surface waters (Cannon Branch and Broad Run), one minor perennial tributary and five intermittent streams totaling approximately 5,455 linear feet of surface water. An RPA buffer of 100 ft extends from Cannon Branch (Stream O) which would be confirmed through a Preservation Area Site Assessment (PASA) with the County. In coordination with the County, the PASA would be submitted prior to construction.

No surface waters occur in the vicinity of any of the Alternative #1 projects. Alternative #1 would increase the area of impervious surfaces at HEF by under four acres. This would cause additional discharges of stormwater to the existing stormwater management system (Airport stormwater permit #VAR050985), and a negligible reduction in water entering the groundwater. Stormwater that currently collects in Wetland B would be discharged to the storm sewer after construction of Project #7. Increased impervious surfaces would be mitigated through proposed underground detention systems. The underground detention area would include drainage structures constructed in the airfield infield area between Runway 16L/34R and Taxiway Bravo. These structures would be sized to accept the expected stormwater volumes and placed and designed to meet FAA standards. This system would be incorporated into the Airport's stormwater permit.

With the adherence to stormwater management criteria consistent with water quality protection provisions of 9VAC25-875-740 and 9VAC25-875-80 and -260 of the *Virginia Erosion and Stormwater Management Regulations*, in conjunction with following the approved SWPPP, SPCC, ODCP plans, and existing VPDES permit it is not anticipated the construction and operations of Alternative #1 would significantly impact surface water quality in comparison to the No Action Alternative.

Alternative #2, Project #6 construction would involve the permanent installation of an eight-inch thick Mechanically Stabilized Earth (MSE) wall secured into the channel banks with dowel nails beneath each bridge. Existing rip-rap at the bridges would be removed during construction and replaced afterward. During construction, equipment would need to work within, above and adjacent to the stream. To accomplish this without impacting water quality, precast concrete double-tees (platforms) would be temporarily installed within the approximately 1,170-foot length of streambed where work would occur. The double-tees would allow the waters of Broad Run to continuously flow as it would during seasonal low flow conditions.

Operational impacts of Alternative #2 would occur from the effects of increased stormwater discharges to the Airport's stormwater system (#VAR050985) due to an increase in impervious surfaces at HEF (approximately 26 acres). Increased impervious surfaces would be mitigated through proposed underground detention systems. The underground detention systems would be constructed in the airfield infield area between Runway 16L/34R and Taxiway Bravo at the Economy Parking Lot, and the Terminal Parking Lot. These structures would be sized to accept

the expected stormwater volumes and placed and designed to meet FAA standards. This system would be incorporated into the updates to the Airport's stormwater permit.

With the adherence to stormwater management criteria consistent with water quality protection provisions of 9VAC25-875-740 and 9VAC25-875-80 and -260 of the *Virginia Erosion and Stormwater Management Regulations*, in conjunction with following the approved SWPPP, SPCC, ODCP plans, existing VPDES permit, as well as coordination of the PASA, it is not anticipated the construction and operations of Alternative #2 would significantly impact water quality in comparison to the No Action Alternative.

PUBLIC INVOLVEMENT/AGENCY COORDINATION

The public comment period for the PEA began on May 7, 2026 and closed on June 15, 2026. A public notice was published in InsideNoVa/Prince William beginning May 14, 2026. The PEA was also distributed for agency review and comment. The PEA was made available to the public for review/download online at the Washington Manassas Airport website: <https://flyhef.com/> as well as in hardcopy at.:

Washington Manassas Airport
Administrative Office
10600 Harry J. Parrish Boulevard
Manassas, VA 20110

Manassas City Library
10104 Dumfries Rd
Manassas, VA 20110

No comments were received from the public. Combined state agency responses were received from the VADEQ through the OEIR. The comments are included in Appendix E of the PEA. The agency comments received generally address presence/absence of resources in the project area, potential permitting requirements, the Proposed Action's consistency with various resource/development policies and regulations, and concerns regarding potential impacts to downstream mussel populations. The agency comments did not result in significant changes to the PEA.

MITIGATION MEASURES

Implementation of the measures outlined below are to be undertaken as part of the Proposed Action. As described in the PEA and below, the FAA is also relying on USACE, VADEQ and other federal, state and local agencies to ensure mitigation described in the PEA is achieved.

