U.S. AIR FORCE

PROGRAMMATIC ENVIRONMENTAL ASSESSMENT

for Electric Vehicle Charge Facilities at Multiple Air Force Bases

DRAFT

October 2023

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DRAFT FINDING OF NO SIGNIFICANT IMPACT (FONSI)
ELECTRIC VEHICLE CHARGE FACILITIES AT MULTIPLE AIR FORCE BASES

Pursuant to provisions of the National Environmental Policy Act (NEPA), 42 United States Code 4321-4370h; Council on Environmental Quality Regulations, 40 Code of Federal Regulations (CFR) 1500-1508 (2022); and the U.S. Department of the Air Force (DAF) Environmental Impact Analysis Processes (EIAP), 32 CFR 989, the DAF prepared the attached Programmatic Environmental Assessment (PEA) to assess the potential impacts from implementing the Electric Vehicle Charge Facilities (EVCF) Program at six Air Force Bases (AFBs): Joint Base Anacostia-Bolling (JBAB) in Washington D.C., Joint Base Andrews (JBA) in Maryland, Joint Base McGuire Dix Lakehurst (JBMDL) in New Jersey, Los Angeles AFB (LAAFB) in California, Tyndall AFB (TAFB) in Florida, and the United States Air Force Academy (USAFA) in Colorado. This FONSI hereby incorporates the entire PEA by reference.

Purpose and Need

The purpose of the Proposed Action is to provide AFBs with electric vehicle (EV) charging stations to enable on-base EV usage and charging for government-owned vehicles (GOVs). The Proposed Action is needed to increase the number of EV charging stations on AFBs for creating the necessary infrastructure to expand EV usage, which would minimize carbon emissions in the long-run and help DAF meet White House and Executive Order (EO) goals for EV usage, tackling the climate crisis, and catalyzing clean energy industries.

Description of the Proposed Action and Alternatives

Under the requirements of Executive Orders (EO) 14008, Tackling the Climate Crisis at Home and Abroad, and EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, the Office of the Secretary of the Air Force's Deputy Assistant Secretary of the Air Force for Operational Energy (IEN) Installation Energy (IEE) is proposing the installation of EV charging stations on all AFBs for the eventual conversion of the DAF fleet of light-duty vehicles to EVs by 2027.

Proposed Action

The Proposed Action includes installation of new EV charging stations on six AFBs (listed above) as part of the DAF's program for the planned conversion of light-duty GOVs at all AFBs to EVs. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support EV vehicle use. EVCF would conform to the requirements in the Installation Facilities Standards, any necessary historic guidelines, and Advisory Council on Historic Preservation (ACHP) exemption requirements. As discussed in Chapter 1 of the PEA, site-specific follow-on NEPA analysis would be required as EVFC projects are identified and designed to ensure each project is covered by the PEA using the Checklist in Appendix A. This includes sites considered within the PEA which are not fully designed. The Proposed Action is described in detail in Section 2.5 of the PEA.

No Action Alternative

The No Action Alternative in the PEA (Section 2.4) provides a baseline against which to contrast impacts of the Proposed Action and can be evaluated to identify impacts to the human environment in the absence of the Proposed Action.

Summary of Findings

Based on the characteristics of the sites proposed for EVCF at each of the six AFBs (developed parking facilities within AFB boundaries), DAF determined there would be no significant impacts to the following

resources and, therefore, dismissed these resources from detailed analysis within the PEA: water resources, geology, cultural resources, biological resources, land use, transportation, public health and safety, socioeconomics and environmental justice (see Table 1-1 of the PEA for dismissal justification). Chapter 3 of the PEA discusses the affected environment and potential environmental consequences for the Proposed Action and the No Action Alternative for resources carried forward for detailed analysis based on the sites selected for EVCF at the six AFBs. An overview of the potential level of adverse effects to these resources is presented in Table 1. As shown in Table 1, implementation of the Proposed Action is not anticipated to result in significant adverse environmental impacts. Under the No Action Alternative, no changes to baseline conditions would occur.

Table 1. Summary of Potential Environmental Effects from Baseline Conditions

Resource Area	Level of Impact	Cumulative Impact
Air Quality and Greenhouse Gas/Climate Change	Construction impacts to local air quality and greenhouse gas emissions impacts to the climate would be less than significant. Operations impacts would be less than significant. Long-term operations may result in beneficial impacts, as greenhouse gas emissions are decreased.	Less than significant
Soil Resources	Construction impacts would be short-term and less than significant. Operations impacts would be less than significant.	Less than significant
Noise	Construction impacts would be short-term and less than significant. Operations impacts would be less than significant.	Less than significant
Utilities and Infrastructure	Construction impacts on electrical infrastructure would be short-term, localized, and less than significant. Operations impacts would be less than significant.	Less than significant
Hazardous Materials and Waste	Overall impacts would be less than significant.	Less than significant

Regulatory Compliance

Overall, the PEA assesses the potential impacts associated within EVCF Program implementation and provides the DAF meaningful points in agency planning and decision making on the relevant environmental information of the EVCF program. Once a decision is made to implement at a particular installation, the DAF will conduct follow-on site-specific environmental analysis tiering from the PEA document using the Checklist in Appendix A of the PEA. This would include identification of any regulatory compliance required at the specific EVCF site under consideration.

As stated above, the PEA dismisses various resources (water resources, geology, cultural resources, biological resources, land use, transportation, public health and safety, socioeconomics and environmental justice) based on the site-specific conditions of proposed EVCF locations at the six AFBs analyzed within the PEA. Although these resource areas are not analyzed in detail within the PEA and included in the FONSI, these resources will be considered during evaluation of the site-specific future proposed EVCF locations using the Checklist in Appendix A of the PEA. Specifically, Section 7 consultation under the Endangered Species Act would occur as applicable during tiered NEPA. Site-specific supplemental or tiered NEPA will occur to identify the potential for impacts at a site-specific level and Section 7 consultation would occur as applicable. Through the course of tiered NEPA, there is the also potential that site-specific unknowns would result in a need for mitigations measures. Any required mitigation measures will be identified at a site-specific level.

Cumulative Effects

The qualitative analysis in Chapter 3.0 of the PEA indicates no significant impact to any resource area. The DAF focused the cumulative impacts analysis consistent with Council on Environmental Quality (CEQ) regulations 40 CFR 1508.1(g)(3). Because construction for the EVCF projects considered in this PEA would be very limited in scope and duration, the projects would cause less than significant incremental additions to the impacts from construction of larger projects in the affected areas. However, the completed EVCF projects would make long-term contributions to the development of carbon pollution-free electricity initiatives.

Public Involvement

The DAF sent early notification letters to federal, state and local governments and federally recognized tribes that are historically affiliated with the geographic region of each AFB on June 20, 2023. DAF received comments from the following stakeholders: Burlington County New Jersey, Delaware Tribe of Indians, District Department of Transportation, Flandreau Santee Sioux Tribe, Florida Fish and Wildlife Commission, Florida State Clearinghouse, New Jersey Department of Environmental Protection, Northern Cheyenne Tribe, and the U.S. Environmental Protection Agency (see Appendix B for comments).

The DAF published a Notice of Availability of the Draft PEA/Draft FONSI in national and regional newspapers announcing the availability of the Draft PEA and proposed FONSI for a 45-day review and comment period. [placeholder to include summary of comments received].

Finding of No Significant Impact

After review of the PEA for Electric Vehicle Charge Facilities at Multiple Air Force Bases, which is hereby incorporated by reference, I have determined that the Proposed Action will not have a significant impact on the quality of the human or natural environment. Accordingly, an Environmental Impacts Statement is not required. The signing of this FONSI completes the environmental impact analysis process. The Final PEA and FONSI are available online at https://www.afcec.af.mil/Home/Environment/National-Environmental-Policy-Act-Center/.

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Date

Attachment:

Programmatic Environmental Assessment for Electric Vehicle Charging Facilities Programmatic at Multiple Air Force Bases

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List of Acronyms and Abbreviations

Acronym	Definition
2,4-DNT	2,4-dinitrotoluene
A	amp
ACAM	Air Conformity Applicability Model
ACHP	Advisory Council on Historic Preservation
AFB	Air Force Base
AFI	Air Force Instruction
AFFF	aqueous film-forming foam
AFMAN	Air Force Manual
AMW	Air Mobility Wing
AQCR	Air Quality Control Region
AST	Aboveground storage tank
BESS	battery energy storage system
BMP	Best Management Practices
CAA	Clean Air Act
CE	Civil Engineer
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CH_4	methane
CO	carbon monoxide
CO_2	carbon dioxide
CO_{2e}	carbon dioxide equivalent
CWA	Clean Water Act
CZ	Environmental Directorate
CZMA	Coastal Zone Management Act
DAF	U.S. Department of the Air Force
DAFI	Department of Air Force Instruction
dB	decibel
dBA	A-weighted decibel
DC	direct current
DCMR	District of Columbia Municipal Regulations
DPCC/DCR	Discharge Prevention, Containment and Countermeasures and Discharge Cleanup and Removal Plans
DoD	Department of Defense
DOEE	Department of Energy and Environment
EA	Environmental Assessment

Acronym	Definition
EBS	environmental baseline survey
EIAP	Environmental Impact Assessment Process
EO	Executive Order
ERP	Environmental Restoration Program
ESA	Endangered Species Act
EVCF	Electric Vehicle Charge Facilities
FPPA	Farmland Protection Policy Act
FR	Federal Register
FY	fiscal year
GHG	greenhouse gas
GOV	government-owned vehicle
HAP	hazardous air pollutant
HAZMAT	hazardous materials
HQ	Headquarters
INRMP	Integrated National Resources Management Plan
IEE	Environment, Safety and Infrastructure
IRP	Installation Restoration Program
JBA	Joint Base Andrews
JBAB	Joint Base Anacostia-Bolling
JBMDL	Joint Base McGuire Dix Lakehurst
JCP&L	Jersey Central Power & Light Company
kVa	Kilo-volt amp
kW	kilowatt
LAAFB	Los Angeles Air Force Base
LRS	Logistics Readiness Squadron
MBTA	Migratory Bird Treaty Act
MDE	Maryland Department of Environment
MRA	munitions response area
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
N_2O	nitrous oxides
NO_2	nitrogen dioxide
NPDES	National Pollutant Discharge Elimination System

Acronym	Definition
NTV	non-tactical vehicle
O_3	ozone
OSHA	Occupational Health and Safety Act
OU	Operable Unit
PAH	polycyclic aromatic hydrocarbons
Pb	lead
PCB	polychlorinated biphenyls
PCE	tetrachloroethene
PEA	Programmatic Environmental Assessment
PEPCO	Potomac Electric Company
PFAS	perfluoroalkyl and polyfluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctane sulfonate
PID	photo-ionization detector
PSD	Prevention of Significant Deterioration
$PM_{2.5}$	particulate matter, less than or equal to 2.5 micrometers
PM_{10}	particulate matter, less than or equal to 10 micrometers
PV	photovoltaic
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
SAF	Secretary of the Air Force
SCE	Southern California Edison
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SO_x	Sulfur oxides
SPCCP	Spill Prevention Control and Countermeasure Plan
SWMP	Stormwater Management Plan
SWMU	Solid Waste Management Unit
SWPPP	Storm Water Pollution Prevention Plan
SUV	sports utility vehicle
SVOC	semi-volatile organic compounds
TAFB	Tyndall Air Force Base
TCE	trichloroethene
TMDL	total maximum daily load
UFC	Unified Facilities Criteria
UFGC	United Facilities Guide Specification

Acronym	Definition
USAFA	U.S. Air Force Academy
USEPA	U.S. Environmental Protection Agency
U.S.C.	United States Code
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UST	underground storage tank
V	volt
VI	vapor intrusion
VOC	volatile organic compound
ZEV	Zero-emission vehicle

Chapter 1 Purpose and Need for the Proposed Action

1.1 Introduction and Location

Under the requirements of Executive Orders (EO) 14008, Tackling the Climate Crisis at Home and Abroad, and EO 14057, Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability, the Secretary of the Air Force for Environment, Safety and Infrastructure (SAF/IEE) is proposing the installation of electric vehicle (EV) charging stations on all Air Force Bases (AFBs) for the eventual conversion of the Department of the Air Force (DAF) fleet of light-duty vehicles to EVs. Section 205 of EO 14008, the Federal Clean Electricity and Vehicle Procurement Strategy, encourages procurement to achieve or facilitate clean and zero-emission vehicles (ZEVs) for federal, state, local, and tribal government fleets; and to achieve a carbon pollution-free electricity sector no later than 2035. In addition, EO 14057 specifically requires all federal agencies to ensure that all light-duty non-tactical vehicle (NTV) acquisitions are zero emission vehicles by end of fiscal year (FY) 2027, and all vehicle acquisitions (including medium- and heavy-duty vehicles) are ZEVs by end of FY 2035.

The DAF operates a total vehicle fleet of approximately 61,000, 31,000 of which are light duty, 21,000 are medium duty, and 9,000 are heavy duty. Of the DAF inventory, approximately 200 are plug-in hybrid EVs and 45 are battery EVs, with vehicle charging times varying depending on the power level of chargers and the make and model of each vehicle. Each agency with a fleet of at least 20 vehicles must create and annually update a zero-emission fleet strategy that includes maximizing the purchase and deployment of ZEVs, optimizing fleet size and composition, and building charging infrastructure for ZEVs. To estimate an installation's required electric vehicle charge facilities (EVCF), the DAF performs installation-specific analyses considering factors such as fleet size and reported mileage of each vehicle.

To understand the range of potential environmental impacts associated with implementation of an EVCF Program (also referred to as Program), DAF has identified six installations across the U.S. to conduct programmatic environmental analyses. The DAF chose these six locations based on the level of existing EVCF infrastructure in place as well as to reflect regional diversity (e.g., air quality attainment status). These six locations include Joint Base Anacostia-Bolling (JBAB) in Washington D.C., Joint Base Andrews (JBA) in Maryland, Joint Base McGuire Dix Lakehurst (JBMDL) in New Jersey, Los Angeles Air Force Base (LAAFB) in California, Tyndall AFB (TAFB) in Florida, and the United States Air Force Academy (USAFA) in Colorado (See Figure 1). Actual and ultimate implementation of the Program at these locations may vary from what is described in this document.

The National Environmental Policy Act (NEPA) of 1969, as amended (42 U.S. Code [U.S.C.] §4321, et seq.); Council on Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500-1508); and the DAF's NEPA regulations (32 CFR Part 989) require lead agencies to evaluate the potential impacts of federal actions on the surrounding environment. Overall, this Programmatic Environmental Assessment (PEA) assesses the potential impacts associated within EVCF Program implementation and provides the DAF meaningful points in agency planning and decision making on the relevant environmental information of the EVCF program. Once a decision is made to implement at a particular installation, the DAF will conduct follow-on site-specific environmental analysis tiering from this document.

Figure 1-1. EVCF Program Locations Considered within the PEA

1.2 Purpose and Need for the Proposed Action

The ***purpose*** of the Proposed Action is to provide AFBs with EV charging stations to enable on-base EV usage and charging for GOVs. The Proposed Action is ***needed*** to increase the number of EV charging stations on AFBs for creating the necessary infrastructure to expand EV usage, which would minimize carbon emissions in the long-run and help DAF meet White House and EO goals for EV usage, tackling the climate crisis, and catalyzing clean energy industries.

1.3 Scope of Environmental Analysis

The DAF has prepared this analysis as a broad Program-wide evaluation of EVCF implementation within DAF installations. As a programmatic analysis, it is intended to support DAF installation-level EVCF implementation by streamlining coordination and environmental analysis. When a DAF installation has determined that NEPA analysis is required for a specific EVCF action, the action would be evaluated for coverage under this EA. If specific proposed EVCF actions are deemed to have no significant impacts, then the action could tier off this PEA using the checklist in Appendix A. If specific proposed EVCF actions are outside of the scope of this PEA, or are expected to create impacts greater in magnitude, extent, or duration than those described in this PEA, then tiered NEPA documentation, such as a separate EA, would be prepared for that action.

Consistent with 32 CFR Part 989 and CEQ regulations (40 CFR Parts 1500-1508), the scope of analysis presented in this PEA is defined by the potential range of environmental impacts resulting from implementing the Proposed Action and Alternatives, including the No Action Alternative.

This PEA identifies, describes, and evaluates the affected environment and environmental consequences of the Proposed Action and identifies measures to prevent or minimize environmental impacts. Table 1-1 provides information regarding resources analyzed in detail within the PEA document along with resources eliminated from detailed analysis due to lack of impacts to the resource for the six AFBs. The intent of the PEA is not to entirely dismiss any environmental resources, but rather to streamline environmental evaluation using the checklist. An installation is responsible for conducting site-specific NEPA analysis that includes all relevant resources, permit considerations, and consultations with local stakeholders based on the specifics of the locations and the project. Appendix A includes a checklist developed for use by DAF to tier off this PEA for EVCF implementation at additional locations in the future. EVCF projects not fitting the checklist requirements may be subject to a higher level of NEPA analysis.

Table 1-1: Resource Area Level of Analysis

Resource	Level of Analysis and Justification
Air Quality and Greenhouse Gas/Climate Change	Construction of required EVCF and operational activities have potential air quality impacts from construction and charging use. These activities could also contribute to greenhouse gas emissions and climate change. Overall conversion of the GOV fleet would be beneficial to air quality and greenhouse gas emissions as Particulate Matter 2.5 ($PM_{2.5}$) and carbon dioxide (CO_2) would decrease. EVCF operational activities could contribute to climate resilience and adaptation of installations and the surrounding area. See Section 3.1 for additional discussion related to the six installations under consideration.
Water Resources	Impacts associated with water resources are site-specific in nature and cannot be fully analyzed in depth within this PEA. This resource area would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. For EVCF sites selected within this PEA, construction of required EVCF and operational activities would be located in the vicinity of existing parking lot areas away from water resources; therefore, no direct impacts to water resources are anticipated. The minimal amount of ground disturbance required for construction along with the use of standard best management practices would result in negligible indirect impacts of sedimentation and

Resource	Level of Analysis and Justification
	erosion to water resources. Potential impacts of erosion and sedimentation and management of stormwater are discussed alongside soils impacts (see Section 3.2). Any increases in impervious surface would also be negligible as EVCF analyzed within this PEA would be placed within existing developed/impervious areas.
Soil and Geological Resources	Construction of required EVCF could cause direct impacts to soils and increased potential for soil erosion. EVCF placement would not require extensive grading of topography or impacts to geological resources. See Section 3.2 for additional discussion related to the six installations under consideration for soil impacts; geology is dismissed from further analysis.
Cultural Resources	Impacts associated with cultural resources are site-specific in nature and cannot be fully analyzed in depth within this PEA. This resource area would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. Regarding archaeological resources, placement of EVCF at AFBs analyzed within this PEA would occur in existing disturbed areas (e.g., parking lots, areas directly adjacent to existing facilities) or within locations previously surveyed and determined absent of archaeological resources. Regarding historic structures, locations selected for EVCF within this PEA are anticipated to meet all requirements contained within the Advisory Council on Historic Preservation (ACHP) October 26, 2022 exemption, which relieves federal agencies from the historic preservation review requirements under the National Historic Preservation Act (NHPA) regarding the effects of the installation of certain EVCF on historic properties. All federal agencies are exempt from the Section 106 requirements of considering the effects of the installation, maintenance, repair, or expansion of EVCF and Level 1, 2, or 3 charging stations, provided that (87 FR 66201): (1) activities take place in existing parking facilities with no major electrical infrastructure modifications and are located as close to an existing electrical service panel as practicable; (2) use reversible, minimally invasive, non-permanent techniques to affix the infrastructure; (3) minimize ground disturbance to the maximum extent possible, and ensure that it does not exceed previous levels of documented ground disturbance; (4) use the lowest profile EVCF reasonably available that provides the necessary charging capacity; (5) place the EVCF in a minimally visibly intrusive area; and (6) use colors complementary to surrounding environment, where possible.
Biological Resources	Impacts associated with biological resources are site-specific in nature and cannot be fully analyzed in depth within this PEA. This resource area would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. Any required mitigation measures would be identified at a site-specific level. Sites considered in this PEA occur within previously disturbed areas with low-quality habitat (e.g., parking lots or maintained lawn and landscaping). Negligible biological resource impacts would result from both construction and operations.
Land Use	Eliminated from detailed PEA analysis (refer to Checklist in Appendix A for site-specific consideration). Sites chosen for EVCF installation within this PEA are already designated to allow for charging stations and would be compatible with adjacent land uses and installation master planning. No impacts would occur to land use from construction and operations.
Noise	Construction of EVCF would cause temporary increases to noise. This would include potential temporary use of excavation equipment and trucks to prepare the sites and drills to secure the EVCF to the proposed locations. Overall impacts would be temporary (a few weeks) during construction. See Section 3.3 for additional discussion related to the six installations under consideration.
Utilities and Infrastructure	Establishment of EVCF requires consideration of the existing electrical grid including capacity, location of existing infrastructure, and whether additional infrastructure (e.g., transformers, linear connections) are required. EVCF would likely displace current parking spaces allotted to personnel. The impacts associated with electrical utility infrastructure

Resource	Level of Analysis and Justification
	are programmatic in nature. See Section 3.4 for additional discussion related to the six installations under consideration.
Transportation	Transportation impacts are site-specific in nature and cannot be fully analyzed in depth within this PEA. Transportation impacts would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. Regarding sites selected for this PEA, temporary negligible impacts could occur during construction activities from construction vehicle traffic and/or temporary road closures or delays required for connecting the EVCF to the existing electrical grid. Average construction time frame for EVCF installation would be a few weeks. The respective base would provide notifications prior to any road closures. Placement of the EVCF could also result in minor parking restrictions as spaces would be dedicated for EVs.
Public Health and Safety	Impacts to public health and human safety are site-specific in nature and cannot be fully analyzed in depth within this PEA. Follow-on, detailed environmental analysis for newly proposed EVCF sites would be required in order to determine the context and intensity of the impact(s) to public health and safety; refer to Checklist in Appendix A for site-specific consideration. Construction activities associated with the Proposed Action would be conducted in accordance with applicable federal, state, DAF, and local worker safety and regulatory requirements and guidelines, including those established by the Occupational Safety and Health Administration. Adherence to these requirements would substantially minimize the potential for severe worker injuries during construction. Operational activities would consist of EV charging. The DAF has determined that ZEVs and EVCF do not present an inordinate fire risk, however, when an EV fire occurs, it requires different strategies for extinguishing as an EV fire can burn for a longer period. In general, fire departments and emergency services undergo trainings on how to deal with EV fires. Adherence to established EVCF safety requirements, practices, and guidelines would apply and further minimize the potential for worker injury. Overall impacts to public health and safety for EVCF sites considered within this PEA would be negligible.
Hazardous Materials and Waste	Construction activities have the potential to disturb contaminated sites (if present). As the proposed EVCF sites are located in previously disturbed areas such as motor pools, a greater potential for contamination exists. See Section 3.5 for additional discussion related to the six installations under consideration.
Socioeconomics	Socioeconomic impacts are site-specific and project scale specific in nature and cannot be fully analyzed in depth within this PEA. Socioeconomic impacts would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. Based on the location and scale of EVCF projects presented within this PEA, construction activities associated with EVCF installation would generate temporary jobs and minor beneficial economic impacts. Impacts to socioeconomic conditions from EVCF operations would be negligible.
Environmental Justice	Environmental justice impacts are site-specific in nature and cannot be fully analyzed in depth within this PEA. Impacts to environmental justice populations would require follow-on, detailed environmental analysis for newly proposed EVCF sites in order to determine the context and intensity of the impact(s); refer to Checklist in Appendix A for site-specific consideration. Sites chosen for EVCF installment within this PEA are located within the AFB boundary and activities at these sites would not result in disproportionately high and adverse on minority populations and low-income populations or disproportionate and adverse impacts on communities with environmental justice concerns. Overall, the EVCF Program would have benefits to surrounding communities through the deployment of climate resilient-infrastructure and would lower emissions of particulate matter known to cause adverse health effects (such as respiratory conditions) by providing the necessary infrastructure to convert vehicle fleets to EVs.

ACHP = Advisory Council on Historic Preservation; AFB = Air Force Base; CO_2 = carbon dioxide DAF = Department of the Air Force; EV = electric vehicle; EVCF = electric vehicle charge facilities; FR = Federal Register; GOV = government-owned vehicle; NHPA = National Historic Preservation Act; PEA = programmatic environmental assessment; $PM_{2.5}$ = particulate matter, less than or equal to 2.5 micrometers; ZEV = zero-emission vehicle

1.4 Intergovernmental Coordination, Public and Agency Participation

The DAF coordinated with other federal agencies with jurisdiction by law or special expertise over the Proposed Action and Alternatives (focusing on the six installations analyzed within this PEA) to inform the range of issues to be addressed in the PEA. Coordination letters and responses received are consolidated in Appendix B and discussed in Chapter 3, as appropriate. DAF and respective future installations proposing EVCF would continue to coordinate with the respective agencies as new installation locations and sites are identified under the EVCF Program.

Consistent with National Historic Preservation Act (NHPA) of 1966 implementing regulations (36 CFR Part 800), Department of Defense (DoD) Instruction 4710.02, *DoD Interactions with Federally Recognized Tribes*, Department of Air Force Instruction (DAFI) 90-2002, *Interactions with Federally Recognized Tribes,* and Air Force Manual (AFMAN) 32-7003, *Environmental Conservation*, the DAF is also consulting with federally recognized tribes that are historically affiliated with the geographic region of each AFB location being considered for the Proposed Action regarding the potential to affect properties of cultural, historical, or religious significance to the tribes. Appendix B contains additional details, including copies of communications.

Chapter 2 Proposed Action and Alternatives

This chapter discusses the selection standards for alternatives and describes the Proposed Action and Alternatives, including the No Action Alternative, selected by the DAF to be evaluated in this PEA. The DAF considered a number of selection standards in choosing the AFBs analyzed within this PEA, including the presence of existing infrastructure, geographical location, and local area air quality attainment status. As stated in Chapter 1, the DAF chose these six locations based on the level of existing EVCF infrastructure in place as well as to reflect regional diversity (e.g., air quality attainment status). DAF made additional considerations for TAFB and LAAFB. DAF selected TAFB for inclusion in the PEA as they are completing rebuilding TAFB from ground up in the aftermath of Hurricane Michael in 2018. DAF also selected LAAFB as the existing EVCFs installed in 2014 are currently inoperable because of proximity to the ocean / salt in the air, however, the existing infrastructure is still in place. Section 2.2 provides additional detail regarding selection of sites within each AFB.

As discussed in Chapter 1, site-specific follow-on NEPA analysis would be required as EVFC projects are identified and designed to ensure each project is covered by this PEA using the Checklist in Appendix A. This includes sites considered within this PEA that are not fully designed.

2.1 Proposed Action

The Proposed Action includes installation of new EV charging stations on six AFBs within existing or planned facilities as part of the DAF's program for the planned conversion of light-duty GOVs at all AFBs to EVs. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support EV vehicle use. Figures 2-1a and 2-1b depict an example Level-2 charger used to enable charging for light-duty GOVs. EVCF would conform to the requirements in the Installation Facilities Standards, any necessary historic guidelines, and ACHP exemption requirements (see Table 1-1, Cultural Resources for additional information).

Figure 2-1a. Example Level-2 Charger Mounted to Building

Figure 2-1b. Example Free-standing Level-2 Charger

2.1.1 EVCF Requirements

EVCF includes the ungrounded, grounded, and equipment grounding conductors and the EV connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of delivering energy from the premises wiring to the EV. There are three levels of EVCF:

- Level 1—Refers to a freestanding or wall mounted charging structure that delivers a 110/120-volt (V) charge, replenishing an EV battery at a rate of 4 to 6 miles of range per hour of charging time. Charging an EV at level 1 typically takes more than 24 hours for a fully battery-powered EV, depending on the size of the vehicle's battery.
- Level 2—Refers to a freestanding or wall mounted charging structure that delivers a 208/240V charge, replenishing an EV battery at a rate of 10 to 20 miles of range per hour of charging time. Charging an EV at level 2 typically takes between 6 and 8 hours depending on the size of the vehicle's battery.
- Level 3 (also known as Direct Current (DC) Fast Charging)—Refers to a freestanding or wall mounted structure capable of being networked that is designed to charge vehicles more quickly than level 1 or level 2 with an electrical output ranging between 40 to 120 kilowatts (kW) delivering a charge of up to 480V. DC fast charging can typically replenish an EV battery at a rate of 50 to 90 miles of range per 30 minutes of charging time.

DAF is considering the use of Level 2 and Level 3 charging stations under the Proposed Action, with Level 3 being more cost-intensive. DAF would determine the actual EVCF unit and charging capabilities on a case-by-case basis, dependent on a variety of factors including the number of EVs, and whether the need exists for faster charging capabilities offered by Level 3 charging.

Currently no Unified Facilities Criteria (UFC) exists for EVCF, however, there is a United Facilities Guide Specification (UFGS), Division 11 – Equipment Section 11 11 37, Electric Vehicle Supply Equipment (November 2018[1]) that includes specifications for constructing EVCF. A new UFC is under development and is expected to be complete by the end of 2023 and an updated UFC for POVs and tactical vehicles is anticipated for release in July 2024.

[1] UFGS 11 11 37 Electrical Vehicle Supply Equipment (wbdg.org)

2.1.2 Construction

Construction of the required EVCF would include site preparation (e.g., vegetation clearing; soil excavation, filling, grading, and leveling; trenching or directional boring to install/extend electrical utilities); identification and extension of electrical utility and infrastructure systems; installation of foundations for free-standing charging stations or pad-mounted transformers (e.g., concrete foundation slab); protection (e.g., vehicle impact-rated bollards) and establishment of EV-designated parking areas for charging. In general, the PEA analysis assumes approximately 50 cubic feet of ground disturbance per free-standing EVCF station considering a concrete foundation dimension of 5 feet by 5 feet and 2 feet thick. The amount of land disturbance would depend on the site selected for EVCF installation, proximity to the existing electrical grid, and capacity for the existing electrical grid to accommodate EVCF. Construction and placement of EVCF is expected to typically take a few weeks to complete.

Temporary laydown areas and storage areas would be established prior to construction. It is assumed these areas would be located within adjacent parking or designated laydown areas not requiring additional disturbance. Site preparation would include the installation of erosion and sediment control best management practices (BMPs) and the clearing and grubbing[2] of existing vegetation on the site, as needed. Once the site is prepared, excavation would begin for foundation footings (for free-standing charging stations) and any electrical utility upgrades using heavy excavation equipment. Electrical utilities would be extended (e.g., through trenching within existing rights-of-way) from existing infrastructure and may involve minor upgrades such as installation of a new transformer. Once complete, any excavations outside the foundation would be backfilled and compacted to existing ground contours. Following construction, final grading would occur. Areas temporarily disturbed would be stabilized with final landscaping and re-seeded with approved seed mixtures.

Should the EV charging stations selected be building-mounted, either on the interior or exterior of a building, the excavation efforts would be eliminated. Drilling into the building would be required to mount the charging unit, and depending on the location of the utility tie-in, punching through the wall may be required. Any excess material would be discarded appropriately. Buildings would be restored by pre-existing material or paint to original condition.

Construction activities would also be conducted in accordance with the applicable requirements of the U.S. Environmental Protection Agency's (USEPA) National Pollutant Discharge Elimination System (NPDES) and associated permits to manage the quantity and quality of stormwater discharged from the project site and minimize the pollution and sedimentation of receiving water bodies. These "regulatory compliance measures" and other design commitments applicable to this Proposed Action, including Alternative-specific requirements, are discussed throughout the resource-specific impact analyses in Chapter 3. As the DAF would comply with each of these requirements if it selects the Proposed Action Alternative for implementation, the analysis assumes compliance with these measures when assessing the impacts.

2.1.3 EVCF Operation

The intent of Program deployment is to accommodate the charging of GOVs in the fleet. Therefore, fleet managers, maintenance staff, and the operators of the vehicles – either assigned to the vehicle or temporarily using it – could be users of the equipment to recharge the vehicles. To accommodate the missions of the vehicles, the DAF has targeted areas of high concentration or origin/destination for fleet vehicles for potential installation. These typically include

[2] Grubbing refers to the removal of roots, stumps and debris from a site.

maintenance and fleet garages, parking lots near facilities, and other areas of larger GOV concentration.

The type of charging installed (Level 2 or Level 3/DC Fast Charging) would dictate a vehicle's dwell time at the charging station. Most fleet facilities will incorporate Level 2 charging as the dominant choice, though DC Fast Charging could also be installed to meet specific needs. At other areas around the respective base, the final installation choice would be based on the expected vehicle's dwell time at the location.

In addition, charging stations would require periodic field inspections, testing, and maintenance to ensure proper operations.

2.2 Selection Standards for Alternatives

CEQ NEPA implementing regulations direct federal agencies to "evaluate reasonable alternatives to the Proposed Action" (40 CFR 1502.14[a]). A range of reasonable alternatives in this PEA was identified by evaluating their ability to meet the purpose and need of the Proposed Action and their ability to reduce impacts to the environment. Based on DAF's NEPA regulations (32 CFR 989.8[c]), DAF used selection standards to identify reasonable alternatives and analyzed in detail only alternatives determined to meet the selection standards. Table 2-1 outlines specific selection standards related to alternatives considered during the Environmental Impact Analysis Process (EIAP).

Table 2-1: NEPA Selection Standards

1: Reduce Level of Disturbance by Maximizing Existing Infrastructure or Combining with Other Improvements
• Leverage existing DAF installation infrastructure and resources to minimize requirements for additional facilities and related environmental impacts from construction and operations in support of EVCF installation and operations. • EVCF implementation may be coordinated with rehabilitation or new construction to minimize impacts or integrate with other renewable energy construction such as solar parking canopies. EVCF installation may also include "make ready" construction independently or in conjunction with other construction where the conduits are constructed but electric distribution cables get pulled or activated once the EVCF is constructed.
2: Minimize Environmental and Socioeconomic Impacts
• Avoid or reduce adverse impacts to wetlands, surface waters and floodplains, and protected species by utilizing existing developed and previously disturbed areas. • Avoid contaminated sites for which remediation is not feasible. • Install EVCF at locations within the installation containing larger concentration of DAF fleet of light-duty vehicles. Where possible, DAF aggregated vehicle parking locations to form proposed EVCF locations at parking lots central to multiple buildings and likely users. • Maximize use of existing electrical utilities and available buildings and parking areas to reduce overall level of disturbance. • Utilize previously disturbed sites to avoid impacts to undisturbed lands or open space. • Compatible with installation master planning and training.
3: Operational Efficiency
• DAF eliminated consideration of Level 1 charging stations due to the longer charge times required.

DAF = U.S. Department of the Air Force; EVCF = electric vehicle charge facilities

2.3 Alternatives Considered but Eliminated from Detailed Analysis

Based on the selection standards above, the DAF eliminated numerous potential sites at each AFB location that either had environmental constraints or were not in proximity to high-use vehicle fleet locations.

2.4 No Action Alternative

Under the No Action Alternative, the DAF would not implement the EVCF Program. Failure to plan for fleet conversion to EVs would contradict the overall DAF strategy to create an energy resilient ecosystem where vehicles can be fueled by locally produced energy and on demand, increasing the source diversity of vehicle energy, eliminating tailpipe emissions, and decreasing reliance on fossil fuels. The DAF, however, would still be obligated to provide EV charging options to meet White House and the SAF IEE's goals for conversion of the DAF fleet of light-duty vehicles and the installation of EV charging stations on all AFBs. Installations would likely experience increased effort and time for EVCF implementation NEPA approval as there would be no PEA analysis to tier from using a checklist. This would likely translate to increased effort and time within the DAF to meet 2027 goals and could inhibit DAF's success in meeting the goals or hinder the operations and missions of the light-duty fleet.

2.5 Proposed Action Alternative – Installment of EVCF Infrastructure

The PEA provides varying level of detail regarding EVCF for each base (e.g., the type and number of charging stations, electrical utility requirements), reflecting the current planning stage of the EVCF Program at the time of PEA preparation. The following sections provide a description of the proposed sites for EVCF installment at each of the AFB locations considered within this PEA.

2.5.1 Joint Base Anacostia-Bolling (JBAB)

JBAB currently has solar powered net zero charging stations on the base and serves as a pilot location for a test facility for EV buses. The following sites are being considered for analysis within the PEA:

- **Building 1311 (Shopette)** located northwest of the Luke Avenue Southwest and Tinker Street Southwest intersection (see Figure 2-2a). This location contains the base gas station, tire shop with service bays and a convenience store. A transformer is located in the southeast portion of the parking lot. JBAB has not identified the specific number or type of charging stations for this location, however, once determined, EVCF would be placed within the existing Building 1311 parking lot.

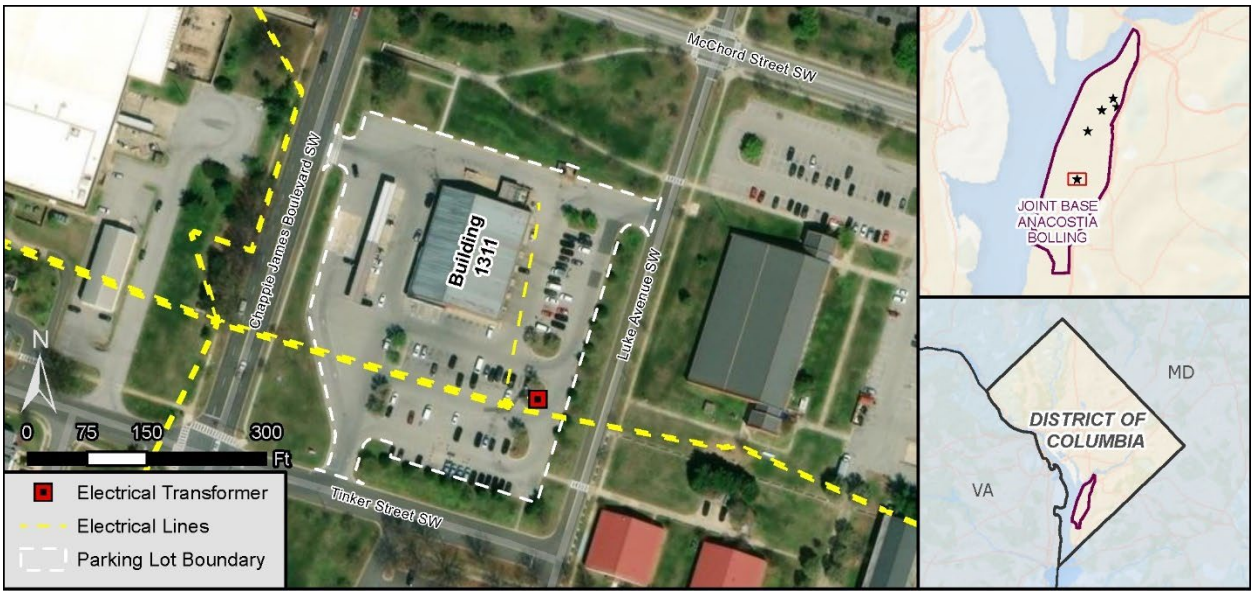


Figure 2-2a. JBAB Building 1311

- **Building 371** located to the west of Brookley Avenue Southwest and east of Cudahay Street Southwest (see Figure 2-2b). This location contains the base petroleum and water department with 22 fleet vehicles consisting primarily of pickup trucks and vans. A low-voltage line runs along the east side of the building. The parking lot of Building 371 has several existing charging stations.

Figure 2-2b. JBAB Building 371

- **Building 361/362** located southwest of the Thomas Road Southwest and Cudahay Street Southwest intersection (see Figure 2-2c). This location contains administrative functions for vehicle operations and a maintenance shop with 16 fleet vehicles consisting primarily of vans for escorting groups around the base. Level 3 charger stations currently exist at this location. At this location power is provided from the electrical line crossing Thomas Road. Low-voltage power circles exist to the east of Building 361. JBAB has not identified the specific number or type of charging stations for this location, however, once determined, EVCF would be placed within the existing Building 361/362 parking lot.

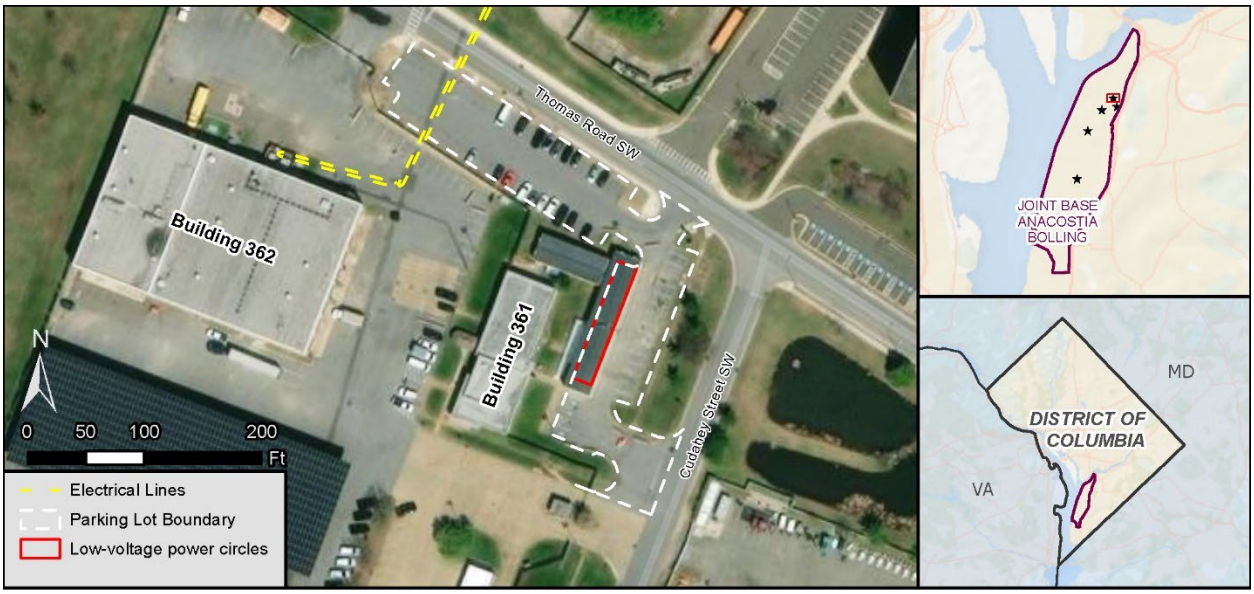


Figure 2-2c. JBAB Building 361/362

- **Building 400** located directly east of Defense Boulevard across from the airfield (see Figure 2-2d). This location houses several missions, including the Joint Air Defense Operations Center Building. High-power voltage exists in the western area of the parking lot along Defense Boulevard and low voltage runs through the parking lot around the building. JBAB recently installed two Level 2 sun-tracking solar-powered charging stations in the southeastern corner of the parking lot. JBAB has not identified the specific number or type of charging stations for this location, however, once determined, EVCF would be placed within the existing Building 400 parking lot.

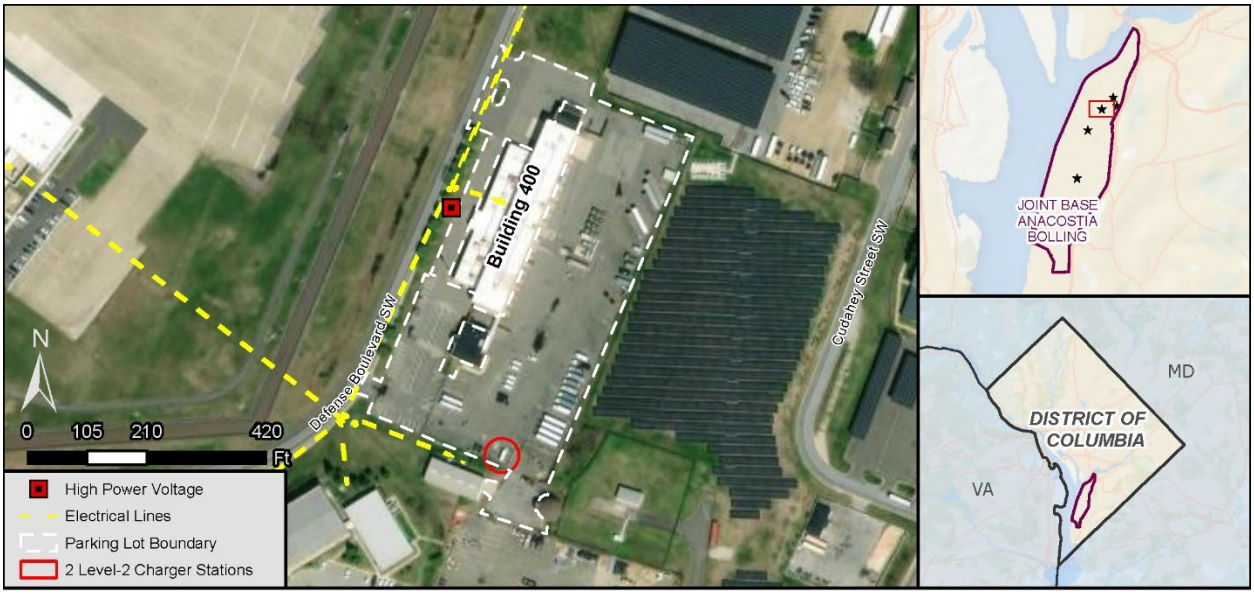


Figure 2-2d. JBAB Building 400

- **Parking Garage** located directly east of Chappie James Boulevard (see Figure 2-2e). This location provides parking for employees of a major mission partner. Four dual-port

SemaConnect Level 2 charger stations currently exist on the first floor. JBAB has not identified the specific number or type of charging stations for this location, however, once determined, EVCF would be placed within the existing parking garage.

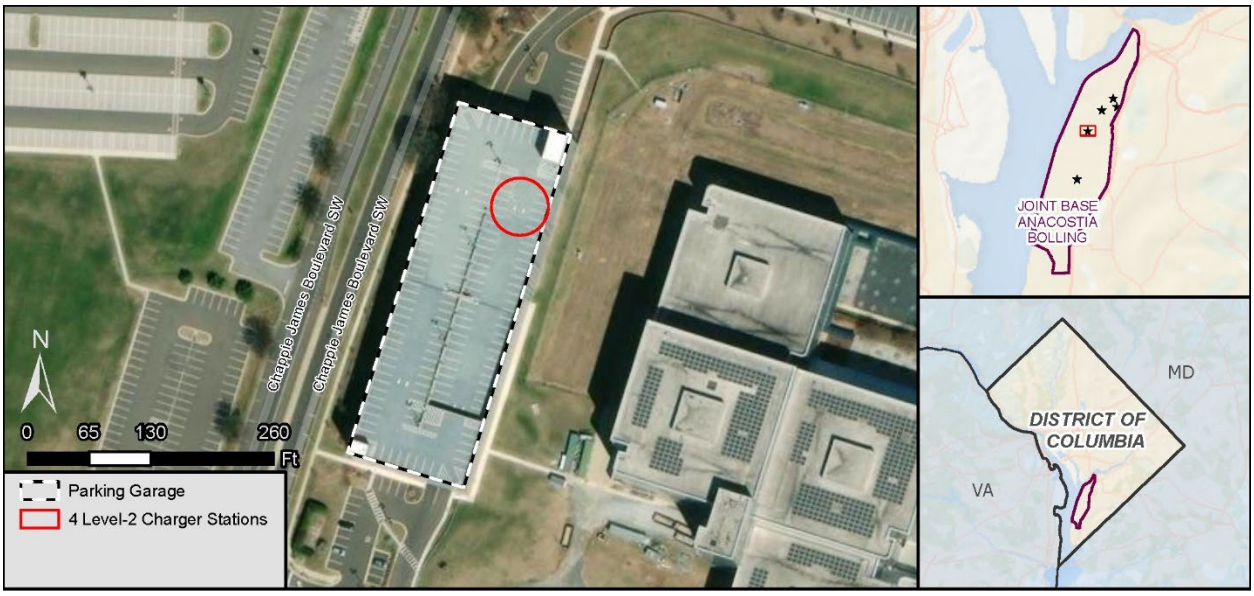


Figure 2-2e. JBAB Parking Garage

In addition to the sites mentioned above, base planners are also considering the possibility of installing EVCF within the base entry gates at some time in the future. Installation of EVCF at these locations would be subject to the checklist (see Appendix A) developed as part of this PEA.

2.5.2 Joint Base Andrews (JBA)

JBA was the first AFB to pilot an EV fleet, which included the installation of over 20 Level 2 and 6 Level 3 charging stations in 2014. Sites being considered for analysis within the PEA include:

- **Civil Engineer (CE) Escort Vehicle Lot** located south of the intersection of East Perimeter Road and Fetchet Avenue (see Figure 2-3a). JBA is proposing installation of three 80-amp (A) dual port Level 2 charging stations at six parking spaces in the northeast corner of the lot. This specific location would accommodate medium-duty escort vehicles (e.g., sports utility vehicles [SUVs], trucks, vans) used to pick up fleet vehicles for escorting around base. Eight to ten trucks at this location are on a priority list for EV transitioning. A 75 kilovolt-amps (kVa) transformer (red square on figure) is located approximately 100 feet to the east of the proposed site and requires an upgrade to a 300 kVa transformer to support EVCF. The site is surrounded by maintained lawn and has vapor extraction monitoring wells located approximately 20 feet to the east.