1. The Sponsor must adhere to FAA Advisory Circular (AC) 150/5370-10H, *Standard Specifications for Construction of Airports*.
2. The Sponsor must obtain an air permit in accordance with 9VAC5-80-1120 before construction of, or operation of, any new stationary source if required.
3. The Sponsor must comply with control methods in Virginia Administrative Code VAC5-50-60, of the Regulations for the Control and Abatement of Air Pollution to minimize fugitive dust.
4. The Sponsor must register and obtain permitting for installation of fuel burning equipment in accordance with 9VAC5-80, Article 6, Permits for New and Modified Sources, if required.

5. If project activities include open burning or the use of special incineration devices are employed in the disposal of land-clearing debris during demolition and construction, these activities must meet the requirements under 9VAC5-130 *et seq.* for open burning.
6. The Sponsor must comply with Virginia Administrative Code VAC5-45-780 *et seq.* limitations on the use of “cut-back” (liquefied asphalt cement, blended with petroleum solvents).
7. The Sponsor must avoid tree clearing, removal or replacement of structures and bridges from April 1 to November 15 to avoid impacts to bat species and tree clearing from March 15 to August 15 for migratory birds.
8. The Sponsor must also avoid mowing areas with taller vegetation (bypass channel associated with Project #6) between April 1 and August 31, unless continuous mowing has occurred prior to April 1 and would continue through August 31. If the seasonal timing restriction cannot be upheld, perform field inspections for nesting migratory and grassland birds prior to construction to document evidence of active nesting sites or breeding behavior and avoid disturbance in those areas.
9. The sponsor must perform an evaluation for bald eagle and/or peregrine falcon nests before tree clearing for Project #5. In the event a peregrine falcon nest is observed, implement a timing restriction between February 15 through July 15 for any activities within 600 feet of a nest or nestbox. Observance of a bald eagle nest will require initiation of additional agency consultation.
10. The Sponsor must adhere to the approved flow monitoring plan and continue coordinating project #6 design and construction with VADWR to maintain minimum flows and ensure downstream mussel populations are not impacted.
11. The Sponsor must construct and operate the Proposed Action consistent with the enforceable policies of the CZMP and avoid RPA impacts to the extent practical.
12. The Sponsor must prepare and submit a PASA to the county for review and approval prior to construction.
13. The Sponsor must ensure that Gateway Trail is not obstructed during construction of projects #4 and #5 through implementation of construction measures including fencing and setbacks.
14. The Sponsor must adhere to all applicable regulatory requirements including the requirements of the Virginia Tank Regulations 9 VAC 25-91-10 *et seq.* (AST) and/or 9 VAC 25-580-10 *et seq.* (UST) for storage of hazardous materials and any future UST’s, AST’s, or petroleum storage.
15. The sponsor must adhere to a SMMP and a CHASP for potential contaminated fill, soil or groundwater encountered during construction.
16. The Sponsor must sample groundwater for Projects #1, #7 and #16 if dewatering is required to determine if treatment is required prior to construction and handle, treat and discharge groundwater in accordance with the VADEQ and VPDES (VAG83) permit requirements.
17. The Sponsor must complete a subsurface investigation for Projects #1, #7, and #16 based on prior use of solvents to determine if there is a potential for vapor encroachment and install soil vapor barriers below new building slabs if required to prevent encroachment.
18. The Sponsor must conduct pre-demolition hazardous building material surveys and properly characterize, manage, abate or dispose of all suspected hazardous building materials encountered during the construction (including historic fill materials, if encountered) in accordance with applicable local, state and federal requirements.