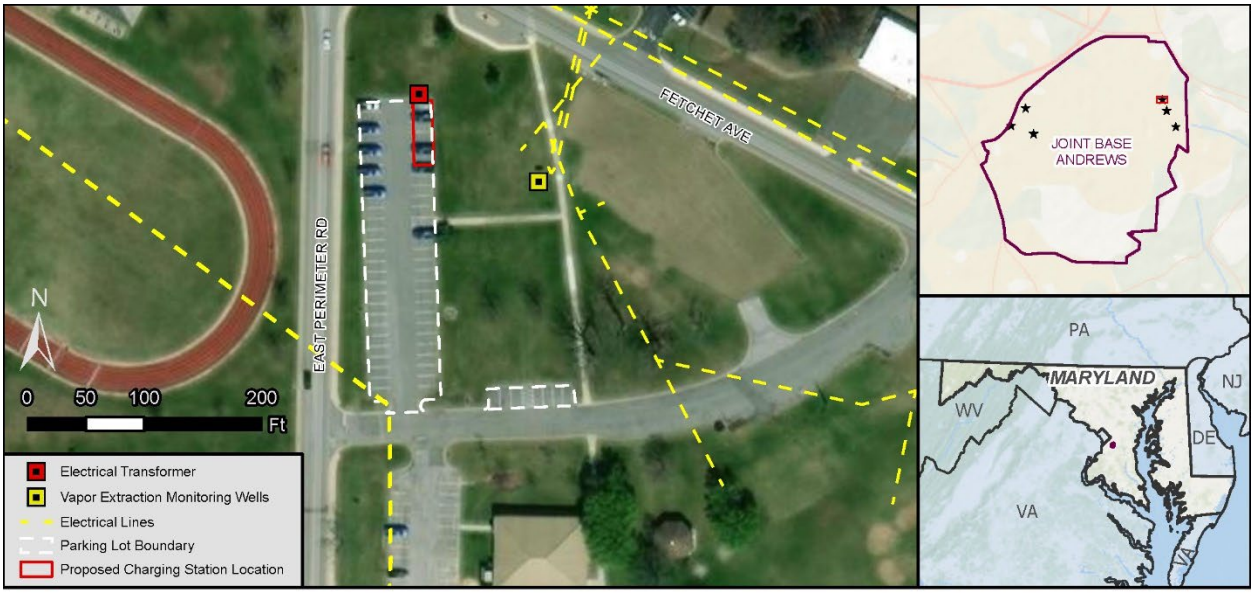


Figure 2-3a. JBA CE Escort Vehicle Lot

- **Logistics Readiness Squadron (LRS) Parking Lot** located directly east of the Pennsylvania Avenue and Bainbridge Street intersection (see Figure 2-3b). The overall location supports the vehicle depot/maintenance center and contains a wide range of vehicle types including EVs, buses and light-to-heavy-duty vehicles. JBA is proposing installation of two charging areas. The first location currently contains 14 30A Blink charging stations, some of which are currently out of service. JBA would remove the first four Blink charging stations beginning with the northernmost EVCF and replace them with dual port 80A Level 2 charging stations. The second location currently contains eight 30kW Princeton Power System stations designated for buses, and five Clipper Creek CS-100 charging stations with 208 to 240 kVa transformers. JBA would remove the Princeton Power System charging stations and replace them with approximately five dual port 80A Level 2 charging stations. A 300 kVa transformer would also be added to provide power to the additional charging stations. The sites are surrounded by maintained lawn, with forested area located directly to the north of the parking lot that would not be affected.

Figure 2-3b. JBA LRS Parking Lot

- **CE Yard Parking Lot** located to the west of the intersection of Pennsylvania Avenue and Ohio Drive that is used for storage of materials, SUVs, snowplows, and construction vehicles (see Figure 2-3c). JBA proposes to install 12 make-ready pads to house dual port 80A Level 2 charging stations in the southeast corner of the gravel lot. The location is directly adjacent to an existing 300 kVa transformer and is located within the existing gravel parking lot.

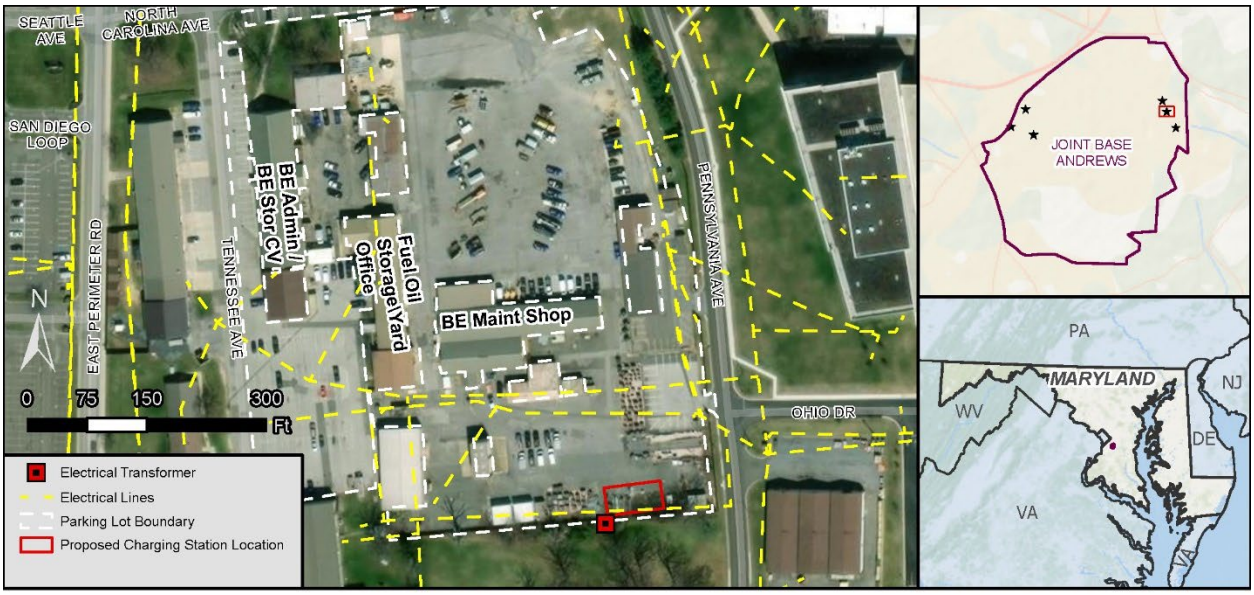


Figure 2-3c. JBA CE Yard Parking Lot

- **Jones Building Lot** located to the south of North Perimeter Road and to the east of Robert M Bond Drive (see Figure 2-3d). This location functions for administrative building parking. Electrical power is located behind a gated concrete enclosure with the building mechanical, electrical and plumbing equipment. Four existing Level 2 Blink charging stations are connected to a 115 kVa transformer. JBA has plans to add two 80A dual-port charging stations for four parking spaces adjacent to the bus stop/smoking area across from the Jones Building complex. In addition, JBA intends to replace the four existing 30A Blink charging stations with two 80A dual-port charging stations in the future. EVCF at this location may require boring (versus trenching) to access electrical power due to the concrete wall enclosure.

Figure 2-3d. JBA Jones Building Lot

- **Medical Building Garage** located to the west of West Perimeter Road and to the north of Vandenberg Drive (see Figure 2-3e). This location is a concrete parking garage for adjacent medical facilities. An unloaded and live 300 kVa transformer, previously used to support a building since demolished, is located in the grassy area approximately 200 feet southeast of the southeasternmost corner of the east parking lot. JBA has plans to trench/bore from this transformer to provide power to the proposed installation of three 80A dual-port Level 2 charging stations to be located in existing low emissions vehicle parking spaces.

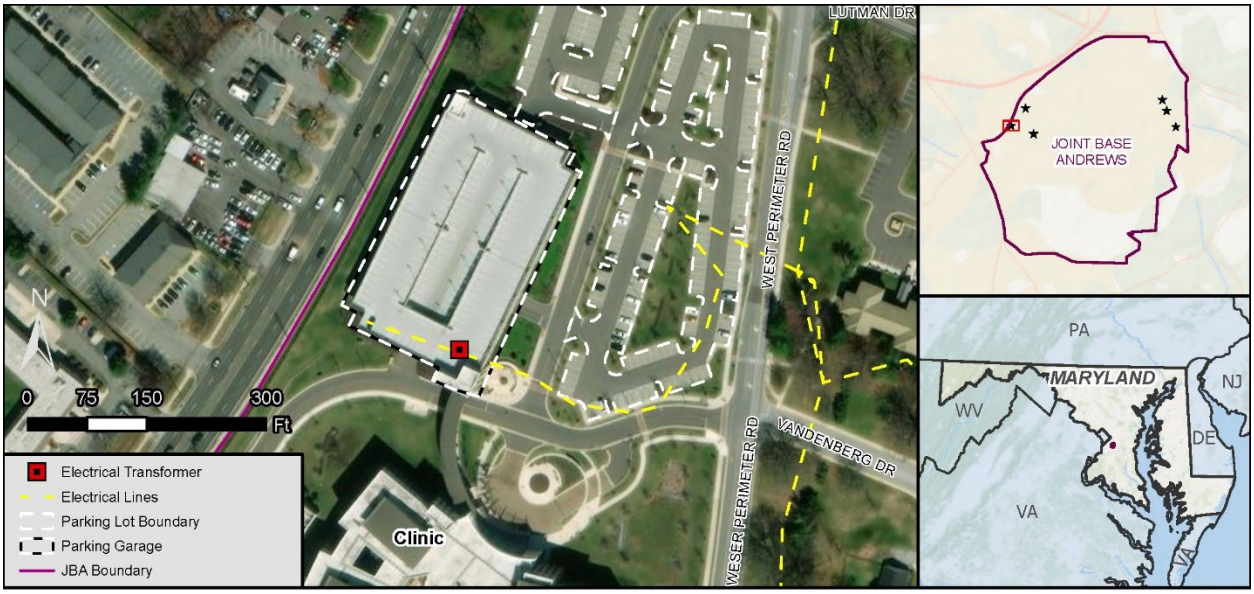


Figure 2-3e. JBA Medical Building Garage

- **SMART Conference Building** located to the south of Arkansas Road and to the west of South Run (see Figure 2-3f). This facility is used to provide work and meeting space for base commanders, and generals. A 300 kVa transformer is located adjacent to the southeast corner of the parking area that was previously installed for EV charging power but has yet to be used. JBA is proposing installation of three dual port 80A Level 2 charging stations.

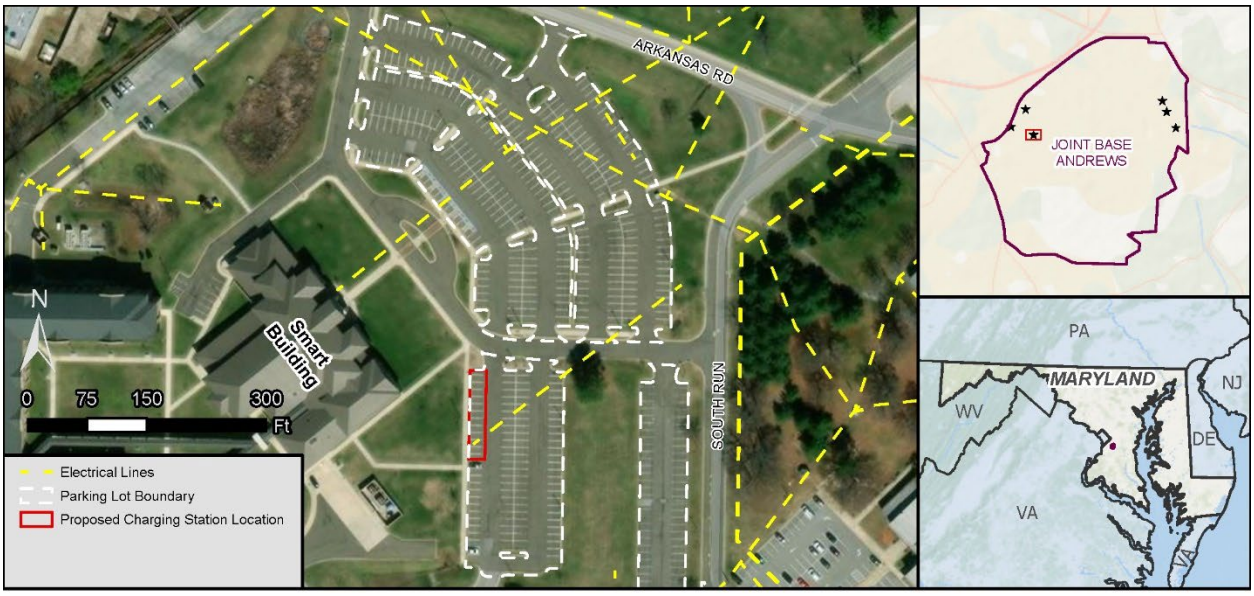


Figure 2-3f. JBA SMART Conference Building

2.5.3 Joint Base McGuire Dix Lakehurst (JBMDL)

Initial planning indicates that approximately 20 sites would be required to support EV users in the future. The following 17 sites are being considered for analysis within the PEA:

- **Outside Hobby Shop – Ex-2 (McGuire)** located to the east of the Vandenberg Avenue and West 3rd Street intersection (see Figure 2-4a). This facility allows patrons to do their own auto work. The parking lot currently contains ten dual Clipper Creek Level 2 80A chargers that were installed in 2015. An existing 1,000 kVa transformer provides power to these charging stations. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot for the facility.

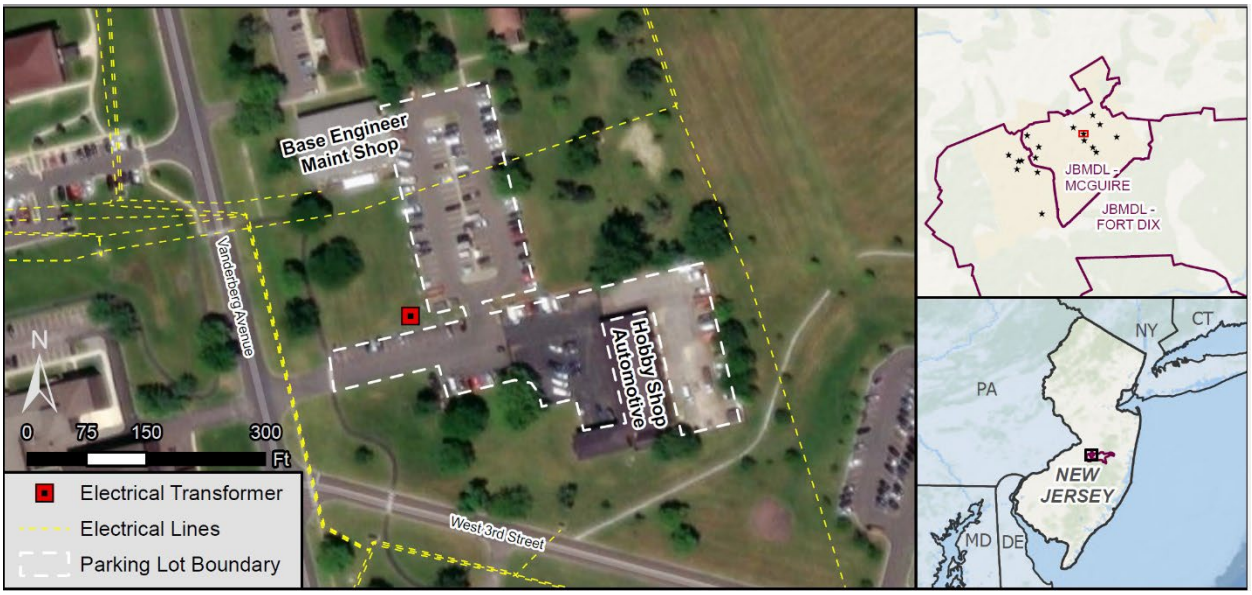


Figure 2-4a. JBMDL Outside Hobby Shop

- **3104 CE Water Shop – Prop 1 (McGuire)** located directly west of Warehouse Road and to the north of West Tuskegee Airmen Avenue (see Figure 2-4b). This facility is part of the Department of Public Works, which currently utilizes 10-15 GOVs. Three transformers are located in the vicinity including one along the southeast edge of the building and two others directly west (approximately 285 feet). JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot for the facility. This location could require extension of electrical lines from one or both of the transformers located to the west.

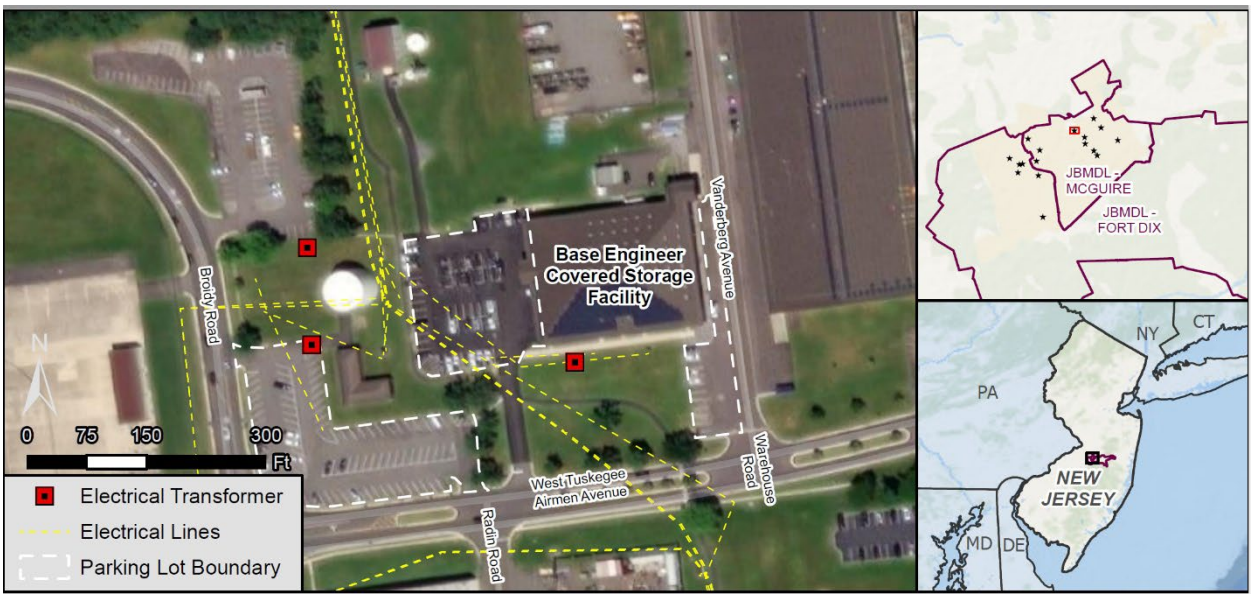


Figure 2-4b. JBMDL 3104 CE Water Shop

- **CE Yard – Prop 7 (McGuire)** located to the northeast of the Vandenberg Avenue and West Arnold Avenue intersection (see Figure 2-4c). This facility provides storage for work trucks, heavy-duty vehicles and equipment storage. An existing 480/277V transformer is located nearby. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot for the facility.

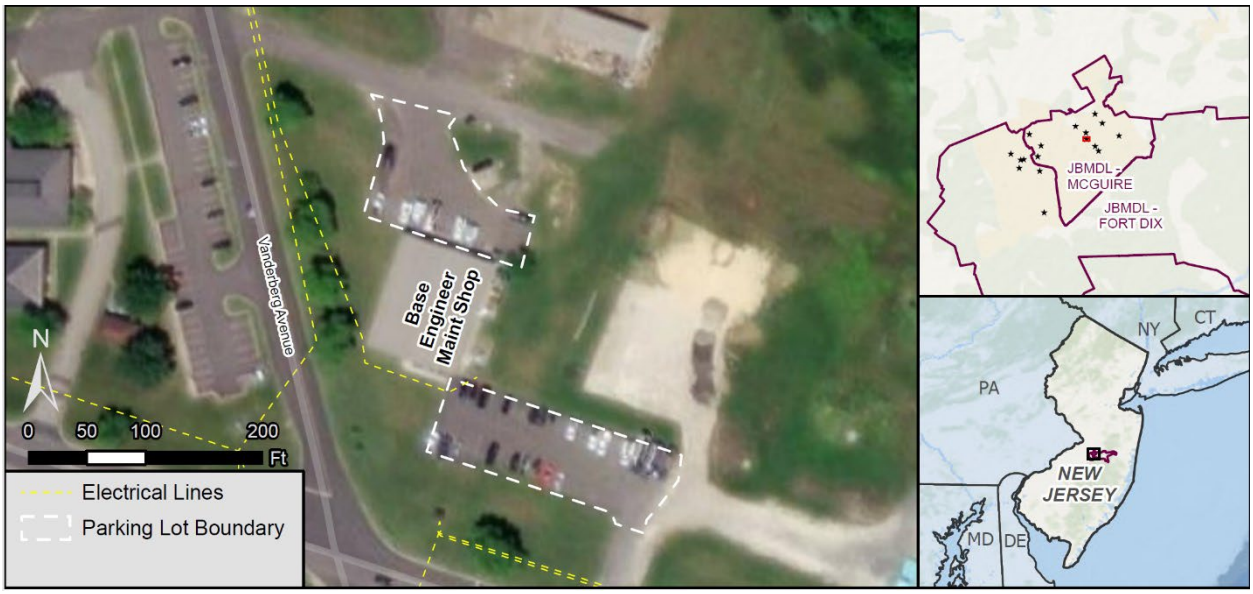


Figure 2-4c. JBMDL CE Yard

- **305th Air Mobility Wing (AMW) Headquarters (HQ) – Prop 6 (McGuire)** located along Vandenberg Avenue (see Figure 2-4d). This facility acts as an airport terminal and typically has between five to ten vehicles assigned to the parking lot. An existing transformer is located at the southeastern edge of the facility. JBMDL is considering placing EV charging stations

under the existing building canopy in a location currently used for pallet storage and parking. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would require establishment of pads and bollards for protection within the existing parking lot areas.

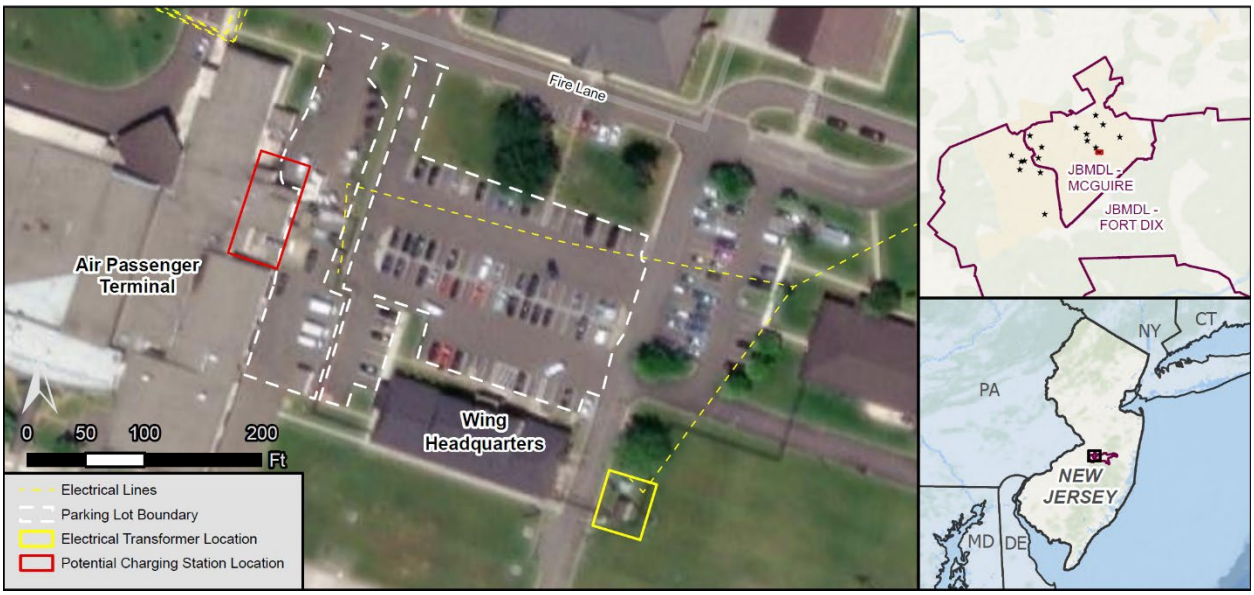


Figure 2-4d. JBMDL 305th AMW HQ

- **305th Passenger Terminal Flight Parking Area – Prop 5 (McGuire)** located along Vandenberg Avenue and west of McGuire Boulevard (see Figure 2-4e). This facility acts as short-term airport parking for individuals flying out of the 305th. A transformer is located at the southeast edge of the 305th AMW HQ facility. An underground power line runs underneath Vandenberg Avenue. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

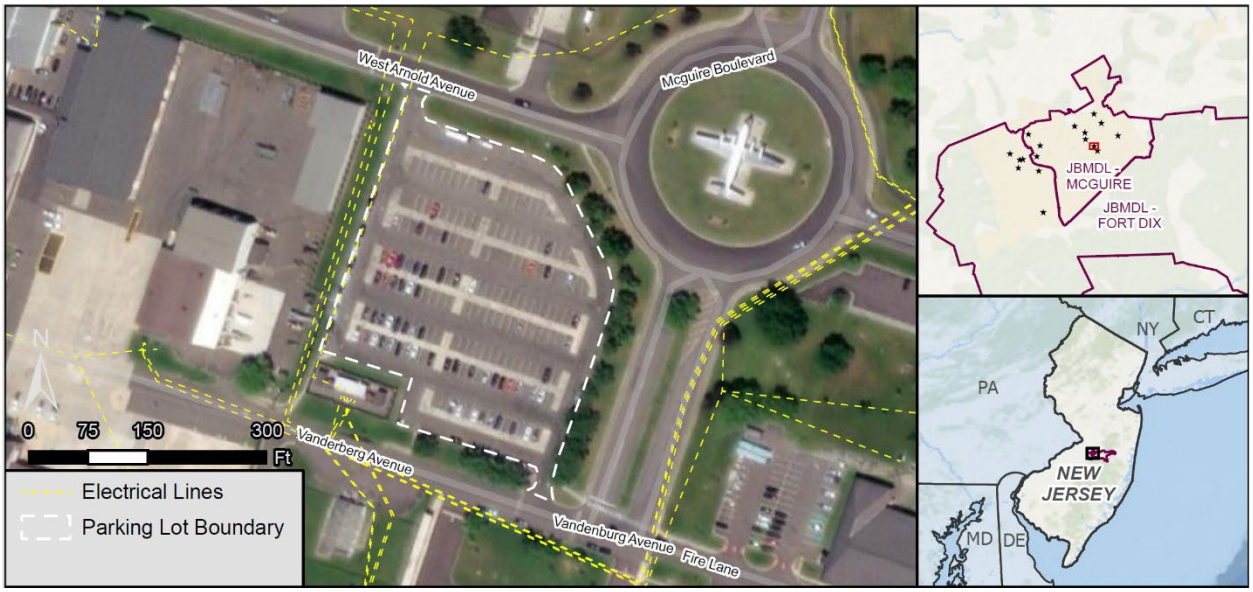


Figure 2-4e. 305th JBMDL Passenger Terminal Flight Parking Area

- **1907: Contingency Response Wing – Prop 3 (McGuire)** located to the southeast of the East 4th Street and East Arnold Avenue intersection (see Figure 2-4f). This facility is a historic building located within the McGuire Historic District and acts as a natural disaster response wing. Existing switchgear and a pad-mounted transformer are located at the northeast corner of the facility. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

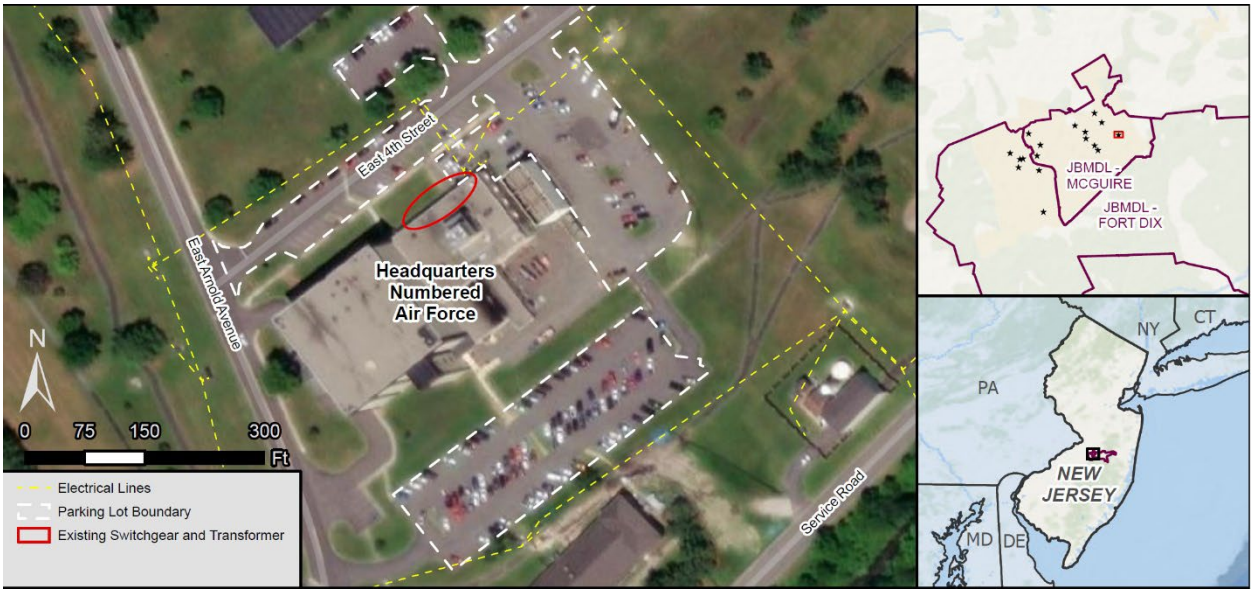


Figure 2-4f. 1907: JBMDL Contingency Response Wing

- **Library/Dorms/Dining Parking Lot – Prop 8 (McGuire)** located along West Tuskegee Airmen Avenue and north of POW/MIA Boulevard (see Figure 2-4g). The parking lot serves the base library, dining hall and dormitories. An existing 208/120V transformer is located at the southeast corner of the library. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

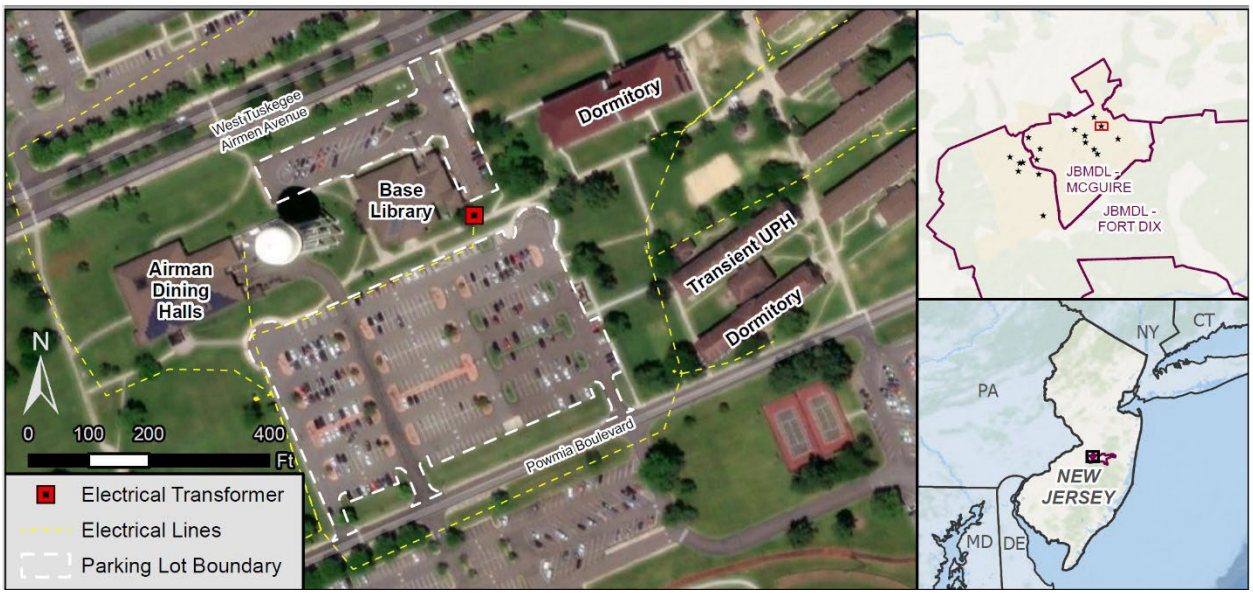


Figure 2-4g. JBMDL Library/Dorms/Dining Parking Lot

- **Air Base Wing HQ – Prop 4 (McGuire)** located to the south of Cookstown-Wrightstown Road and to the east of McGuire Boulevard (see Figure 2-4h). The facility serves as the HQ for the commander and other high-level officials and has between 10 and 15 GOVs assigned to the location. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

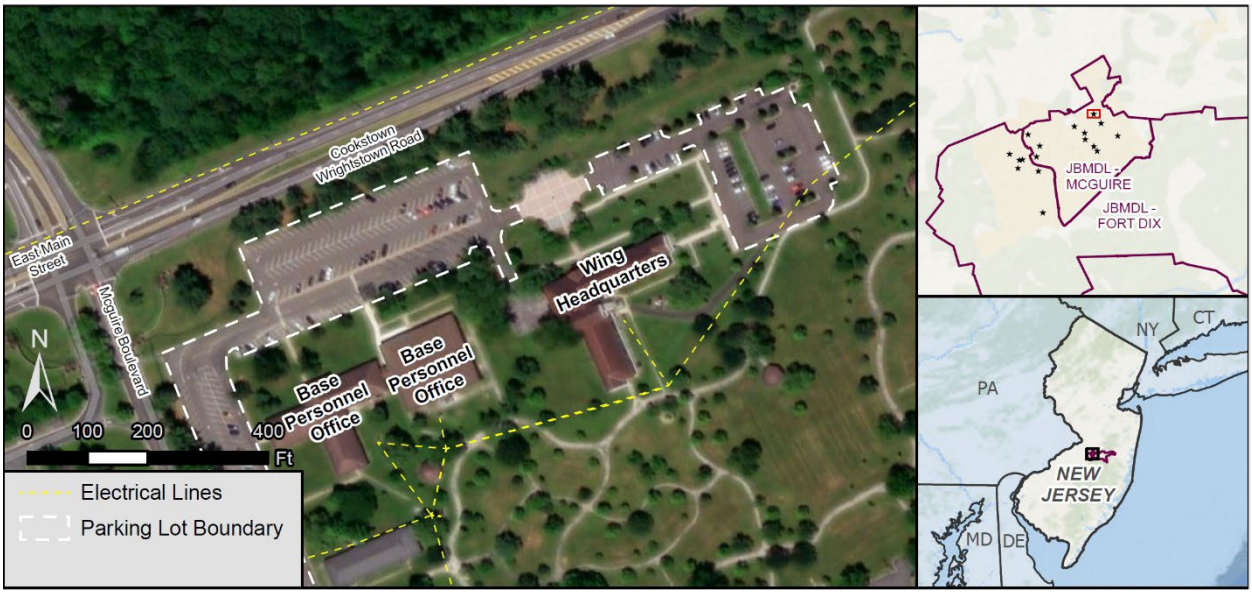


Figure 2-4h. JBMDL Air Base Wing HQ

- **Medical Group – Prop 9 (Dix)** located along Neely Road (see Figure 2-4i). The facility serves as a Department of Veterans Affairs medical facility. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

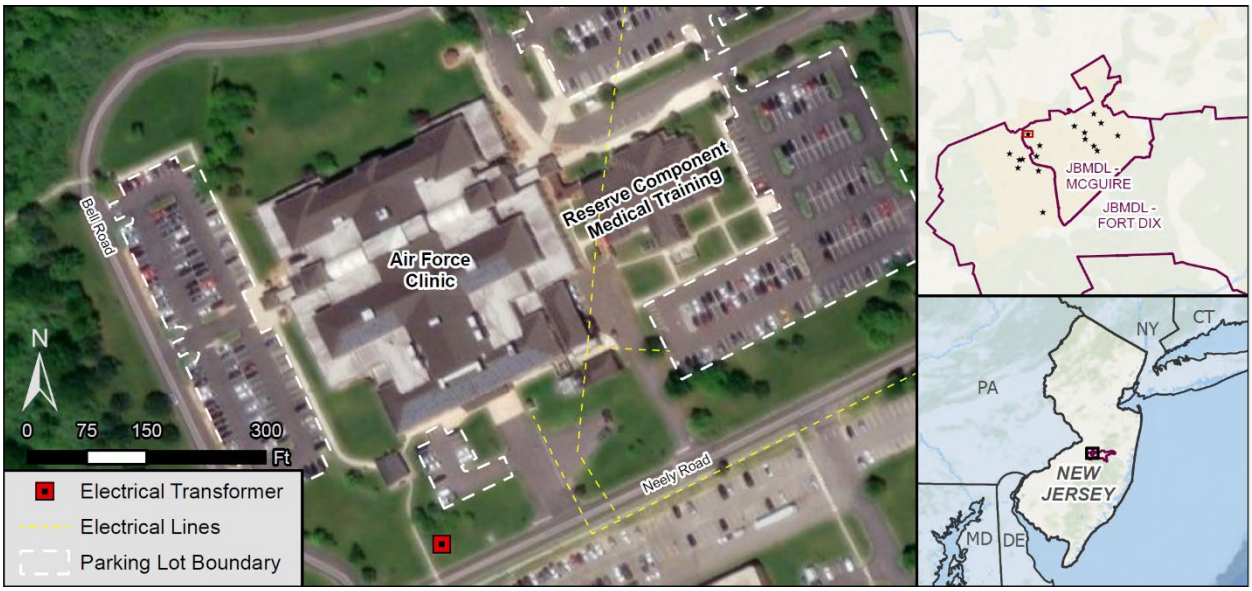


Figure 2-4i. JBMDL Medical Group

- **5139 – Prop 16 (Dix)** located at the intersection of Pemberton Wrightstown Road and Pennsylvania Avenue (see Figure 2-4j). The facility is used as a warehouse and logistics center. The nearest substation is located directly across the road. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

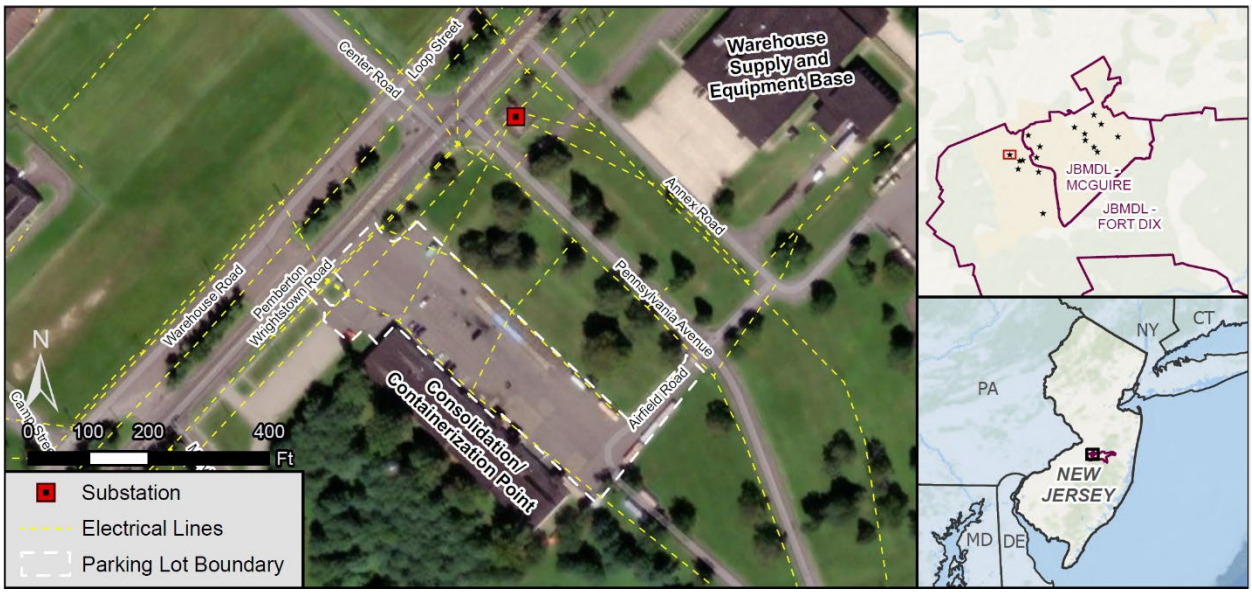


Figure 2-4j. JBMDL 5139

- **787th Civil Engineer Squadron Building 5320 – Prop 10 (Dix)** located west of the Delaware Avenue and South Garage Street intersection (see Figure 2-4k). The facility provides office space for the 787th Civil Squadron Office and typically has 10 to 15 assigned GOVs. JBMDL has not identified the specific number or type of charging stations, however, EVCF would be placed within the existing parking lot.

Figure 2-4k. JBMDL 787th Civil Engineer Squadron Building 5320

- **Building 5344/5345 – Prop 11 (Dix)** located along Delaware Avenue (see Figure 2-4l). The facility supports the PRIDE group and typically has 10 to 15 assigned GOVs. The nearest power sources are two electrical poles with three bucket transformers at the southeast corner of the parking lot. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

Figure 2-4l. JBMDL Building 5344

- **108th Air National Guard – Prop 21 (Dix)** located along Wonnacott Avenue (see Figure 2-4m). The facility provides space for the 108th Civil Engineer Squadron part of the Air National Guard and typically has 20 to 30 assigned GOVs (light-duty trucks and vans). The nearest power source appears to run underground below the building. JBMDL has not identified the

specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

Figure 2-4m. JBMDL Air National Guard

- **Parking Lot (between Engineering Personnel and Guard Support Compound) – Prop 20 (Dix)** located along Fiebelkorn Road (see Figure 2-4n). The parking lot provides space for base tenants and typically has five to ten assigned GOVs (primarily box trucks). The nearest power source is a transformer directly west of the facility along Fiebelkorn Road. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

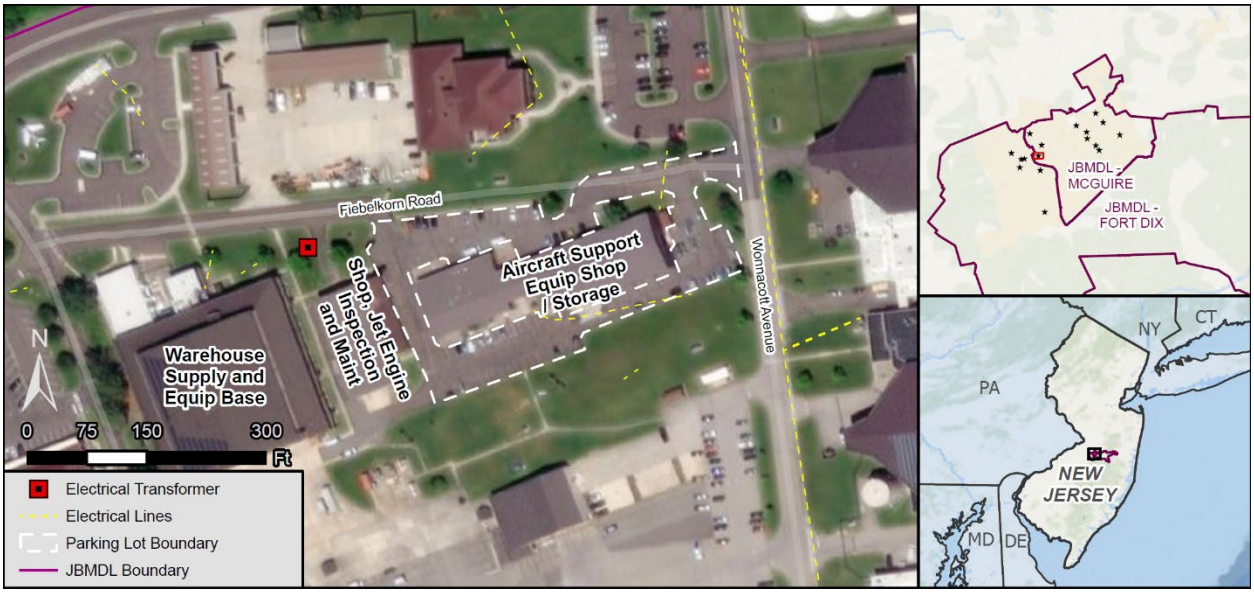


Figure 2-4n. JBMDL Parking Lot (between Engineering Personnel and Guard Support Compound)

- **Fleet Readiness Training Center – Prop 14 (Dix)** located along Texas Avenue and north of Sunrise Road (see Figure 2-4o). The facility is used for equipment maintenance, including maintenance of vehicles. The nearest power sources are overhead power lines running along Texas Avenue. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

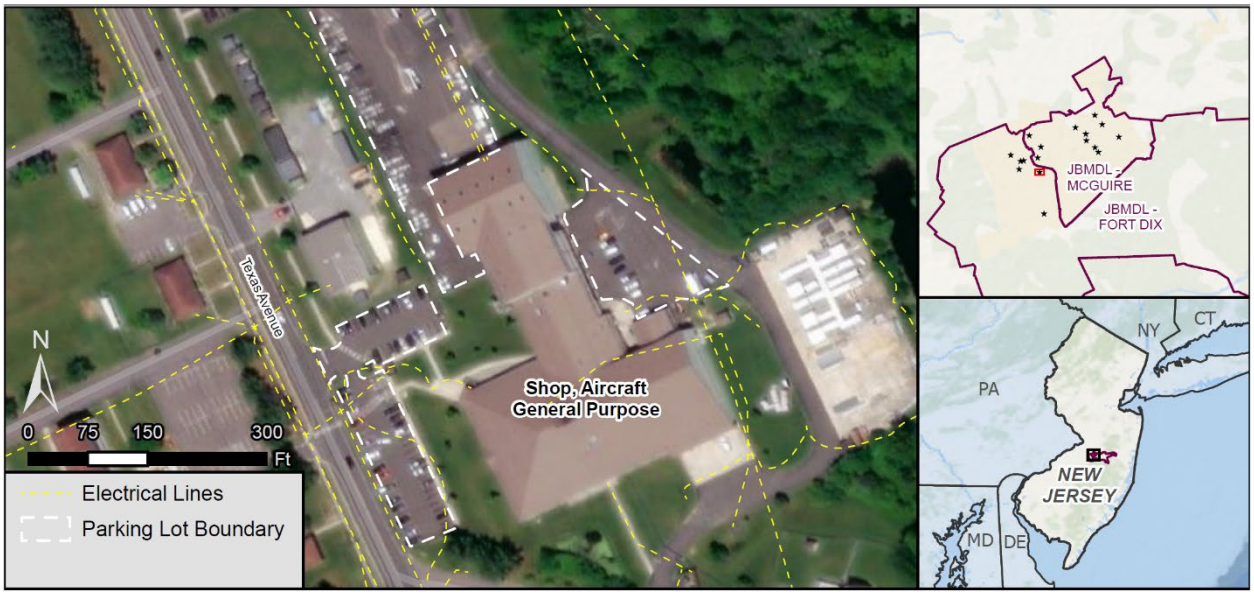


Figure 2-4o. JBMDL Fleet Readiness Training Center

- **LRS Yard – Prop 13 (Dix)** located along 18th Street East (see Figure 2-4p). The facility is a motor pool/vehicle yard primarily used by the Army for support activities. The facility typically contains over 30 GOVs. The nearest power sources are poles along 18th Street and along the western edge of the site. JBMDL has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

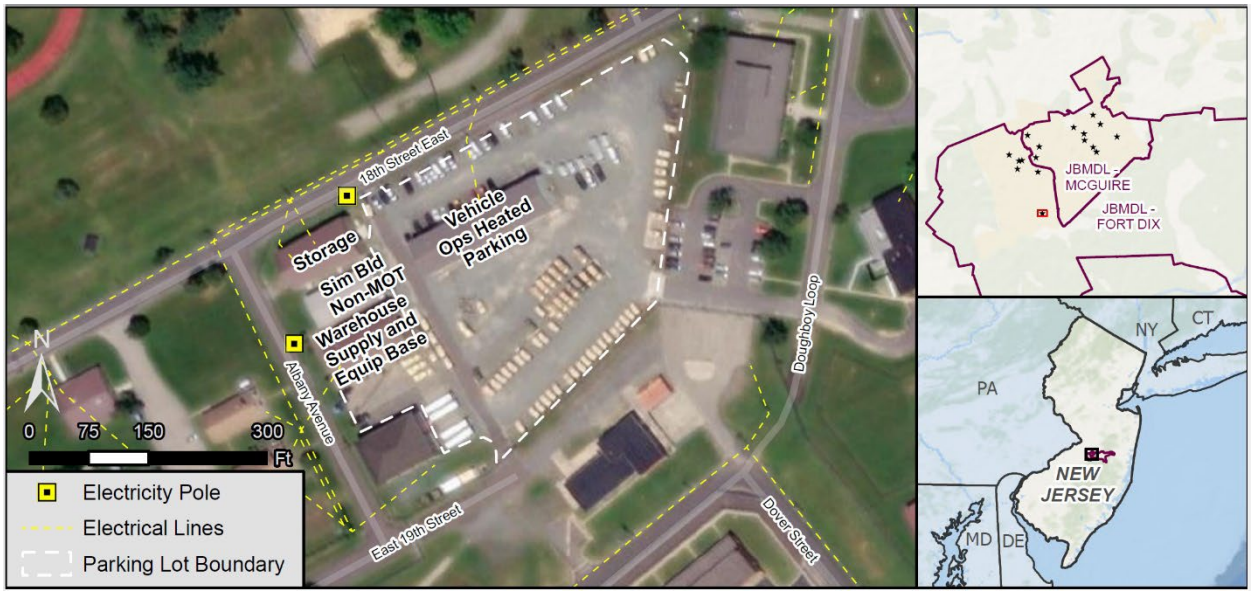


Figure 2-4p. JBMDL LRS Yard

- **Building 678 (Lakehurst)** located along Lakehurst Naval Air Center (see Figure 2-4q). The facility is used as a laboratory and administrative space. JBMDL has plans to incorporate a 400 kW photovoltaic (PV) array built on a canopy over the pre-existing parking lot, along with a 1.5 MW battery energy storage system (BESS) with EVCF. The project will include a new concrete pad to support the two charging stations that will be connected to the PV system and generators.