19. The Sponsor must ensure potential hazardous materials are handled and stored appropriately in accordance with prevailing requirements and containment and remedial measures for unintended releases addressed in accordance with VADEQ requirements and guidance in the SWPPP, SPCC Plan and ODCP.
20. The Sponsor must handle solid waste and C&D debris in accordance with applicable local, state and federal regulations.
21. If any Native American artifacts and/or human remains are encountered during construction, the Sponsor must cease all activities within a 100-foot radius of the discovery. The Airport Sponsor shall take steps to protect the discovery and promptly report the discovery to the FAA.
22. The Sponsor must engage with the two property owners newly exposed to DNL 65 dBA to conduct indoor noise measurements, if commercial service comes to HEF, and operational levels reach the predicted point of potentially causing adverse effects. The affected owners must be offered mitigation measures to abate noise impacts such as land acquisition or sound insulation.
23. The Sponsor must develop Maintenance and Protection of Traffic Plans during the design phase to help control, minimize or mitigate any potential disruptions to the traveling public and monitor traffic operations and implement any signal timing modifications with the construction schedule.
24. The Sponsor must submit a project-specific erosion and sediment (ESC) plan for review and approval to the project locality pursuant to local ESC requirements for projects involving land-disturbing activities greater than 10,000 square feet (greater than 2,500 square feet in a Chesapeake Bay Preservation Area).
25. The Sponsor must coordinate with the locality and develop a stormwater management plan (SWM) if required.
26. The Sponsor must register for coverage under the General Permit for Discharges of Stormwater for Construction Activities (VAR10) and develop site-specific SWPPPs for land disturbing activities greater than one (1) acre.
27. The Sponsor must coordinate with, and acquire a Flood Hazard Use Permit, from Prince William County and comply with the requirements of the local floodplain ordinance for floodplain and/or floodway impacts.
28. The Sponsor must offset floodplain impacts through soil removal (floodplain balancing) in uplands within the bypass channel resulting in no net rise and no increase in the 1 percent annual chance flood elevation.
29. The Sponsor must prepare a CLOMR and coordinate with FEMA during project design.
30. The Sponsor must adhere to the Airport's existing VPDES General Permit for Industrial Activity Stormwater Discharges (VAR050985).
31. The Sponsor must comply with the existing SPCC Plan and site-specific SPCC plans.
32. The Sponsor must restore temporarily impacted wetlands through application of a wetland grass seed mix and subsequent monitoring to ensure germination.
33. The Sponsor must mitigate unavoidable impacts to wetlands and streams in accordance with USACE and VADEQ permit requirements. Anticipated mitigation includes the purchase of credits through a local mitigation bank.
34. The Sponsor must obtain all required permits and approvals for the Proposed Action prior to construction.

FEDERAL AGENCY FINDINGS

In accordance with all applicable laws, the FAA makes the following findings for the Proposed Action based on all appropriate information and analyses contained in the PEA:

A. The Proposed Action is reasonably consistent with existing plans of public agencies for development of areas surrounding the airport. (49 U.S.C. § 47106(a)(1)). The FAA is satisfied that the Proposed Action is consistent with plans (existing at the time the Proposed Action is approved) of public agencies for development of areas surrounding the airport. The project development will take place on airport property for the purposes of supporting aeronautical activities.

B. The interest of the communities in or near where the Proposed Action may be located were given fair consideration. (49 U.S.C. § 47106(b)(2)). The FAA is satisfied that the interests of the communities in or near where the Proposed Action will be located were given fair consideration as demonstrated by the PEA, including *Appendix Q Public Involvement*.

C. The FAA is satisfied that consistent with 49 U.S.C. § 47107(a)(10), the airport sponsor has, and will continue to take all necessary actions, including the adoption of zoning laws, to ensure the land uses in the airport vicinity are compatible with airport operations. The Proposed Action will not result in changes to zoning or land use in the vicinity of the airport.

D. The FAA has given this Proposed Action the independent and objective evaluation. The FAA's review and ultimate decision-making process included the FAA's rigorous exploration and objective evaluation of reasonable alternatives and probable environmental consequences, regulatory agency consultations, as required, and public involvement. FAA furnished guidance and participated in the preparation of the PEA by providing input, advice, and expertise throughout the planning and technical analyses, along with administrative direction and legal review. FAA has independently evaluated the PEA and takes responsibility for its scope and content.

E. The FAA finds that Executive Order 11988, which directs federal agencies to reduce the risk of flood loss, minimize the impacts of floods on human safety, health, and welfare, and restore and preserve the natural and beneficial values served by floodplains, has been followed and, as required, complied with appropriately. The FAA is satisfied that the Proposed Action would create an encroachment, but not a significant encroachment, on floodplains and that implementation of the Proposed Action would comply with all the requirements of EO 11988. Specifically, the Proposed Action would not adversely affect the natural and beneficial values of the floodplain, result in a high probability of loss of human life, or result in damages that could be substantial in cost or extent, including the interruption of service or loss of vital transportation facility. The Proposed Action would also conform with DOT Order 5650.2, *Floodplain Management and Protection*.

F. The Proposed Action will conform to the State Implementation Plan (SIP) in accordance with Section 176 of the Clean Air Act (CAA) and its amendments (42 U.S.C. § 7506(c)). The FAA has determined that the Proposed Action would not exceed *de minimis* thresholds as defined in 40 CFR Part 93, Subpart B associated with construction or operations.

G. Historic properties would not be adversely affected by the Proposed Action (Section 106 of the National Historic Preservation Act (NHPA) regulations (36 CFR Part 800)). The FAA has determined, and the VHDR has concurred, that Proposed Action will result not result in an adverse effect to historic properties identified within the APE.