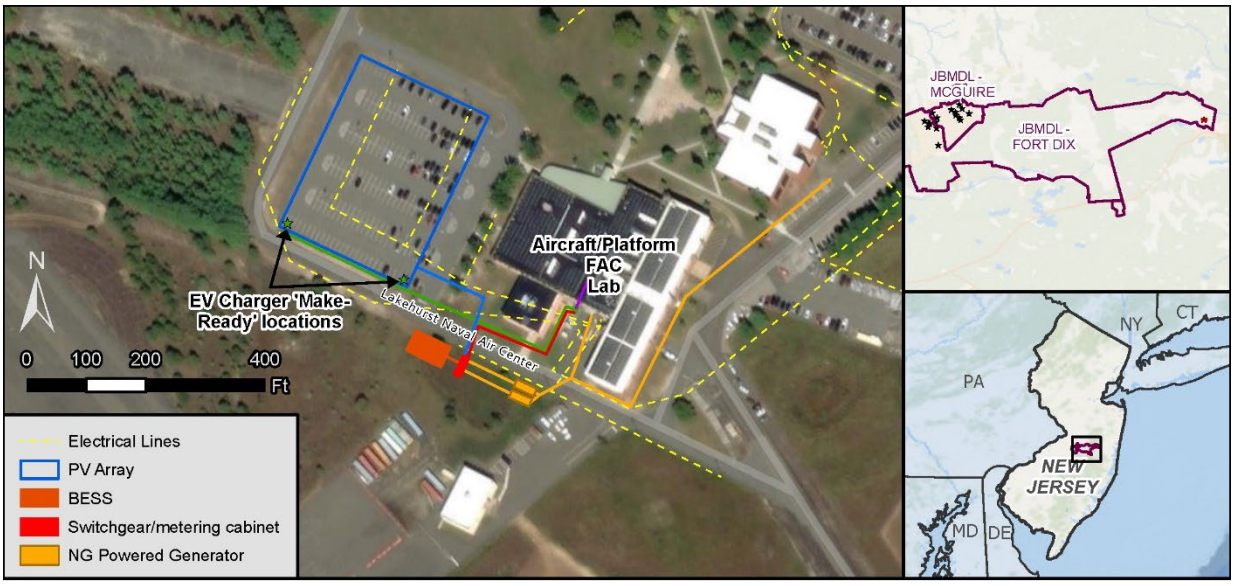


Figure 2-4q. JBMDL Building 678

2.5.4 Los Angeles Air Force Base (LAAFB)

LAAFB currently has an EV fleet of Nissan Leafs and Chevy Volts and has a variety of existing charger providers on base including 13 ChargePoint charging stations in storage waiting to be installed. LAAFB proposes to add six GOV charging stations. The following site is being considered for analysis within the PEA:

- **Existing EV Lot** located to the north of the Child Development Center along North Orbital Loop (see Figure 2-5a). This lot contains 39 existing charging stations, most of which were installed in 2014 and consist of a mix of Level 2 and Level 3 charging stations. Due to proximity to the ocean and resulting levels of salt in the air, these chargers have experienced faster than anticipated corrosion and developed signs of rust within two years of installation. A 750 kVa transformer is located centrally within the lot. LAAFB proposed to place the 13 ChargePoint charging stations along the back wall of the lot to replace a portion of the existing 27 Coritech charging stations. These would consist of a mix of Level 2 and Level 3 charging stations.

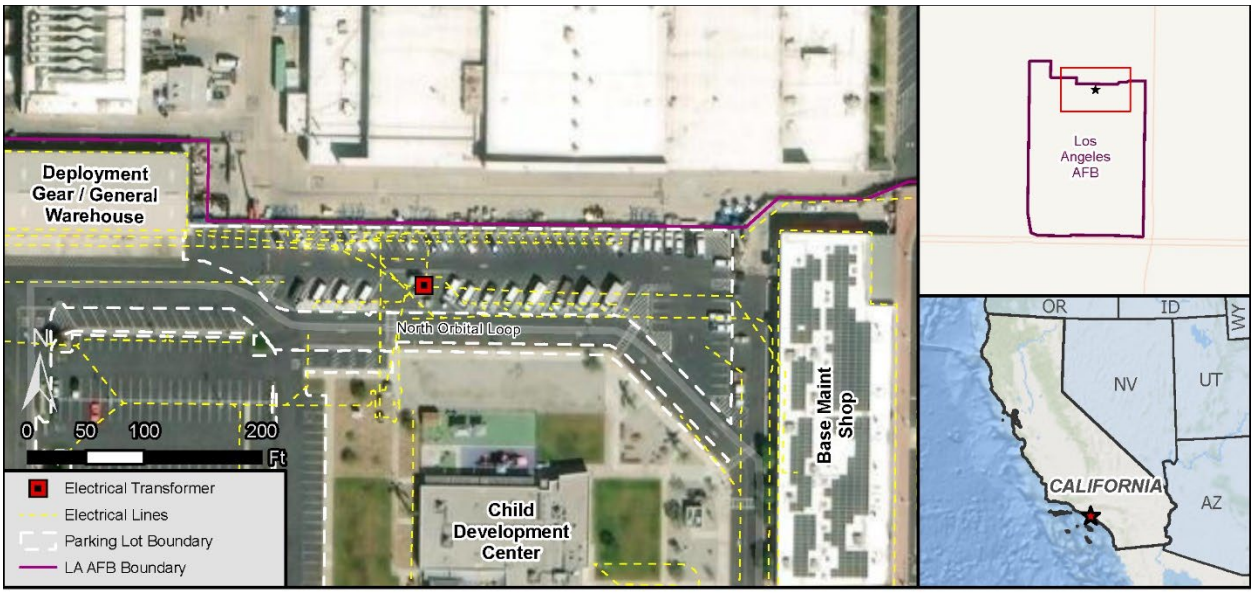


Figure 2-5a. LAAFB Existing EV Lot

2.5.5 Tyndall AFB (TAFB)

Tyndall sustained an estimated $4.7 billion in damage when Hurricane Michael, a Category 5 storm, came onshore near the base and the Florida Panhandle in October 2018. Nearly 484 buildings were damaged, and personnel were forced to relocate. Due to rebuilding from Hurricane Michael in 2018, the base is undergoing an extensive MILCON rebuild with minimal buildings/structures remaining where fleets were historically parked. Due to the damage and rebuild conditions, SUVs and trucks are the primary mode of transportation currently. The following summarizes locations where GOVs are parked and where EVCF may be considered in the future (also refer to Figure 2-6 for the general locations of the sites discussed below):

- **7000 Area/Munitions Storage Area** typically has 15 to 20 parked GOVs. The closest power source is a pad-mounted transformer directly adjacent to the parking lot. Outside of the developed areas, wetlands are prevalent. TAFB has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot and avoid impacts to wetlands.
- **Weapons Evaluation Group/8500 Area** typically has 15 to 20 parked GOVs and is located off Florida Avenue, a public road. The area is in the process of transitioning from overhead to underground power, and a power source is directly adjacent to the site. Wetlands are prevalent outside of the developed areas. TAFB has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot and avoid impacts to wetlands.
- **LRS/Natural Resource Center/Lab and CE Complex** has not yet been constructed but would typically have 15 to 20 parked GOVs. TAFB has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the new parking lot.
- **HQ/Commanders Building** is currently under construction and will have a minimal number of GOVs. TAFB has not identified the specific number or type of charging stations for this location and power would likely be routed underground. TAFB has been installing power

corridors underneath primary roads so power would be run from Beacon Beach Road. EVCF would be placed within the parking lot.

- **Security Forces** typically has 15 to 20 parked GOVs, primarily SUVs and police vehicles. TAFB is considering a central charging station near the Exchange and flightline, which have newly established underground power. TAFB has not identified a specific location for the charging stations for this facility, but it's anticipated that the EVCF could be placed within the existing facility parking lot. Newly installed electric utilities would be used to power the EVCF.
- **325th Communications Squadron** located to the west of Suwannee Avenue and to the north of Airey Avenue. The facility has no planned MILCON, however, a number of light-duty and medium-duty vehicles are planned for transition to this location. Power for this location would come from the concrete utility enclosure at the rear of the building. TAFB has not identified the specific number or type of charging stations for this location, however, EVCF would be placed within the existing parking lot.

Figure 2-6. Tyndall EVCF Locations Overview

2.5.6 U.S. Air Force Academy (USAFA)

The USAFA is a proposed National Register of Historic Places (NRHP) eligible district, with the Cadet Area designated as a National Historic Landmark District (NHL), for its design, architecture, and historic importance as a military academy. Several smaller NRHP eligible districts and individually eligible historic properties, like Falcon Stadium, exist within the campus district. Depending on where new construction occurs and what it involves, various stakeholders are consulted. For consultations outside the NHL, the Colorado State Historic Preservation Office (SHPO) is consulted on all new construction. If construction involves ground disturbance outside previously disturbed areas, the USAFA's 35 tribal nation stakeholders are also consulted. Within the NHL, SHPO and the National Park Service are typically consulted. In general, installation/construction of EVCF that follows the ACHP's October 26, 2022 exemption for EVCF on historic properties would not require Section 106 consultation. The only situations where such consultation would be warranted would be if EVCFs were proposed to be mounted on any of USAFA historic buildings or would impact any of the specific historic materials on USAFA, which include granite, marble, concrete aggregate panels, terrazzo, curtain walls, tile walls, and similar. This includes any installments of EVCF, which would be required to conform with the criteria listed in Table 1-1 per the ACHP's October 26, 2022 exemption for EVCF on historic properties and would meet the conditions of the ACHP's exemption. The following sites, all located outside of the Cadet Area National Historic Landmark, are being considered for analysis within the PEA:

- **Davis Airfield** located off Airfield Drive. This location is primarily used for airport service and support. Two locations are being proposed for EV chargers. The first would serve the Squadron Ops and the 306th Flying Training Group. The USAFA has identified the southwest corner of the parking lot directly east of Building 9209 (Squadron Operations) as the preferred location of 2 EV chargers to support 12 EVs at this location. The preferred power source location is directly southeast of the proposed EV charger site (see Figure 2-7a).

  The second location serves the Maintenance Dock (Building 9201). The USAFA has identified the parking strip directly west of Building 9201 as the preferred location of 1 EV charger to support 3 EVs at this location. The preferred power source location is directly adjacent (south) of the proposed EV charger site (see Figure 2-7b).

Figure 2-7a. USAFA Davis Airfield – Building 9209

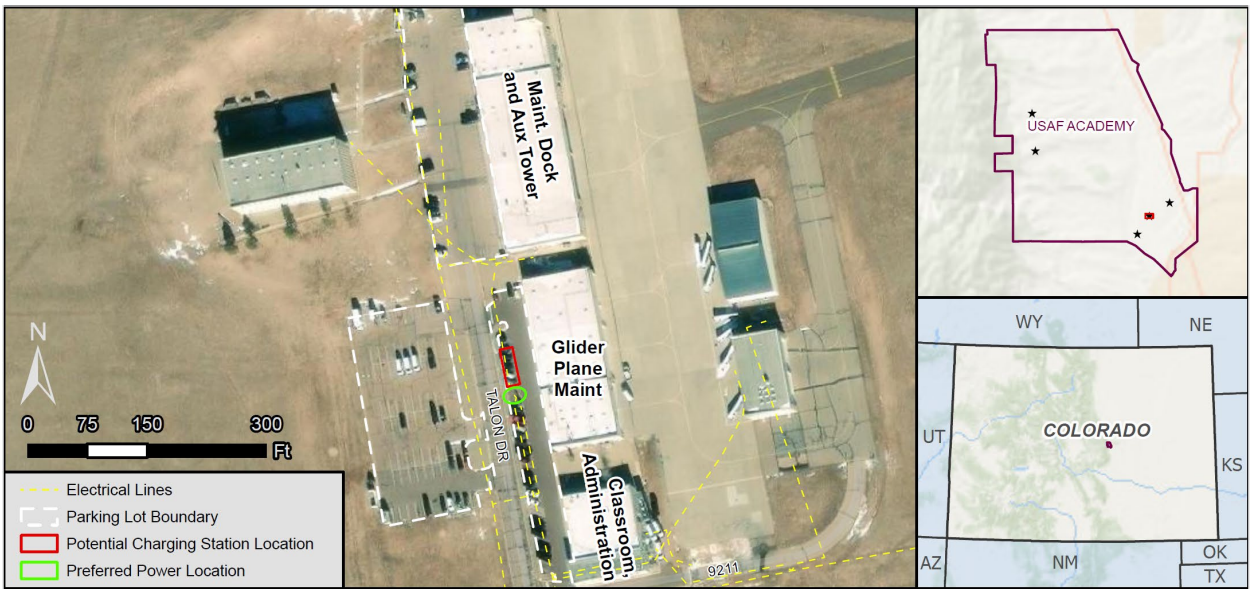


Figure 2-7b. USAFA Davis Airfield – Building 9201

- **Fairchild Hall** located north of Faculty Drive and east of Fairchild Drive (see Figure 2-7c). The USAFA is proposing 2 EV chargers along the parking spaces directly south of Fairchild Hall and north of Faculty Drive to support 14 EVs at this location. A transformer located in Mitchell Hall, directly across Fairchild Drive to the west would provide the power source for EV charging stations.

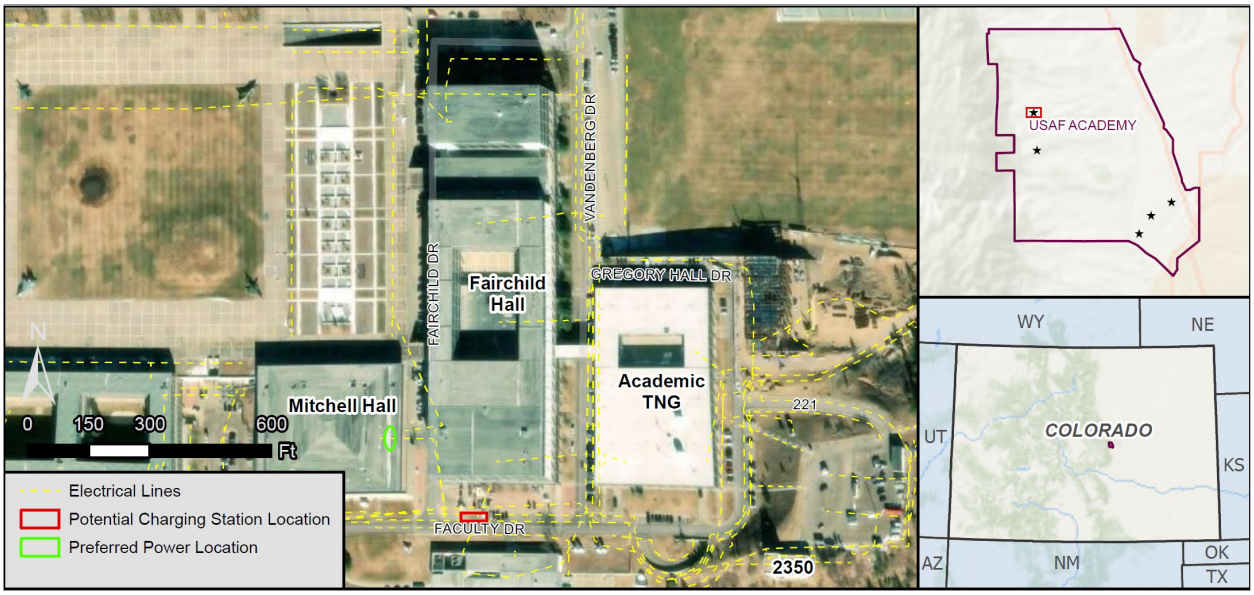


Figure 2-7c. USAFA Fairchild Garage/Service Road

- **Medical Clinic** located off Pinion Drive (see Figure 2-7d). This facility offers medical services. The USAFA is considering placement of EV charging stations along the back southeast corner of the parking lot, which is directly adjacent to a vaulted power source. USAFA has not determined the total number and type of EV charging stations, although the current preference is for the use of 80A Level 2 charging stations.

Figure 2-7d. USAFA Medical Clinic

- **LRS** located to the southeast of the Industrial Drive and Security Drive intersection (see Figure 2-7e). This facility contains the highest concentration of non-tactical vehicles (e.g., buses, vans, cars, and trucks) and acts as USAFA's primary fleet center and fueling station. The USAFA has identified the parking strip along the far west edge (towards the base of the warehouse) as the preferred location of 13 EV chargers to support 84 EVs at this location. The preferred power source location is along the central western edge of the proposed EV charger location.

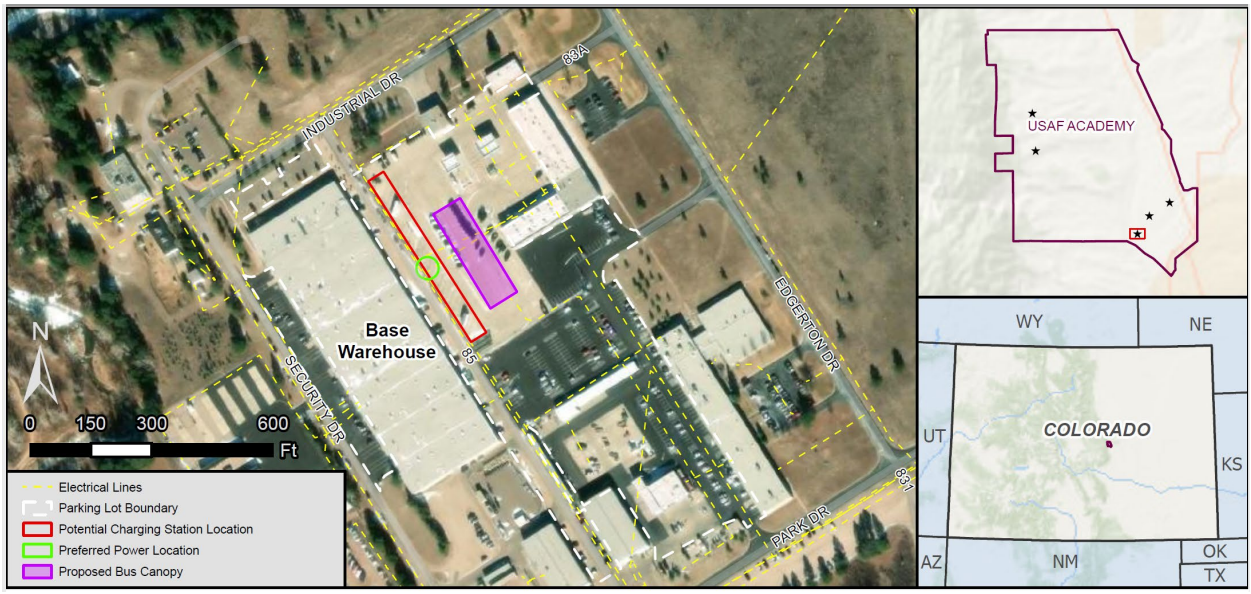


Figure 2-7e. USAFA LRS

Chapter 3 Affected Environment and Environmental Consequences

This chapter describes the affected environment and potential environmental consequences for resource areas that could be affected by the Proposed Action. Resources dismissed from detailed analysis in the EA, including water resources, geological resources, cultural resources, biological resources, land use, transportation, public health and safety, socioeconomics, and environmental justice, and the justification for their dismissal, are presented in Table 1-1. As described in Table 1-1, and in Section 2.2, the size and scope of proposed EVCF is not anticipated to create adverse effects to these resources. Such effects would be further minimized through consideration of general siting measures by each AFB location to avoid adverse impacts to wetlands, surface waters and floodplains, and protected species by utilizing existing developed and previously disturbed areas. The proposed EVCF sites at each AFB location described in Section 2.5 conform to these conditions and dismissal of resources.

The Region of Influence (ROI) for this PEA generally includes the footprints of the proposed EVCF sites at each respective AFB location as described in Section 2.5. The methodology used to identify the existing conditions and to evaluate potential impacts on resources involved the following: review of documentation and project information provided by DAF, searches of various environmental and federal and state agency databases, environmental baseline surveys (EBSs) where required, and public scoping. All references are cited, where appropriate, throughout this EA.

Wherever possible, the analyses presented in this chapter quantify the potential impacts associated with the Proposed Action and the No Action Alternative. Where it is not possible to quantify impacts, the analyses present a qualitative assessment of the potential impacts. The following descriptors qualitatively characterize impacts on each resource area analyzed:

- Beneficial – impacts would improve or enhance the resource.
- Negligible – no apparent or measurable impacts expected.
- Minor – the action would have a barely noticeable or measurable adverse impact on the resource.
- Moderate – the action would have a noticeable or measurable adverse impact on the resource. This category could include potentially significant impacts that could be reduced to a lesser degree by the implementation of mitigation measures.
- Significant – the action would have obvious and extensive adverse impacts that could result in potentially significant impacts on a resource despite mitigation measures.

Appendix D contains a list of projects DAF identified for the cumulative impacts analysis for each resource area.

3.1 Air Quality and Greenhouse Gas/Climate Change

This section assesses the baseline conditions for air quality and climate change within the six bases and assesses the plausibility of air quality and/or climate change to affect or be affected by the implementation of the EVCF Program at these bases. Air quality conditions at a given location are a function of several factors including the quantity and type of pollutants emitted locally and regionally, as well as the dispersion rates of pollutants in the region. Primary factors affecting pollutant dispersal include wind speed and direction, atmospheric stability, climate and temperature, and topography.

The ROI for air quality is the air quality control region (AQCR) for each proposed AFB analyzed in this EA. Air quality and climate conditions within the ROI are described in terms of the USEPA's attainment list and the relationship to air quality standards. The ROI for greenhouse gas emissions is defined as regional to national, since the use of electricity for vehicle charging could have impacts on greenhouse gas (GHG) emissions at electric power plants supplying each installation.

3.1.1 Definition of the Resource/Regulatory Setting

3.1.1.1 Criteria Air Pollutants

National Ambient Air Quality Standards (NAAQS) are provided for six criteria pollutants as listed pursuant to Section 108 of the CAA of 1970, as amended: carbon monoxide (CO); lead (Pb); nitrogen dioxide (NO_2); ozone (O_3); particulate matter, divided into two size classes of aerodynamic size less than or equal to 2.5 micrometers ($PM_{2.5}$), and aerodynamic size less than or equal to 10 micrometers (PM_{10}); and sulfur dioxide (SO_2).

NAAQS are split into two types:

- Primary air quality standards provide public health protection, including “sensitive populations” such as the elderly.
- Secondary standards provide public welfare protection, including decreased visibility and damage to animals and crops.

Primary NAAQS are used as the basis for determining whether a region is complying with CAA requirements. Table 3.1-1 lists the NAAQS for each criteria pollutant.

Table 3.1-1. National Ambient Air Quality Standards for Criteria Air Pollutants

Pollutant		Primary/Secondary	Averaging Time	Level	Form
CO		Primary	8 hours	9 ppm	Not to be exceeded more than once per year
			1 hour	35 ppm	
Pb		Primary and Secondary	Rolling 3 month average	0.15 µg/m^3	Not to be exceeded
NO_2		Primary	1 hour	100 ppb	98th percentile of 1-hour daily maximum concentration, averaged over 3 years
		Primary and Secondary	1 year	53 ppb	Annual Mean
O_3		Primary and Secondary	8 hours	0.070 ppm	Annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years
PM	$PM_{2.5}$	Primary	1 year	12.0 µg/m^3	Annual mean, averaged over 3 years
		Secondary	1 year	15.0 µg/m^3	Annual mean, averaged over 3 years
		Primary and Secondary	24 hours	35 µg/m^3	98th percentile, averaged over 3 years
	PM_{10}	Primary and Secondary	24 hours	150 µg/m^3	Not to be exceeded once per year on average over 3 years
SO_2		Primary	1 hour	75 ppb	99th percentile of 1-hour daily maximum concentrations, averaged over 3 years
		Secondary	3 hours	0.5 ppm	Not to be exceeded more than once per year

Source: USEPA 2023a

µg = micrograms; CO = carbon monoxide; m^3 = cubic meter; NO_2 = nitrogen dioxide; O_3 = ozone; Pb = lead; $PM_{2.5}$ = particulate matter of diameter 2.5 microns or less; PM_{10} = particulate matter of diameter 10 microns or less; ppb = parts per billion; SO_2 = sulfur dioxide

3.1.1.2 Other Air Quality Considerations

In addition to the criteria pollutants discussed above, Hazardous Air Pollutants (HAPs) also are regulated under the CAA. The USEPA has identified 188 HAPs known or suspected to cause health effects in small concentrations. HAPs are emitted by a wide range of anthropogenic (human-related) and naturally occurring sources, including combustion mobile and stationary sources. Unlike the NAAQS for criteria pollutants, federal ambient air quality standards do not exist for non-criteria pollutants. Therefore, HAPs are regulated through specific air emission permit provisions for stationary sources and HAP emission limits for mobiles sources.

3.1.1.3 Greenhouse Gas Emissions

GHG emissions released into the atmosphere from human-induced fossil fuel combustion are widely believed to be contributing to changes in global climate. GHGs, which include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), water vapor, and several trace gases, trap radiant heat reflected from the Earth in the atmosphere, causing the Earth's average surface temperature to rise. The predominant GHGs are CO_2, CH_4, N_2O, hydrofluorocarbons, and perfluorocarbons. In the U.S., anthropogenic GHG emissions are emitted primarily from burning fossil fuels. Although GHG levels have varied for millennia (along with corresponding variations in climate conditions), increases driven by human activity have contributed significantly to recent climatic changes.

3.1.2 Affected Environment

3.1.2.1 Criteria Pollutants

The ambient air quality in an area is classified by whether it complies with the NAAQS. Areas where monitored outdoor air concentrations are within an applicable NAAQS are considered in attainment of that NAAQS. If sufficient ambient air monitoring data are not available to determine, the area is deemed attainment/unclassifiable. Areas where monitored outdoor air concentrations exceed the NAAQS are classified by the USEPA as nonattainment. Nonattainment designations for some pollutants (e.g., O_3) can be further classified based on the severity of the NAAQS exceedances. Lastly, areas that have historically exceeded the NAAQS but have since instituted controls and programs that have successfully remedied these exceedances are known as maintenance areas.

The General Conformity Rule of the federal CAA mandates that the federal government work with state agencies within nonattainment or maintenance areas to ensure federal actions abide by approved State Implementation Plans (SIP). AFMAN 32-7002, Environmental Compliance and Pollution Prevention, explains responsibilities and specific details on how to comply with the CAA and other federal, state, and local air quality regulations. This provides further and more specific instructions on the requirements of the Air Force's EIAP for air quality promulgated at 32 C.F.R. 989.30, which mandates EIAP documents address General Conformity.

According to the EPA AirData Air Quality Monitoring Map (USEPA 2022), the TAFB and USAFA locations are considered in attainment/unclassifiable. All other AFB locations would be subject to the General Conformity Rule as they are within either nonattainment or maintenance areas. Table 3.1-2 describes the air quality attainment status at each of the six bases under consideration.

Table 3.1-2. Air Quality Conditions at Proposed AFB Locations

Location Considered	**Regulatory Authority**	**Air Quality ROI**	**Facility Attainment Status**
JBAB: Washington D.C.	Region 3; DC Department of Energy and Environment	National Capital AQCR	Located within CO maintenance and 8-hour O_3 non-attainment areas

Location Considered	**Regulatory Authority**	**Air Quality ROI**	**Facility Attainment Status**
JBA: Maryland	Region 3; Maryland Department of the Environment	National Capitol AQCR	Located within 8-hour O_3 non-attainment area
JBMDL: New Jersey	Region 2; New Jersey Department of Environmental Protection	Metropolitan Philadelphia Interstate AQCR	Located within 8-hour O_3 non-attainment and 24-hour PM 2.5 maintenance areas
LAAFB: California	Region 9; California Air Resources Board	Metropolitan AQCR	Located within CO maintenance, 8-hour O_3 non-attainment area, 24-hour $PM_{2.5}$ nonattainment, and Pb nonattainment areas
TAFB: Florida	Region 4; Florida Department of Environmental Protection	Mobile-Pensacola-Panama City-Southern Mississippi AQCR	In Attainment
USAFA: Colorado	Region 8; Colorado Department of Public Health and Environment	San Isabel AQCR	In Attainment

Source: USEPA 2023b

AQCR = Air Quality Control Region; CO = carbon monoxide; NAAQS = National Ambient Air Quality Standard; O_3 = ozone; ROI = Region of Influence; JBAB = Joint Base Anacostia-Bolling; JBA = Joint Base Andrews, JBMDL = Joint Base McGuire-Dix-Lakehurst, LAAFB = Los Angeles Air Force Base, Pb = lead; $PM_{2.5}$ = particulate matter, less than or equal to 2.5 micrometers; TAFB = Tyndall Air Force Base, USAFA = United States Air Force Academy

3.1.2.2 Greenhouse Gas Emissions

The primary long-lived greenhouse gases (GHGs) emitted by human activities are CO_2, methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Table 3.1-3 summarizes baseline general climate conditions and county GHG emissions for base locations.

Table 3.1-3. Climate Conditions at Proposed AFB Locations

Climate Feature	**JBAB**	**JBA**	**JBMDL**	**LAAFB**	**TAFB**	**USAFA**
Köppen-Geiger Climate Description	Humid Subtropical	Humid Subtropical	Humid Subtropical	Mediterranean	Tropical Wet	Humid Continental/ Semi-Arid
Average Annual Precipitation (inches)	42.8	43.6	44.1	14.1	53.0	20.9
Wettest Month/Average Monthly Precipitation (inches)	September 4.3	July 4.4	August 4.2	February 3.5	August 6.6	July 3.1
Driest Month/ Average Monthly Precipitation (inches)	November 2.9	November 2.8	November 2.8	August 0	May 2.6	December 0.6
Annual Mean Temp (°F)	56.6	56.9	55.1	63.7	68.9	46.5
Warmest Month (°F)	July 78.3	July 78.1	July 77	August 76.1	July 81.4	July 70.6
Coolest Month (°F)	January 34.1	January 34.9	January 32.5	December 52.8	January 53.9	December 24.7
County Baseline GHG Emissions (tons $CO_{2\text{-eq}}$)	1,988,953	4,398,027	2,427,503	46,701,532	1,469,430	3,166,505

Source: USEPA NEI 2023c
°F = degrees Fahrenheit; CO_2e = carbon dioxide equivalent
GHG from 2020 EPA County level greenhouse gas emissions. Counties pulled from are District of Columbia, Prince George's County MD, Burlington County NJ, Los Angeles County CA, El Paso County CO, and Bay County FL.

GHG emissions are presented as tons carbon dioxide equivalent ($CO2_e$). $CO2_e$ is a metric used to compile emissions of different GHGs into a single number. It is equal to the number of metric tons of CO2 emissions that would cause the same global warming effect as one metric ton of the greenhouse gas being considered. It is calculated by multiplying the emissions of each GHG with its respective global warming potentials (GWP). These values are then summed to produce a single $CO2_e$ number.

3.1.2.3 Climate Change Hazard Assessment

The Fourth National Climate Assessment details the regional historical effects and projected impact of climate change (USGCRP 2018). The assessment breaks down the U.S. into regions and the base locations are discussed collectively under the regions they are located. JBAB, JBA, and JBMDL all fall under the Northeast. USAFA and LAAFB fall under the Southwest. TAFB is in the Southeast.

Northeast

The Northeast mainly faces increases in rainfall intensity and average annual temperature. This region is projected to experience higher temperatures and extreme heat events. Heat related illness is projected to rise due to those higher temperatures. Sea level rise has amplified storm impacts as well.

Southwest

The Southwest region faces extreme weather events and rising temperatures. Exposure to hotter temperatures and heat waves already leads to heat-associated deaths in Arizona and California. Mortality risk during a heat wave is exacerbated on days with elevated levels of ground-level ozone or particulate air pollution. In parts of the region, hotter temperatures contribute to reductions of seasonal maximum snowpack and its water content. The increase in heat and reduction of snow under climate change have amplified recent hydrological droughts in the Colorado River Basin and Rio Grande. Snow droughts can arise from a lack of precipitation, temperatures too warm for snow, or a combination.

Southeast

The Southeast region faces extreme weather events and rising temperatures, although temperatures have had a lesser impact than other parts of the U.S. The extreme weather events expected to have a significant impact are hurricanes, heat waves, and drought. Rising sea levels and potential changes in hurricane intensity are aspects of climate change expected to have a measurable effect on coastal ecosystems in the Southeast. Hurricanes are of specific concern to TAFB due to its location along the Gulf Coast.

3.1.3 Environmental Consequences

The air quality impact analysis follows EIAP Air Quality Guidelines for criteria pollutants and GHG emissions (Solutio Environmental, 2017). This PEA uses the Air Conformity Applicability Model (ACAM) to analyze potential air quality impacts associated with the Proposed Action, in accordance with AFMAN 32-7002, the EIAP, and the General Conformity Rule (40 CFR Part 93 Subpart B). The General Conformity Rule applies to the Proposed Action at JBAB, JBA, JBMDL, and LAAFB.

Construction emissions resulting from the Proposed Action were calculated using ACAM. Such emissions are presented annually. For air quality analysis purposes, construction activities are expected to occur until 2027.

Current DAF guidance presented methodology for an Air Quality EIAP Level II, Quantitative Assessment, which assesses whether an action is expected to have insignificant impact on air quality (Solutio Environmental, 2020). An action is considered to have an insignificant impact on air quality if it does not cause or contribute to exceedance of one or more of the insignificant indicators. The DAF defines "insignificance indicators" for each criteria pollutant according to current air quality conditions.

The Proposed Action would be expected to have a significant adverse impact on air quality if it would: (1) produce emissions exceeding the general conformity rule *de minimis* (of minimal importance) threshold values; or (2) contribute to a violation of any federal, state, or local air regulation.

For non-attainment or maintenance areas, the General Conformity Rule defines *de minimis* levels used as insignificance indicators. However, *de minimis* levels have not been established for attainment area criteria pollutant emissions. The insignificance indicators are 250 tons per year, except for Pb, which is 25 tons per year.

Change in climate conditions caused by GHGs is a wide-reaching effect. There are currently no established numerical thresholds for GHG emission to be considered significant. For the purposes of this analysis, the Mandatory GHG Reporting Rule threshold (40 CFR 98) of 25,000 metric tons CO_2e is used as a measure of significant impact. The Proposed Action would contribute incrementally to regional and national GHG emissions for all proposed EVCF sites, as calculated by ACAM. This PEA analyzes the potential GHG emissions for each AFB.

3.1.3.1 Proposed Action

Construction

Overall impacts to air quality and greenhouse gas emissions from construction would be less than significant. Anticipated impacts are further discussed below.

Criteria Pollutants

Construction and trenching activities at all proposed EVCF sites would result in short-term insignificant impacts on air quality. Activities would temporarily generate criteria pollutant emissions and fugitive dust from the use of diesel- and gasoline-powered equipment (see Table 3.1-4). Construction workforce commuting would also contribute to a short-term increase in emissions. Criteria pollutant emissions from construction activities would be temporary in nature (limited to the duration of construction activities), and the resulting impacts to air quality would be short-term.

The DAF would consider options to have construction contractors implement standard construction BMPs to minimize emissions, such as:

- Reducing diesel emissions through use of cleaner fuels and not idling engines,
- Reducing fugitive dust emissions by using appropriate dust suppression methods (e.g., application of water) and
- Reducing fugitive dust emissions by promptly removing spilled or tracked dirt.

Table 3.1-4 summarizes all emissions from construction activities for EVCF sites at each AFB location.

Table 3.1-4. Criteria Pollutant Emissions

Location	Pollutant	Construction Emissions	Significance Indicator	
			Indicator	Exceedance
JBAB	VOC	0.078	50	No
	NO_x	0.366	100	No
	CO	0.680	100	No
	SO_x	0.002	250	No
	PM_{10}	0.181	250	No
	$PM_{2.5}$	0.013	250	No
	Pb	0.000	25	No
	NH_3	0.001	250	No
	CO_2e	154.3	--	--
JBA	VOC	0.063	50	No
	NO_x	0.288	100	No
	CO	0.554	100	No
	SO_x	0.001	250	No
	PM_{10}	0.192	250	No
	$PM_{2.5}$	0.011	250	No
	Pb	0.000	25	No
	NH_3	0.001	250	No
	CO_2e	124.3	--	--
JBMDL	VOC	0.075	100	No
	NO_x	0.338	100	No
	CO	0.673	100	No
	SO_x	0.002	100	No
	PM_{10}	0.589	250	No
	$PM_{2.5}$	0.012	100	No
	Pb	0	25	No
	NH_3	0.001	100	No
	CO_2e	148.2	--	--
LAAFB	VOC	0.051	10	No
	NO_x	0.245	10	No
	CO	0.404	100	No
	SO_x	0.001	70	No

Location	Pollutant	Construction Emissions	Significance Indicator	
			Indicator	Exceedance
	PM_{10}	0.048	100	No
	$PM_{2.5}$	0.009	70	No
	Pb	0.000	25	No
	NH_3	0.000	70	No
	CO_2e	102.2	--	--
TAFB	VOC	0.063	250	No
	NO_x	0.285	250	No
	CO	0.578	250	No
	SO_x	0.001	250	No
	PM_{10}	0.216	250	No
	$PM_{2.5}$	0.010	250	No
	Pb	0.000	25	No
	NH_3	0.001	250	No
	CO_2e	124.2	--	--
USAFA	VOC	0.051	250	No
	NO_x	0.241	250	No
	CO	0.445	100	No
	SO_x	0.001	250	No
	PM_{10}	0.160	250	No
	$PM_{2.5}$	0.009	250	No
	Pb	0.000	25	No
	NH_3	0.000	250	No
	CO_2e	101.4	--	--

Source: ACAM 2020

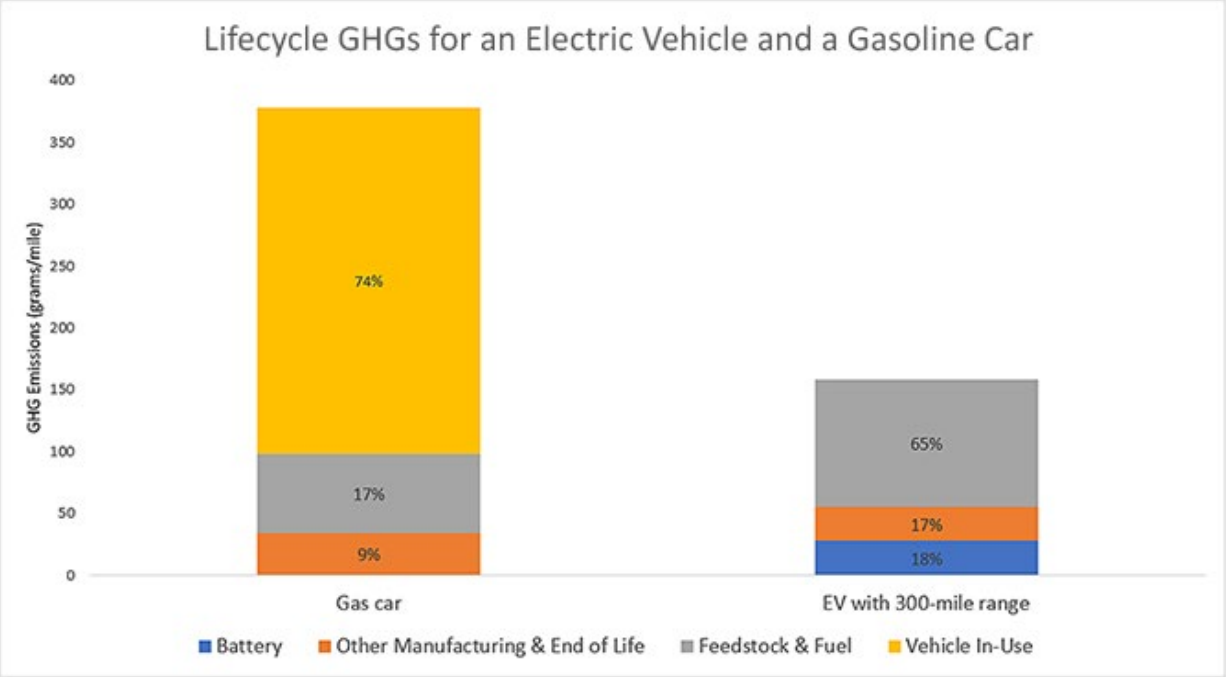
CO = carbon monoxide; CO_2e = carbon dioxide equivalent; NH_3 = ammonia; NO_x = nitrogen oxides; O_3 = ozone; Pb = lead; $PM_{2.5}$ = particulate matter of diameter 2.5 microns or less; PM10 = particulate matter of diameter 10 microns or less; SOx = sulfur oxides; ton/yr = tons per year; VOC = volatile organic compound JBAB = Joint Base Anacostia-Bolling; JBA = Joint Base Andrews, JBMDL= Joint Base McGuire-Dix-Lakehurst, LAAFB = Los Angeles Air Force Base, TAFB = Tyndall Air Force Base, USAFA = United States Air Force Academy

Greenhouse Gases

Construction and trenching activities at all proposed EVCF sites would result in short-term, GHG emissions from the use of diesel and gasoline powered equipment (see Table 3.1-4). Emissions associated with construction would be temporary, but the resulting impacts would be more long term as most GHGs have atmospheric residence times ranging from decades to centuries. Operations emissions produced from the construction equipment would be negligible.

Operations

Overall impacts to air quality and greenhouse gas emissions from operations would be less than significant and beneficial. While operation of the EV charging stations would have negligible direct effects on air quality and GHG emissions, they could induce a lowering of GHG emissions by allowing a greater use of EVs. EVs typically have lower life-cycle GHG emissions than conventional vehicles that run on gasoline or diesel (USEPA, 2023d). Figure 3.1.3, derived from the Argonne National Laboratory's GREET model, illustrates the GHG emissions from an EV and from a conventional vehicle over the vehicle life cycle (i.e., manufacturing, use, and disposal). While upstream production emissions are likely higher for EVs, overall emissions are significantly higher for conventional vehicles. The blue section represents emissions from battery manufacturing. The orange bars encompass manufacturing (e.g., extracting materials, manufacturing, and assembling parts and vehicles) and end-of-life (recycling or disposal) for the rest of the vehicle. The gray bars represent upstream emissions associated with producing gasoline or electricity (U.S. mix), and the yellow bar shows in-use tailpipe emissions from conventional vehicles (USEPA 2023d). Note that this figure is intended as a representative illustration of the differences in GHG emissions between EVs and conventional vehicles; these numbers would likely vary between different vehicle types, models and model years, and with vehicle condition and age and the sources of energy used to supply the regional electricity grid.



Source: USEPA 2023d
Assumptions: EV with 300-mile range; vehicle lifetime of 173,151 miles for both EV and gas car; 30.7 MPG gas car; and U.S. average grid emissions.

Figure 3.1.3. Lifecycle GHGs for EV and Gasoline Cars

While the Proposed Action does not include replacing conventional vehicles with EVs, it is in response to EO 14057, which requires that only zero EVs be available for acquisition by 2035. It is likely that over time, the availability of additional charging stations, combined with EV acquisitions through EO 14057, would result in the replacement of conventional fuel vehicles with EVs. While the exact number of new EVs is unknown, it is likely that such replacements would lead to a reduction in regional GHG emissions and other vehicle-related air pollutant emissions

over time. Further, there would be no expected increase in impacts to air quality and GHG emissions during transition when EVs and conventional vehicles are in use concurrently, as any substitution of conventional vehicles by EVs would be likely to lead to an incremental reduction in air pollutant and GHG emissions. Greater GHG emissions reductions could occur if a larger portion of grid-supplied electricity is generated from renewable sources such as wind or solar, instead of fossil fuels such as natural gas or coal.

3.1.3.2 Cumulative Impacts

Overall cumulative impacts to air quality and greenhouse gas emissions would be less than significant. Implementation of the EVCF Program at all AFB locations would result in short-term negligible to minor impacts to air quality and greenhouse gas emissions from construction and beneficial impacts from operations. As the Proposed Action would result in long-term beneficial impacts from operations and impacts from construction would be short-term (few weeks duration) and negligible to minor, no significant adverse impacts to air quality are anticipated, regardless of the AFB location or the number of sites being considered for EVCF. The proposed implementation of the EVCF Program at all AFB locations analyzed within this PEA in combination with projects identified in Appendix D would not contribute to significant adverse impacts to air quality and greenhouse gas emissions. Projects identified in Appendix D would further help improve energy efficiency and indirectly reduce air and greenhouse gas emissions. The EVCF at AFBs would be consistent with local and regional initiatives for conversion of gas vehicles to EVs as part of efforts to reduce air and greenhouse gas emissions.

3.1.3.3 No Action Alternative

Under the No Action Alternative, none of the proposed construction activities would occur; therefore, there would be no specific changes to criteria pollutant or GHG emissions from baseline conditions. DAF would not have a programmatic NEPA analysis to tier future placement and operations of EVCF equipment at their AFBs. This could result in a delay of achieving reductions in regional GHG emissions and other vehicle-related air pollutant emissions over time.

3.1.3.4 Climate Change Hazard Assessment

The potential future impacts of climate change to proposed facilities are included in region-specific potential impact assessments as part of long-range planning, project design, and permitting activities. Relevant long-term climate weather events of concern for the proposed AFB locations are discussed in Section 3.1.2.3. These areas of concern would have little impact on the new facilities and related operations included in each AFB location.

The DAF uses resiliency measures, updated standards, and best practices captured in routine UFC updates, which serve as design/building codes for DoD facilities. The DAF would participate in or lead, as appropriate, master planning and project development activities at the selected location to ensure that climate impacts to the installations are minimized to the extent practicable and consistent with installation, local, or regional climate plans. Depending on the alternative selected, examples of resiliency measures could include, but would not be limited to, redundant and hardened electrical and water systems to withstand storm damage and higher demand on hot days, storm shelters and appropriate structural construction measures to withstand tornadoes/hurricanes, elevated construction and on-site water management to withstand flooding and sea level rise (including potential increases in the groundwater table), and adequate setbacks from potential fuel sources to mitigate the risk from wildfires.

3.2 Soil Resources

3.2.1 Definition of the Resource/Regulatory Setting

Soil resources include the soils and potential for erosion within the ROI of the Proposed Action.

The ROI for soils includes the boundaries of each proposed EVCF site within the respective AFB locations, as detailed in Section 2.5, Proposed Action.

The term "soil" refers to unconsolidated materials overlying bedrock or other parent material. Soil structure, elasticity, strength, shrink-swell potential, and erodibility all determine the capacity of the ground to support man-made structures and facilities, provide a landscaped environment, and control the transport of eroded soils into nearby drains and surface waters.

Stormwater discharges in the United States are regulated by the Clean Water Act (CWA) NPDES stormwater program, which requires a permit for the discharge of any pollutant to Waters of the U.S. from point and non-point sources. Non-point sources include stormwater runoff from industrial, municipal, and construction sites. Additionally, Section 438 of the Energy Independence and Security Act of 2007 requires federal agencies to reduce stormwater runoff from federal development and redevelopment projects.

Geological resources have been eliminated from detailed evaluation as noted in Section 1.3 because EVCF projects would not excavate below the surface soils, and EVCF structures would not be more susceptible to geological hazards than other structures at the proposed sites.

Potential impacts to Installation Restoration Program (IRP) sites known to contain contaminated soils are discussed in Section 3.5.

3.2.2 Affected Environment

3.2.2.1 Joint Base Anacostia-Bolling (JBAB)

A soil survey conducted by USDA NRCS in 2020 identified eight soil series at JBAB. The majority (86.4 percent) are soil complexes that have been recently disturbed, altered, or have an urban component as a result of urbanization and other human activities (USAF 2021a). Such soils may include a highly disturbed mix of sand, silt, and clay with minor amounts of demolition debris such as broken concrete and/or bricks, in addition to fill made with unconsolidated material from excavations and river dredging (AFCEC 2022). No soils on Base are classified as highly erodible (USAF 2021a).

Table 3.2-1 presents soil types underlying the proposed EVCF sites under consideration at JBAB.

Table 3.2-1. Soils Present within the ROI at JBAB

Location	Soil Map Unit	Description
Building 1311	U1, Ub	U1- Udorthents, heterogeneous fill material; Ub - Urban
Building 371	U1	Udorthents, heterogeneous fill material
Building 361/362	Ub, Dn	Ub – Urban; Dn – Dunning, 0-3 percent slopes
Building 400	Dn, U1	Dn – Dunning; U1 - Udorthents
Parking Garage	U1	Udorthents, heterogeneous fill material

Source: USAF 2021a
Dn = Dunning; U1 = Udorthents; Ub = Urban

Altered soils on-site and the low elevation in the northern portion of the installation have led to issues with subsidence. Many existing facilities have experienced settling and separation of different facility elements (JBAB 2022).

JBAB conserves soil and minimizes pollution by implementing erosion and sediment control as a component of the Integrated Natural Resources Management Plan (INRMP), and by maintaining a Stormwater Pollution Prevention Plan (SWPPP). Title 21 of the District of Columbia Municipal Regulations (DCMR), Chapter 5, Section 540 (*Water Quality and Pollution*) regulates stormwater discharges from ground-disturbing activities, and Section 202 of Executive Order 13508, *Chesapeake Bay Protection and Restoration*, assigns the DoD as a lead agency on the Federal Leadership Committee tasked with strengthening stormwater practices at federal facilities and on federal lands within the Chesapeake Bay watershed. Soil-management actions are overseen by the stormwater media manager at JBAB (USAF 2021a).