H. The Proposed Action conforms to the Avoidance, Minimization and/or Compensation of Harm to Wetlands in Accordance with EO 11990, the Clean Water Act DOT, and Order 5660.1A. The FAA is satisfied that impacts resulting from the Proposed Action can be mitigated through the purchase of wetland credits.

DECISION AND ORDER

The FAA recognizes its responsibilities under NEPA and FAA's own directives and guidance. Recognizing these responsibilities, I have carefully considered the FAA's goals and objectives in relation to the various aspects of the *Washington Manassas Airport (HEF) Part 139 Certification - and Terminal Redevelopment Program Programmatic Environmental Assessment* at Manassas Regional Airport. I have used the environmental process to make a more informed decision. The review included the purposes and needs to be served by this Proposed Action and alternative means to achieve them. This review has also included consideration of the environmental impacts of any alternative that passed the screening criteria and was carried forward for further analysis, and the mitigation and conditions necessary to preserve and enhance the human environment. This decision is based on a comparative examination of environmental impacts, operational factors, and economic factors for each of the alternatives. The PEA provides a fair and full discussion of the impacts of the Proposed Action. The NEPA process included appropriate planning and design for avoidance and minimization of impacts, as required by NEPA, other special purpose environmental laws, and appropriate FAA environmental directives and guidance.

The FAA has determined that environmental and other relevant concerns presented by interested agencies and the general public have been addressed in the PEA. The FAA believes that with respect to the Proposed Action, there are no outstanding environmental issues within FAA's jurisdiction to be studied. Further, it is the determination of the FAA that, with respect to the Proposed Action, the requirements of NEPA and all other applicable federal environmental requirements and Executive Orders have been met. In making this determination, the FAA must decide whether to approve the federal actions necessary for the Proposed Action implementation. FAA approval signifies that applicable federal requirements relating to airport development planning have been met and permits the airport Sponsor to proceed with development and possibly receive funds or any other relevant federal approvals for eligible items. Not approving these actions would prevent the Sponsor from proceeding with the development.

The environmental finding in this FONSI/ROD is based on the Airports Authority implementing the wetland mitigation described in the PEA. If the Airports Authority does not implement the mitigation measures as described, additional environmental review may be required, including potentially the preparation of an Environmental Impact Statement (EIS).

This decision does not constitute a commitment of funds under the Airport Improvement Program (AIP); however, it does fulfill the environmental prerequisites for future AIP funding determinations associated with AIP-eligible project components (49 U.S.C. § 47107).

Similarly, this decision neither grants approval to use Passenger Facility Charges (PFC) nor constitutes a commitment of PFC approval. This decision fulfills the environmental analysis prerequisites for future PFC determinations. The FAA will review any future PFC application upon receipt from the Airport Sponsor and the FAA will make funding decisions in accordance with the established procedures and applicable statutory requirements (49 U.S.C. § 40117).

I have carefully and thoroughly considered the alternatives, including the proposed Federal Actions, contained in the PEA. Based on that information, I find the proposed Federal Actions are consistent with existing national environmental policies and objectives of Section 101(a) of NEPA and other applicable environmental requirements. I also find that all practicable means to avoid or minimize harm from the selected alternative have been adopted, and the proposed Federal Actions as presented in the PEA will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to Section 102(2)(C) of NEPA.

Accordingly, pursuant to the authority delegated to me by the Administrator of the FAA, I find that the actions summarized in this FONSI/ROD are reasonably supported and approved. I hereby direct that action be taken together with the necessary related and collateral actions, to carry out the agency actions noted above. Specifically:

- a. Determinations under 49 U.S.C. §§ 47106 and 47107 relating to the eligibility of the Proposed Action for federal funding under the Airport Improvement Program (AIP) and/or under 49 U.S.C. § 40117, as implemented by 14 CFR § 158.25, to impose and use passenger facility charges collected at the Airport for the Proposed Action to assist with construction of potentially eligible development items shown on the Airport Layout Plan (ALP).

DAVID A FISH Digitally signed by DAVID A FISH
Date: 2026.07.30 08:49:18 -04'00'

APPROVED: _____

Director, Airports Division
Federal Aviation Administration
Eastern Region

Date

DISAPPROVED: _____

Director, Airports Division
Federal Aviation Administration
Eastern Region

Date

Right of Appeal

This FONSI/ROD constitutes a final agency action and a final order taken pursuant to 49 U.S.C. §§ 40101 *et seq.* and constitutes a final order of the FAA Administrator which is subject to exclusive judicial review by the Courts of Appeals of the United States in accordance with the provisions of 49 U.S.C. § 46110. Any party having substantial interest in this order may apply for a review of the decision by filing a petition for review in the appropriate United States Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110.