Any project in the District of Columbia disturbing more than 50 square feet must submit a Soil Erosion and Sediment Control Plan to the Department of Energy and Environment for approval in accordance with Title 21 DCMR, Chapter 5, Section 540.

3.2.2.2 Joint Base Andrews (JBA)

Much of the land surface at JBA has been disturbed as a result of development. Approximately half of the installation is urban land, consisting of streets, buildings, parking lots, and other impervious surfaces, with approximately 10 percent of the installation remaining undisturbed, around the perimeter and in woodland areas among on-Base golf courses. The extent of urban land at JBA prevents soil identification in some areas (USAF 2018).

Table 3.2-2 presents soil types underlying the proposed EVCF sites under consideration at JBA.

Table 3.2-2. Soils Present within the ROI at JBA

Location	Soil Map Unit	Soil Name
CE Escort Vehicle Lot	Un	Urban land
LRS Parking Lot	Un	Urban land
CE Yard Parking Lot	Un	Urban land
Jones Building Lot	UdbB	Udorthents, loamy, 0 to 5 percent slopes
	Un	Urban land
Medical Building Garage	BaA	Beltsville silt loam, 0 to 2 percent slopes
	BuB	Beltsville-Urban land complex, 0 to 5 percent slopes
SMART Conference Building	BuB	Beltsville-Urban land complex, 0 to 5 percent slopes
	GuB	Grosstown-Urban land complex, 0 to 5 percent slopes

Source: USDA 2022a
BaA = Beltsville silt loam, 0 to 2 percent slopes; BuB = Beltsville-Urban land complex, 0 to 5 percent slopes; BuB = Beltsville-Urban land complex, 0 to 5 percent slopes; GuB = Grosstown-Urban land complex, 0 to 5 percent slopes; UdbB = Udorthents, loamy, 0 to 5 percent slopes; Un = Urban land

Stormwater discharges at JBA are regulated by the Maryland Stormwater Management Guidelines for State and Federal Projects, EO 13508, the Chesapeake Bay total maximum daily load (TMDL) requirements, and the Maryland Watershed Implementation Plan, in addition to federal regulations and programs discussed in Section 3.2.1 – Definition of the Resource/Regulatory Setting.

JBA maintains both a Stormwater Management Plan (SWMP) and a SWPPP. The goal of the SWMP is to reduce the discharge of pollutants to stormwater to the maximum extent possible by implementing BMPs and measurable goals for minimum control measures. The SWPPP describes the watersheds at JBA, the receiving water bodies for stormwater from JBA, and the impairment status of each for the Chesapeake Bay Program. The SWPPP further identifies potential sources of pollution that may be reasonably expected to affect the quality of stormwater discharges and serves to ensure compliance with JBA's existing NPDES permits (USAF 2018).

Per Maryland Stormwater Management Guidelines, the Maryland Department of the Environment (MDE) must approve sediment and erosion control plans and stormwater management plans for construction projects for which the total disturbed area is greater than 5,000 square feet or 100 cubic yards. Additionally, compliance with MDE's General Permit No. 20-CP (General Permit for Discharges from Stormwater Associated with Construction Activity) is required for projects disturbing more than one acre of land (USAF 2018).

The proposed EVCF at the LRS site at JBA is located within a Land Use Control area of the existing Base Restoration Program. Prior to construction in this area, a waiver must be obtained from the Base Restoration Program Manager.

3.2.2.3 Joint Base McGuire Dix Lakehurst (JBMDL)

The Cohansey Sand Formation exerts a major influence on the region. Soils that have developed in this area are generally droughty, acidic, and low in nutrients due to the sandy nature of the underlying formation (USAF 2021b). Thirty major soil types have been identified at JBMDL, with the majority of those soils classified as sands or sandy loams (USAF 2021b).

Table 3.2-3 presents soil types underlying the proposed EVCF sites under consideration at JBMDL.

Table 3.2-3. Soils Present within the ROI at JBMDL

Location	Soil Map Unit	Soil Name
McGuire		
Outside Hobby Shop – Ex-2	AdpB	Adelphia-Urban land complex, 0 to 5 percent slopes
	UdwB	Udorthents, sandy, 0 to 8 percent slopes
	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
3104 CE Water Shop – Prop 1	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
CE Yard – Prop 7	AdpB	Adelphia-Urban land complex, 0 to 5 percent slopes
305th AMW HQ – Prop 6	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
305th Passenger Terminal Flight Parking Area – Prop 5	AdpB	Adelphia-Urban land complex, 0 to 5 percent slopes
	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
1907: Contingency Response Wing – Prop 3	PefB	Pemberton sand, 0 to 5 percent slopes
Library/Dorms/Dining Parking Lot – Prop 8	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
Air Base Wing HQ – Prop 4	USCOLB	Urban land-Collington complex, 0 to 5 percent slopes
Dix		
Medical Group – Prop 9	AdmA	Adelphia fine sandy loam, 0 to 2 percent slopes
	CoeAs	Colemantown loam, 0 to 2 percent slopes, occasionally flooded
	SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain
5139 – Prop 16	SacB	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
787th Civil Engineer Squadron Building 5320 – Prop 10	SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain
Building 5344/5345 – Prop 11	SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain
CE National Guard – Prop 21	SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain
	UdwB	Udorthents, wet substratum, 0 to 8 percent slopes
	AdpB	Adelphia-Urban land complex, 0 to 5 percent slopes

Location	Soil Map Unit	Soil Name
Parking Lot (between Engineering Personnel and Guard Support Compound) – Prop 20	SacA	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
Fleet Readiness Training Center – Prop 14	SacA	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
	SacB	Sassafras sandy loam, 2 to 5 percent slopes, Northern Coastal Plain
LRS Yard – Prop 13	SacA	Sassafras sandy loam, 0 to 2 percent slopes, Northern Coastal Plain
Lakehurst		
Building 678	LasB	Lakewood sand, 0 to 5 percent slopes
	Ur	Urban land

Source: USDA 2022c
AdmA = Adelphia fine sandy loam, 0 to 2 percent slopes; AdpB = Adelphia-Urban land complex, 0 to 5 percent slopes; AMW = Air Mobility Wing; CE = Civil Engineering; CoeAs = Colemantown loam, 0 to 2 percent slopes, occasionally flooded; LasB = Lakewood sand, 0 to 5 percent slopes; LRS = Logistics Readiness Service; Northern Coastal Plain; PefB = Pemberton sand, 0 to 5 percent slopes; SacA = Sassafras sandy loam, 0 to 2 percent slopes; Northern Coastal Plain; SacB = Sassafras sandy loam, 2 to 5 percent slopes; UdwB = Udorthents, sandy, 0 to 8 percent slopes; USCOLB = Urban land-Collington complex, 0 to 5 percent slopes

JBMDL maintains three SWPPPs, one for each section of the installation, which describe stormwater management standards, controls, and BMPs implemented to maintain and protect water quality from pollutants carried by stormwater. The SWPPPs were developed in accordance with the New Jersey Storm Water Management Regulations (New Jersey Administrative Code [N.J.A.C.] 7:8), and the New Jersey Pollutant Discharge Elimination System (pursuant to the New Jersey Water Pollution Control Act [N.J.A.C. 7:14]), in addition to the federal NPDES program (USAF 2021).

3.2.2.4 Los Angeles Air Force Base (LAAFB)

The main section of LAAFB in which the ROI occurs is located in a highly developed, urbanized area in which soils have been previously disturbed, and few permeable surfaces exist. Of the seven soil types identified on Base by USDA NRCS, six are classified as Urban land soils. The only mapped soil unit to occur within the ROI is the Urban land-Thums-Windfetch complex with 0 to 2 percent slopes (Map Unit Symbol 1133).

The existing stormwater discharge/collection system on Base, which drains into the Los Angeles County Flood Control District system, has adequate capacity to accommodate future development, as it rarely reaches capacity in the arid climate of Los Angeles. LAAFB is not required to obtain a NPDES permit for stormwater discharges associated with ongoing industrial activities, but a SWPPP is maintained to reduce potential stormwater contamination on existing sites as well as future projects (LAAFB 2017).

3.2.2.5 Tyndall Air Force Base (TAFB)

Soils at TAFB are formed from sandy marine sediments and are predominately sandy, acidic, poorly drained, have low shrink-swell potential, and are relatively close to the underlying water table. A soil survey conducted by USDA NRCS in 2020 identified 20 soil types at TAFB (USAF 2020a), most of which have a high corrosion risk for concrete and uncoated steel, creating minor development constraints (TAFB 2015).

Table 3.2-4 presents soil types occurring within the proposed EVCF sites under consideration at TAFB.

Table 3.2-4. Soils Present within the ROI at TAFB

Location	Soil Map Unit	Soil Name
7000 Area/Munitions Storage Area	31	Osier fine sand
	40	Arents, 0 to 5 percent slopes
Weapons Evaluation Group/8500 Area	13	Leon sand, 0 to 2 percent slopes
	27	Mandarin sand, 0 to 2 percent slopes
LRS/Natural Resource Center/Lab and CE Complex	27	Mandarin sand, 0 to 2 percent slopes
HQ/Commanders Building	13	Leon sand, 0 to 2 percent slopes
	27	Mandarin sand, 0 to 2 percent slopes
Security Forces	13	Leon sand, 0 to 2 percent slopes
	25	Hurricane sand, 0 to 2 percent slopes
325th Communications Squadron	25	Hurricane sand, 0 to 2 percent slopes

Source: USDA 2022d
HQ = Headquarters; LRS = Logistics Readiness Squadron

Stormwater generated on Base percolates rapidly into the sandy soils characteristic of this area. Stormwater at TAFB is managed under both a Multi-Sector Generic Permit and an MS4 permit issued by the Florida Department of Environmental Protection, as well as a federal NPDES permit. The stormwater system at TAFB consists primarily of open ditches in undeveloped areas and underground piping in more developed portions of the installation. Sediment and erosion controls are utilized where necessary to prevent erosion of soils during construction and operations (USAF 2020a).

3.2.2.6 U.S. Air Force Academy (USAFA)

Most of the soils at USAFA are derived from a granitic parent material and are generally very shallow (horizons are not defined) with very little fine or organic material. Deeper soils with finer particles and organic matter occur as outwash deposition in the valleys. Soils in a few areas (surrounding the airfield, in the vicinity of Falcon Stadium and Douglas Valley Housing, and just east of the Community Center, cemetery, and golf course) have a slight-to-moderate erosion potential. Most of these areas are already associated with some type of fairly intensive human use. Very thin soils found on the steeper slopes of the southern and western boundaries have an extremely high erosion potential. Most soils on Base are considered to be moderately erodible (USAF 2020b). Twenty-six soil mapping units have been identified at USAFA, which are composed of 19 soil series and urban land (USAF 2020b).

Table 3.2-5 presents soil types occurring within the proposed EVCF sites under consideration at USAFA.

Table 3.2-5. Soil Present within the ROI at USAFA

Location	Soil Map Unit	Soil Name
David Airfield	19	Columbine gravelly sandy loam, 0 to 3 percent slopes
Fairchild Garage/Service Road	37	Jarre gravelly sandy loam, 1 to 8 percent slopes
	38	Jarre-Tecelote complex, 8 to 65 percent slopes
Medical Clinic	37	Jarre gravelly sandy loam, 1 to 8 percent slopes
LRS	19	Columbine gravelly sandy loam, 0 to 3 percent slopes

Source: USDA 2022e
LRS = Logistics Readiness Squadron

The stormwater discharge/collection system at USAFA has minimal capacity to accommodate new development, due to an increased volume and rate of flow into the installation from

surrounding areas. This stormwater runoff is causing high levels of erosion and sedimentation downstream (USAFA 2018). A SWPPP is maintained at USAFA that identifies BMPs to manage stormwater runoff, such as secondary containment structures, covered work areas, and personnel training. The Monument Creek Watershed Restoration Master Plan (2016) also identifies on-base and off-base projects and priorities for controlling erosion and sedimentation (USAF 2020b).

3.2.3 Environmental Consequences

Impacts to soils would be considered significant if such impacts would substantially increase the potential occurrence of erosion, sedimentation, or loss of topsoil.

3.2.3.1 Proposed Action

Construction

Overall impacts to soils from construction would be less than significant. Ground disturbance associated with construction of EVCF would result in short-term, negligible to minor, adverse impacts to soils. As proposed EVCF sites at all locations are located within existing paved areas, it is expected that there would be minimal loss of existing topsoil or vegetation, primarily associated with the installation or extension of electrical utilities, if required. Regardless, site preparation and construction activities would involve some level of surface disturbance, potentially exposing soils (both previously vegetated and those occurring below existing impervious surfaces) to wind and rain, resulting in erosion and sedimentation. The Proposed Action would be unlikely to result in compaction-related impacts, as construction equipment would primarily operate from existing paved surfaces, and soils occurring in locations proposed for EVCF were likely previously compacted during construction of existing site conditions. Negligible amounts of soil compaction may occur in locations requiring additional disturbance due to the need to extend electrical utilities.

The presence of soils with a high corrosion risk for concrete and uncoated steel at TAFB would be taken into account when determining the design and placement of EVCF within proposed areas (likewise, increased risk of corrosion at LAAFB due to proximity to the ocean and resulting levels of salt in the air would also be taken into account). Where practicable, EVCF would be placed in areas under which lower risk soils occur. Where this is not possible, DAF may elect to choose EVCF with alternative materials that are more corrosion-resistant, as available by manufacturers.

Overall, impacts to soils would be greatest to those locations requiring extension of electrical utilities, however, these disturbances would be temporary and minor. Table 3.2-6 summarizes soil conditions and potential for impact by location.

Table 3.2-6. Summary of Soil Impacts from EVCF Implementation at Pilot Bases

Location	Total Number of Sites	Proposed Number of EVCF	Total Estimated EVCF Disturbance[1]	Total Estimated Infrastructure Disturbance[3]	Presence of Unique or Prime Farmland Soils	General Soil Site Descriptions
JBAB	5	Un-determined[2]	2,000 CF	11,200 CF 700 LF	No	Four sites occurring within existing paved parking lots, 1 site within an existing parking garage
JBA	6	44	2,200 CF	18,250 CF 1,140 LF	Yes[4]	Four sites occurring within existing paved

Location	Total Number of Sites	Proposed Number of EVCF	Total Estimated EVCF Disturbance[1]	Total Estimated Infrastructure Disturbance[3]	Presence of Unique or Prime Farmland Soils	General Soil Site Descriptions
						parking lots, 1 site within an existing gravel parking lot, 1 site within an existing parking garage (3 EVCF)
JBMDL	17	Un-determined[2]	6,800 CF	58,000 CF 3,620 LF	No	All sites within existing paved parking lots
LAAFB	1	13	650 CF	4,000 CF 250 LF	No	Existing paved parking lot
TAFB	6	Un-determined[2]	2,200 CF	20,700 CF 1,290 LF	No	Four existing paved parking lots; 2 newly-constructed parking lots as part of post-Hurricane Michael rebuild efforts
USAFA	4	Un-determined[2]	1,600 CF	15,200 CF 950 LF	No	Three sites occurring within existing paved parking lots, 1 site within an existing parking garage

1. Estimates for total acreage of disturbance are rough estimates including EVCF installation. This assumes 50 cubic feet of disturbance per free-standing EVCF.
2. For sites with an undetermined number of EVCF, area of disturbance was calculated assuming an upper bound average of 8 EVCF per site using JBA as a gauge with an average of 7.3 EVCF proposed over the 6 sites identified.
3. Cubic and linear feet of trenching (for a 4-foot wide by 4-foot deep trench) for all locations based on the distance of the parking lot/garage to the existing electrical grid. This includes exterior trenching through pavement or sidewalk, laying conduit, asphalt/sidewalk repair, landscaping, etc. from the electrical tie-in location to the EVCF.
4. Single site at JBA (Medical Building Garage); surrounding soils are classified as prime farmland.

CF = cubic feet; LF = linear feet; EVCF = Electric Vehicle Charge Facilities; BAB = Joint Base Anacostia-Bolling; JBA = Joint Base Andrews, JBMDL = Joint Base McGuire-Dix-Lakehurst, LAAFB = Los Angeles Air Force Base, TAFB = Tyndall Air Force Base, USAFA = United States Air Force Academy

To minimize impacts to soils during construction, installation-specific BMPs would be implemented to prevent and reduce the potential for erosion and sedimentation. Temporary laydown and storage areas would be located within existing parking or designated laydown areas not requiring additional disturbance. Should ground disturbance at any proposed EVCF location at an installation exceed one acre, a NPDES Stormwater Permit for Construction Activities would be required. Adherence to state and local stormwater regulations, as well as protocols specific to each location, as identified in the installation's SWMP or SWPPPs, would further minimize the potential for erosion and sedimentation. Due to the implementation of BMPs and compliance with all necessary permits, it is anticipated that the implementation of the Proposed Action would result in short-term, minor, adverse impacts to soils.

Operations

Overall impacts to soils from operations would be less than significant. Once constructed, operation of the proposed facilities would not involve ongoing disturbance to soils. All areas disturbed during construction would be revegetated or otherwise stabilized. The existing network of stormwater facilities on-site would be modified if necessary to accommodate new drainage patterns in the vicinity of new facilities. It is anticipated that the addition of EVCF in existing paved

and developed areas would result in negligible increases of stormwater. Impacts to soils from operations would be negligible and would not be anticipated to generate any additional impacts during operations..

3.2.3.2 Cumulative Impacts

Overall cumulative impacts to soils would be less than significant. Implementation of the EVCF Program at all AFB locations would result in negligible to minor and temporary impacts to soils from construction and have no anticipated impacts to soils from operations, regardless of the AFB location or the number of sites being considered for EVCF. Locations proposed for the EVCF Program are associated with developed parking facilities; however, connection and improvements to the existing electrical grid could cause additional disturbances to soils along existing rights of way. Projects identified in Appendix D would not contribute to significant adverse impacts to soils. Most involve interior improvements or would be similar in size and scale to the EVCF analyzed within this PEA and spread throughout the local county.

3.2.3.3 No Action Alternative

No construction or ground disturbing activities would occur under this alternative. Therefore, no specific direct or indirect impacts, either beneficial or adverse, would be expected to soil resources. DAF would not have a programmatic NEPA analysis to tier future placement and operations of EVCF equipment at their AFBs. Installations would conduct independent site-specific NEPA review as EVCF sites are identified to assess impacts to soil resources.

3.3 Noise

3.3.1 Definition of the Resource/Regulatory Setting

Noise is generally defined as unwanted sound. Excessive noise can lead to annoyance and disrupt simple day-to-day activities, especially in areas where occupants are more susceptible to the adverse effects of noise pollution. These areas are referred to as noise-sensitive receptors and include, but are not limited to, residences, schools, daycare facilities, libraries, hospitals, elderly housing, and outdoor recreational areas.

Noise levels are measured in terms of decibels (dB) and are typically adjusted to the "A-weighted" scale (i.e., dBA) to account for the varying sensitivity of the human ear to different frequencies of sound. Table 3.3-1 presents typical sound levels and corresponding human responses. In general, sounds at or below 70 dBA are generally considered safe. The USEPA and the World Health Organization recommend maintaining environmental noises below 70 dBA over 24 hours (75 dBA over 8 hours) to prevent noise-induced hearing loss. Over 2 hours of continuous noise levels between 80 dBA to 85 dBA can lead to damage of hearing (CDC 2022).

Table 3.3-1. Sound Levels and Human Response

Sound Level (dBA)	Effect	Outdoor	Indoor
30	Very quiet	Rustling leaves	Soft whisper (15 feet)
40	Quiet	Quiet residential area	Library
55	Ambient	Rainfall or light auto traffic (100 feet)	Refrigerator
60	Intrusive	Normal Conversation	Air conditioning unit (20 feet)
70	Telephone use difficult	Freeway traffic	Noisy restaurant or TV audio
80	Annoying	Downtown (large city)	Alarm clock (2 feet) or ringing telephone
90	Very annoying; hearing damage (8 hours)	Tractor, bulldozer, excavator	Garbage disposal
100	Very annoying	Garbage truck, motorcycle	Subway train
110	Strained vocal effort	Pile drivers	Power saw at 3 feet
120	Maximum vocal effort	Jet takeoff (200 feet) or auto horn (3 feet)	Rock concert
140	Painfully loud	Carrier deck jet operation	--

Source: USEPA 1981
dba = A-weighted decibel

The standard reduction for a point source noise is 6 dB per doubling of distance from the source. Barriers, both manmade (e.g., sound walls) and natural (e.g., forested areas, hills, etc.), as well as other natural factors, such as temperature and climate, may reduce noise levels. Standard buildings typically provide approximately 10 dB (with windows open) and 20 dB (with windows shut) of noise reduction between exterior and interior noise levels (FHWA 2011).

Table 3.3-2 presents typical construction equipment and corresponding noise levels at different distances. Concurrent operation of some of the equipment listed in Table 3.3-2 could result in a 90 dBA (at 50 feet) sound level. At 500 feet, this combined construction noise level attenuates to 70 dBA outdoors and 60 dBA indoors (with windows open); at 1,000 feet, a 90 dBA (at 50 feet)

sound level would attenuate to 64 dBA outdoors and 54 dBA indoors (with windows open). For purposes of this EA, noise-sensitive receptors at or within 1,000 feet were identified since any receptor within this ROI could potentially experience increased noise levels above 64 dBA, which could be within the threshold where sound levels are considered intrusive and/or annoying.

Table 3.3-2. Estimated Noise Levels from Construction Activities

Equipment	Typical Noise Level at 50 feet (dBA)	Typical Noise Level at 500 feet (dBA)	Typical Noise Level at 1,000 feet (dBA)	Typical Noise Level at 1,500 feet (dBA)
Front Loader	80	60	54	50
Backhoe, excavator	80	60	54	50
Roller	85	65	59	55
Grader	85	65	59	55
Scraper	85	65	59	55
Truck	84	64	58	54
Concrete mixer	85	65	59	55

Source: FTA 2018
dBA = A-weighted decibel

The Noise Control Act of 1972 (42 U.S.C. 4901 et seq.) directs federal agencies to comply with applicable federal, state, interstate, and local noise control regulations. In 1982, the USEPA transferred the primary responsibility of regulating noise to state and local governments. Additionally, under the Noise Control Act, the Occupational Health and Safety Act (OSHA) noise standard (29 CFR 1910.95) establishes workplace standards for noise. The minimum requirement states that constant noise exposure must not exceed 90 dBA over an 8-hour period. The highest allowable sound level to which workers can be constantly exposed is 115 dBA; exposure to this level must not exceed 15 minutes within an 8-hour period. The standards limit instantaneous exposure, such as impact noise, to 140 dBA. If noise levels exceed these standards, employers are required to provide hearing protection equipment that reduces sound levels to acceptable limits (OSHA 2008).

3.3.2 Affected Environment

3.3.2.1 Joint Base Anacostia-Bolling (JBAB)

Primary noise sources that cause elevated noise levels at JBAB include vehicular traffic from Interstate 295, as well as from roadways throughout the base. Additionally, the Reagan Washington National Airport is located immediately across the Potomac River from JBAB and a major flight path goes over the southern end of the base. Two airfields are also located on base. As such, aircraft operations are a major contributor to noise at the installation. Noise-sensitive receptors are generally located in the southern half of JBAB, including family housing units, a medical center, and small area parks (JBAB 2022).

The majority of the proposed EVCF sites are located in the northern portion of the base, between Interstate 295 and an on-base airfield. Noise-sensitive receptors identified at or within 1,000 feet of a proposed EVCF site at the JBAB include housing units located 400 feet southwest of the proposed JBAB Building 1311 (Shopette) site.

3.3.2.2 Andrews (JBA)

Primary noise sources that cause elevated noise levels at JBA include vehicular traffic from within the installation and from major transportation corridors that surround the installation, including Allentown Road and the Capital Beltway (I-95/I-495) along the western boundary and Marlboro Pike on the eastern boundary. Aircraft operations occur at an airfield that occupies a large area in the central eastern portion of the base and contribute to overall ambient noise levels at the base. Noise-sensitive receptors are generally located in the southwest portion of JBA, including family housing units and recreational land uses (JBA 2015).

Noise-sensitive receptors identified at or within 1,000 feet of a proposed EVCF site at the JBA include the following:

- a church located 800 feet east of the JBA CE Escort Vehicle Lot;
- a church adjacent to the southwest boundary of the JBA Jones Building Lot;
- a medical facility adjacent to the JBA Medical Building Garage; and
- a hotel adjacent to, outdoor recreational areas 400 feet south and southeast, and housing units 500 feet south of the JBA SMART Conference Building.

3.3.2.3 Joint Base McGuire Dix Lakehurst (JBMDL)

Primary noise sources that cause elevated noise levels at JBMDL include vehicular traffic from on-base roadways, aircraft operations from the McGuire airfield, and military training operations. Because of aircraft and training activities at the base, JBMDL publishes a monthly noise calendar at the beginning of each month to warn neighbors around the base of upcoming “noisy” events (TAPinto 2023). Noise-sensitive receptors generally include housing areas located southwest and northeast of the McGuire airfield and south and east of the Lakehurst airfield.

Noise-sensitive receptors identified at or within 1,000 feet of a proposed EVCF site at the JBMDL include the following:

- a childcare facility is located approximately 700 feet northeast of the JBMDL Outside Hobby Shop;
- outdoor recreational areas adjacent to the JBMDL Contingency Response Wing;
- residential and outdoor recreational areas and a library adjacent to the JBMDL Library/Dorms/Dining parking lot;
- housing units located approximately 800 feet northwest of the JBMDL Air Base Wing HQ
- a medical facility adjacent to the JBMDL Medical Group;
- military housing facility adjacent to the JBMDL Fleet Readiness Training Center; and
- an outdoor recreational area adjacent to and dormitories located 500 feet east of the JBMDL LRS Yard.

3.3.2.4 Los Angeles Air Force Base (LAAFB)

The proposed EVCF site at the LAAFB is surrounded by a densely developed area where vehicular traffic and aircraft operations are the primary noise sources.

Noise-sensitive receptors identified at or within 1,000 feet of the proposed EVCF site at the LAAFB include a childcare facility located adjacent to the southern boundary and residential areas located 600 feet east of the proposed site.

3.3.2.5 Tyndall Air Force Base (TAFB)

Primary noise sources that cause elevated noise levels at TAFB include vehicular traffic from on-base roadways and a major transportation corridor (U.S. Highway 98) and from substantial aircraft operations and training at the airfield. Residential land uses are located on the mainland north and west of TAFB.

There are no noise-sensitive receptors identified at or within 1,000 feet of a proposed EVCF site at the TAFB.

3.3.2.6 U.S. Air Force Academy (USAFA)

Primary noise sources that cause elevated noise levels at USAFA include vehicular traffic from on-base roadways and aircraft operations from the Davis airfield. Urban development from Colorado Springs is located adjacent to USAFA's eastern boundary, and existing and proposed residential developments are located in proximity to the north and south boundaries of the installation; therefore, the ambient noise environment surrounding the northern, eastern, and southern perimeter of the base is generally a result of vehicular traffic on Interstate 25 and surrounding roadways and from the David airfield. Noise-sensitive receptors at the USAFA are generally located in the central portion of the installation.

Noise-sensitive receptors identified at or within 1,000 feet of a proposed EVCF site at the USAFA include a library adjacent to the USAFA Fairchild Garage/Service Road site and a medical facility that is adjacent to the USAFA Medical Clinic site.

3.3.3 Environmental Consequences

A noise impact would be significant if it would cause harm or injury to receptors, including on-site workers and nearby communities or substantially affect normal operations of noise-sensitive receptors during construction or operation of the Proposed Action.

3.3.3.1 Proposed Action

Construction

Overall impacts to the noise environment from construction would be less than significant. Construction of the Proposed Action would result in intermittent increases in ambient noise levels in the vicinity of the proposed EVCF sites on a temporary basis, occurring over a few weeks, for all proposed EVCF AFB locations. As discussed in Section 2.1.2, construction activities would include, but are not limited to, land clearing, excavating, grading, and trenching or boring. These noise-generating activities would involve the use of heavy construction equipment similar to those occurring under standard building construction activities as listed in Table 3.3-2. Vehicles from commuting construction workers and truck transport of materials, equipment, and wastes would also intermittently increase ambient noise levels at the project sites and along major transportation routes.

Although noise levels would be loud in the immediate vicinity of a construction site, the intermittent nature of peak construction noise levels would not be expected to result in unsafe noise conditions. Adverse noise impacts would be minimized to the extent possible by standard noise control measures, such as project scheduling (e.g., limiting loud construction activities to standard working hours and within a typical 8-hour workday). OSHA regulations (e.g., wearing hearing protection and limiting exposure) would be followed to reduce the impact of noise on construction workers. The majority of proposed EVCF sites would not be located near noise-sensitive receptors (i.e., at/within 1,000 feet of a proposed site). Because distance rapidly attenuates noise levels, any potential receptors generally beyond 1,000 feet of a project site would experience

negligible increases in ambient noise conditions and would not be substantially different to some of the noise levels caused by the aircraft operations.

Although there are no established federal or state-wide regulations that limit overall environmental noise levels or specify thresholds for determining what constitutes a "substantial increase" in noise, for purposes of this EA, the following thresholds were used to determine the levels of impact construction noise would have on noise-sensitive receptors within a 1,000-foot distance of a proposed EVCF site (based on an overall construction noise level of 90 dBA at 50 feet):

- Receptors located between 1,000 feet and 500 feet would likely experience outdoor noise levels between 64 dBA and 70 dBA or indoor noise levels between 54 dBA and 60 dBA. At these noise levels, noise impacts would be considered minor;
- Receptors located within 500 feet would likely experience outdoor noise levels of 70 dBA or greater or indoor noise levels 60 dBA or greater (maximum noise levels would be approximately 90 dBA in the immediate vicinity of the sound source). At these noise levels, the noise impacts would be considered moderate and could require additional noise-reducing measures to minimize impacts.

These thresholds were developed considering recommendations made by health organizations and agencies for maintaining environmental noise levels below 70 dBA over 24 hours (and 75 dBA over 8 hours) and limiting continuous noise levels between 80 dBA to 85 dBA to 2 hours to prevent hearing damage. Additionally, a 10-dBA reduction in noise level for indoor noise of standard buildings (with windows open) was also considered.

Table 3.3-3 summarizes the proposed EVCF sites that include noise-sensitive receptors within a 500-foot ROI.

Table 3.3-3. Level of Impact During Construction On Noise-Sensitive Receptors At/Within 1,000 Feet of a Proposed EVCF Site

Proposed EVCF Site	Receptor	Distance	Level of Noise Impact
Joint Base Anacostia-Bolling (JBAB)			
Building 1311 (Shopette)	housing units	400 feet	Moderate
Joint Base Andrews (JBA)			
CE Escort Vehicle Lot	church	800 feet	Minor
Jones Building Lot	church	adjacent to proposed site	Moderate
Medical Building Garage	medical facility	adjacent to proposed site	Moderate
SMART Conference Building	hotel	adjacent to proposed site	Moderate
SMART Conference Building	outdoor recreational areas	400 feet	Moderate
SMART Conference Building	housing units	500 feet	Minor
Joint Base McGuire Dix Lakehurst (JBMDL)			
Outside Hobby Shop	childcare facility	700 feet	Minor
Contingency Response Wing	outdoor recreational areas	adjacent to proposed site	Moderate
Library/Dorms/Dining parking lot	residential areas	adjacent to proposed site	Moderate

Library/Dorms/Dining parking lot	outdoor recreational areas	adjacent to proposed site	Moderate
Library/Dorms/Dining parking lot	library	adjacent to proposed site	Moderate
Air Base Wing HQ	housing units	800 feet	Minor
Medical Group	medical facility	adjacent to proposed site	Moderate
Fleet Readiness Training Center	military housing facility	adjacent to proposed site	Moderate
LARS Yard	outdoor recreational area	adjacent to proposed site	Moderate
LARS Yard	dormitories	300 feet	Moderate
Los Angeles Air Force Base (LAAFB)			
Proposed EVCF site	childcare facility	adjacent to proposed site	Moderate
Proposed EVCF site	residential areas	600 feet	Minor
U.S. Air Force Academy (USAFA)			
Fairchild Garage/Service Road	library	adjacent to proposed site	Moderate
Medical Clinic	medical facility	adjacent to proposed site	Moderate

Note: TAFB did not have any noise sensitive receptors identified in proximity to the proposed EVCF sites.
EV = electric vehicle; JBA = Joint Base Andrews; JBAB = Joint Base Anacostia-Bolling; JBMDL = Joint Base McGuire-Dix-Lakehurst; HQ = Headquarters; LAAFB = Los Angeles Air Force Base; LRS = Logistics Readiness Center; TAFB = Tyndall Air Force Base; USAFA = United States Air Force Academy

The receptors presented in Table 3.3-3 would likely detect construction noise and may experience annoyance/disturbance due to its proximity to a construction site. The increases in noise levels would be incremental and temporary, occurring only during the few weeks of construction. As necessary, to minimize noise impacts to sensitive receptors, DAF would consider implementing additional BMPs at these sites, such as modifying construction schedule and work hours, and requiring contractors to utilize equipment installed with sound reduction features, such as shrouds, covers, and mufflers. As such, adverse noise impacts from construction at these locations would be considered short-term and minor to moderate.

Overall, construction activities associated with the Proposed Action are expected to result in short-term, negligible to moderate, adverse noise impacts under the Proposed Action.

Operation

Overall impacts to the noise environment from operations would be less than significant. Use of an EVCF may result in some noise in the immediate vicinity of the station resulting from a vehicle's cooling system (e.g., battery fan or coolant flow) and/or from the expansion of the vehicle's battery. The charging station may also generate some noise resulting from its cooling system and/or from the flow of a high-voltage current (FindingEV 2022). These noise levels would be low-level and would not result in any detectable increases in noise at any noise-sensitive receptors during operation of the Proposed Action. Therefore, adverse noise impacts would be negligible.

3.3.3.2 Cumulative Impacts

Overall cumulative impacts to the noise environment would be less than significant. Implementation of the EVCF Program at all AFB locations would result in negligible to moderate short-term (a few weeks duration) impacts to the noise environment from construction and have negligible anticipated impacts to noise from operations, regardless of the AFB location or the number of sites being considered for EVCF. Projects identified in Appendix D would not contribute

to significant adverse impacts to the noise environment. Most involve interior improvements or would be similar in size and scale to the EVCF analyzed within this PEA. Cumulatively, the conversion of gas-powered vehicles to EVs could benefit the regional noise environment at the respective AFBs as local governments are planning and pushing incentives for quieter EVs.

3.3.3.3 No Action

Under the No Action Alternative, the construction and operation of new EVCF would not occur and, therefore, no impacts to the ambient noise conditions would occur.

3.4 Utilities and Infrastructure

3.4.1 Definition of the Resource/Regulatory Setting

Infrastructure consists of the buildings, facilities, other permanent structures (e.g. airfields, port installations), and utilities necessary to support the mission of each individual base. Utilities critical to the success of these bases include electrical, HVAC, communication, water, wastewater, stormwater, natural gas, and fuel infrastructure and their associated equipment. For the purposes of this analysis, this section focuses solely on the impact of the Proposed Action on each installation's electrical utility infrastructure; other utility infrastructure (e.g. water, HVAC, wastewater, etc.) would have negligible impacts as a result of the Proposed Action.

3.4.2 Affected Environment

3.4.2.1 Joint Base Anacostia-Bolling (JBAB)

Electrical service to JBAB is provided by Potomac Electric Power Company (PEPCO). Due to the base's consolidation history, there are two separate microgrids that distribute power throughout JBAB – one supporting Naval Support Facility Anacostia (NSF) and one supporting Bolling Air Force Base (BAFB). Electrical infrastructure for both microgrids has mainly been installed underground.

3.4.2.2 Joint Base Andrews (JBA)

Electrical service to JBA is provided by PEPCO. The company provides power to JBA's primary substation, which is owned and operated by the base, and is distributed throughout the base from there. Most of the electrical infrastructure at JBA has been converted from overhead power lines to underground distribution lines.

3.4.2.3 Joint Base McGuire-Dix-Lakehurst (JBMDL)

JBMDL has two different types of electrical utility infrastructure due to the base's consolidation history. Electrical service throughout the Dix and Lakehurst areas of JBMDL are provided and maintained by a private electric utility, Jersey Central Power & Light Company (JCP&L), while the infrastructure provided throughout the McGuire area is government owned and maintained. Electrical infrastructure in both the Lakehurst and McGuire areas runs underground, while electricity throughout Dix is routed via aerial utility lines.

3.4.2.4 Los Angeles Air Force Base (LAAFB)

Electrical service to LAAFB is provided by Southern California Edison (SCE), who owns and maintains the electrical distribution infrastructure throughout the base. The location of the Proposed Action already has extensive infrastructure to support additional charging stations, as the base has installed additional concrete pads, conduit, and electrical capacity (i.e., make-ready work) as part of an effort to 'future-proof' the base for additional charging stations.

3.4.2.5 Tyndall Air Force Base (TAFB)

Electrical service to TAFB is provided by Gulf Coast Electrical Cooperative, who owns and maintains the electrical distribution infrastructure throughout the base. Electrical power at TAFB prior to Hurricane Michael was distributed via overhead electrical lines on utility poles. These overhead distribution lines are currently in the process of being converted to underground lines to make this infrastructure more resilient in the event of future storms.

3.4.2.6 United States Air Force Academy (USAFA)

Electrical service to USAFA is provided by Colorado Springs Utility, which also owns and maintains the electrical distribution infrastructure throughout the base. 12.5 and 34.5 kV electrical power is distributed throughout the base via underground electrical lines from a substation off of Air Academy West.

3.4.3 Environmental Consequences

An impact to electrical utility infrastructure would be significant if the Proposed Action causes a strain on existing electric demand and usage within the installation or major disruption to service. A strain on electric demand/usage typically occurs when a facility's existing electrical infrastructure has minimal additional electrical capacity, and a new load (e.g., new equipment) is added to the system. This new energy demand can overwhelm the available electric supply, especially if this equipment is all running simultaneously, and cause brownouts or blackouts.

Overall impacts to electrical utility infrastructure would be less than significant. Anticipated impacts are further discussed below. DAF anticipates there would be minor, localized, short-term impacts on the electrical infrastructure of the six bases detailed as a result of construction activities associated with installing the equipment outlined in the Proposed Action. These impacts would consist of temporary interruptions in electrical utility service at locations where the Proposed Action is due to be installed while the equipment is being tied into existing infrastructure. Construction activities would be coordinated in advance of starting construction with consumers to schedule interruptions in a manner that reduces the disturbance of daily activities as much as is feasible. Figures 2-2a through 2-7d in Chapter 2 provide the general locations for the proposed EVCF as part of the Pilot Program analyzed within this EA. They include proximity to existing electrical infrastructure to roughly gauge electric utility distance tie-in requirements.

As noted in Chapter 2, the extent of EVCF installation at the selected locations within pilot bases is currently not known. Load studies and other associated infrastructure analysis of the existing electrical infrastructure at each location would be done prior to construction to fully understand the impacts of EVCF at a specific location. Based on the load study results, new utility service (i.e., where the electrical utility provider would upgrade exterior transformers or provide a new pole-mounted transformer) may be required to provide sufficient power to ensure that the additional electrical load would cause no adverse impacts to the existing service from operations of the EVCF. For all AFB locations, a new electrical utility meter shall be installed to track electricity usage for billing purposes during operations of the EVCF, particularly if the charging infrastructure is provided by a third-party. This would assist each AFB energy manager to track energy usage at each site. Each AFB may also issue radio-frequency identification cards (similar to gas cards) to keep track of which tenants/mission partners are using the equipment for tracking EVCF users.

With these improvements, negligible impacts are anticipated from operations of the EVCF. The sections below focus on potential construction requirements at each AFB location for EVCF installment.

3.4.3.1 Joint Base Anacostia-Bolling (JBAB)

Overall impacts to the electrical utility infrastructure would be minor, localized, and short-term. Electrical capacity across both microgrids at JBAB is very limited, therefore, it is likely the existing electrical service for each of the Proposed Action locations at JBAB would require upgrades. This upgrade work would be done in collaboration with PEPCO; new utility service requests would be submitted to PEPCO to confirm the existing load of each intended electrical connection point. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

For all proposed EVCF sites, most of the electrical infrastructure needed as part of the Proposed Action at JBAB would be buried underground with the exception of utility meters or transformers. Electrical infrastructure would be routed through existing rights of way consisting of road and parking lot shoulders and landscaped areas. Pockets of the base are built on top of old airfield runways; however, it is not presumed that the construction activities would go deep enough to disturb these pockets of pavement, if present.

3.4.3.2 Joint Base Andrews (JBA)

The required electrical infrastructure for the proposed six EVCF sites would be connected to the nearest electrical utility point. A load analysis would be conducted on the intended electrical tie-in points, regardless of the level of charge to ensure appropriate capacity exists and to prevent the stations from being connected to critical and/or emergency equipment.

Given the level of existing infrastructure at each of the proposed EVCF locations, construction and placement of the EVCF would cause minimal disturbance, as electrical tie-in locations are within a short distance (less than 250 feet) from potential charging station locations. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

3.4.3.3 Joint Base McGuire-Dix-Lakehurst (JBMDL)

To support the Proposed Action at JBMDL, locations within the Lakehurst and Dix areas of the base would request a new utility service from JCP&L to distribute the necessary power to the proposed charging stations. All connections would be made in accordance with JCP&L requirements. Proposed EVCF installation at each of the proposed 17 locations would utilize the nearest electrical connection point. It is anticipated there would be minimal construction impact as the electrical utility tie-in locations at each of the proposed EVCF sites are within close proximity to the existing parking spaces. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

A load analysis would be conducted on the intended electrical tie-in points, regardless of the level of charge to ensure there is sufficient capacity at these locations and to prevent the stations from being connected to critical and/or emergency equipment. For all proposed EVCF sites, most of the electrical infrastructure needed as part of the Proposed Action would be buried underground with the exception of utility meters or transformers.

3.4.3.4 Los Angeles Air Force Base (LAAFB)

The Proposed Action location at LAAFB already has extensive existing infrastructure to support additional charging stations including additional concrete pads, conduit, and electrical capacity (i.e., make-ready work) as part of an effort to ‘future-proof’ the base for additional charging stations. Therefore, a service request from SCE to provide additional power to support the proposed EVCF site would not be required because of the existing electrical infrastructure available at the proposed site. Additionally, minimal construction impacts would occur as the

electrical utility tie-in location is in close proximity to the existing parking spaces. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

3.4.3.5 Tyndall Air Force Base (TAFB)

EVCF construction and installation at TAFB would utilize electrical tie-in points nearest to the proposed EVCF site, and the electrical infrastructure needed to energize the proposed charging stations would be buried underground, with the exception of new utility meters and/or transformers (if needed).

To support the Proposed Action at TAFB, a new electrical service request would be initiated at each location to ensure sufficient capacity exists at the intended electrical tie-in location to power the proposed charging stations. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

Additionally, as the base is currently undergoing a massive MILCON rebuild and work post-Hurricane Michael, it is anticipated the construction impact of the Proposed Action would be negligible, as work is not anticipated to disturb any newly finished parking, hardscaped or landscaped areas.

3.4.3.6 United States Air Force Academy (USAFA)

Most of the electrical infrastructure needed as part of the Proposed Action at the USAFA would be buried underground, with the exception of new utility meters and/or transformers at proposed EVCF sites. To support the Proposed Action at USAFA, a new electrical service request would be initiated at each location to ensure there is sufficient capacity distribute power from the existing infrastructure to the proposed charging stations.

Minimal construction disturbance would occur for required electrical utility tie-in locations as they are in close proximity to the EVCF sites. Temporary interruptions in electrical utility service could occur at locations where the EVCF is due to be installed while the equipment is being tied into existing infrastructure.

3.4.3.7 Cumulative Impacts

Overall cumulative impacts to electrical utility infrastructure would be less than significant. Implementation of the EVCF Program at all AFB locations would result in minor, localized and temporary impacts to the electric utilities from construction and have negligible impacts to electric supply from operations, regardless of the AFB location or the number of sites being considered for EVCF. Projects identified in Appendix D would not contribute to significant adverse impacts to utilities. Most involve interior improvements or would be similar in size and scale to the EVCF analyzed within this PEA. Additionally regional planning studies are identifying potential constraints to the existing electrical grid in anticipation of EV infrastructure and increased amounts of EVs within the respective AFB county. These efforts would serve to reduce overall adverse cumulative effects as more EVCF projects are realized.

3.4.3.8 No Action

Under the No Action Alternative, the construction and operation of new EVCF would not occur and, therefore, no impacts to utilities and infrastructure would occur. DAF would not have a programmatic NEPA analysis to tier future placement and operations of EVCF equipment at their AFBs. Installations would conduct independent site-specific NEPA review as EVCF sites are identified to assess impacts to the noise environment.

3.5 Hazardous Materials and Waste

3.5.1 Definition of the Resource/Regulatory Setting

Hazardous materials (HAZMAT) refer to substances that pose a potential risk to health, safety, or property if they are released. They can be found in many forms including gases, liquids, solids, and contained gases. These materials are often used in industrial processes or are the byproducts of such processes.

Hazardous waste is a waste that makes it dangerous or capable of having a harmful effect on human health or the environment. Hazardous waste is often a byproduct of various industrial processes or could come from discarded commercial products like cleaning fluids or pesticides.

The handling, transport, and disposal of HAZMAT and waste are governed by several federal, state, and local regulations aimed at protecting the health and safety of workers, the public, and the environment. This includes the Resource Conservation and Recovery Act (RCRA), which mandates proper disposal of hazardous waste, and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which provides for liability, compensation, cleanup, and emergency response for hazardous substances released into the environment. Additional relevant regulations include OSHA standards on hazardous waste operations and emergency response and relevant state and local environmental and health codes. Installations would also be required to comply with all DoD, Air Force and Space Force Regulations, Instructions, and Manuals related to HAZMAT in Table 1-2 (AFI 32-7001, AFI 32-7020, AFMAN 32-7002, SWP 32-1002, 30 SWP 32-7044, 30 SWP 32-7042, 30 SWP 32-7043A, 30 SWP 32-7043E, and 30 SWP 32-7080).

AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*, defines HAZMAT as: all items covered under the Emergency Planning and Community Right to Know Act or other applicable federal, state, local, or final governing standards (Overseas Environmental Baseline Guide Document where no final governing standards exist) tracking or reporting requirements; covered under 29 CFR [Section] 1910.1200 or 29 CFR [Section] 1910.1450; Class I or Class II ODS. The term HAZMAT, as used in this AFMAN, excludes: Munitions, as defined by AFMAN 21-200, *Munitions and Missile Maintenance Management*; pharmaceuticals managed by an installation pharmacy or formulary; radioactive materials, as defined in and managed in accordance with AFMAN 40-201; and [hazardous waste].

3.5.2 Affected Environment

3.5.2.1 Joint Base Anacostia-Bolling (JBAB)

Various HAZMAT, including organic solvents, chlorine, Freon, paints, thinners, oils, lubricants, compressed gases, pesticides, herbicides, nitrates, chromates, stripping substances, waste oils, paint-derived waste, and assorted other waste types are utilized or stored within the JBAB base. To ascertain the presence of potentially HAZMAT and to confirm the approval of organizations for specific material usage, an intricate tracking and accounting system known as the Air Force Enterprise Environmental, Safety, and Occupational Health Management Information System is in operation.

JBAB is home to several Initial Accumulation Points for hazardous waste. The principal hazardous waste facility, which is permitted for 90-day storage, is securely located within JBAB. The two 90-day storage facilities at JBAB are housed in Building 41 and 121/122. Wastes from the peripheral Installation Action Plans are collected and transported to the central storage facility by contractors supporting the 11 CES Environmental Element staff. The Defense Logistics Agency oversees the final management of hazardous wastes.

Waste oil and spent cooking oil are gathered at numerous sites across the base and are periodically removed by an external contractor for recycling. Other wastes such as spent antifreeze, tires, batteries, and fluorescent bulbs are also removed by external contractors for recycling or appropriate disposal (USAF 2021).

Data collected through investigations of numerous IRP sites on JBAB reveals the presence of elevated metal concentrations in both the soil and groundwater. These elevated concentrations are common throughout JBAB and are considered localized conditions. These include but are not limited to aluminum, arsenic, barium, beryllium, cadmium, cobalt, iron, and manganese (USAF 2023a).

EVCF Sites

As part of the PEA effort, DAF screened each proposed EVCF location to determine whether there is potential for contamination. This resulted in the identification of one proposed EVCF site at JBAB, the Building 1311 Shopette, for which DAF determined an EBS was warranted to further investigate and characterize contamination potential. Building 1311 – Shopette – was evaluated in an EBS that determined that the surveyed site at JBAB exhibits several environmental concerns. The proposed EVCF site is primarily used as a parking area and for vehicle movement, with a duration of use that extends to approximately 30 years. In general, minor leaks of automotive fluid from parked and moving vehicles are common, potentially impacting the shallow soil below the asphalt parking surface (USAF 2023a).

One notable element is the former waste oil underground storage tank (UST) that was removed from the site in December 1998/January 1999. This tank was deemed in good condition, and subsequent testing revealed the presence of toluene and xylenes in soil samples at levels below applicable regulatory concentrations (USAF 2023a).

The site currently houses four 12,000-gallon gasoline USTs associated with the gas station. While these USTs are not known to have resulted in contamination, their presence introduces the potential for subsurface contamination that could create volatile vapors beneath the surface (USAF 2023a).

In addition to this, an unidentified feature resembling a fill or access port was found on the east side of the building. Its purpose or associated system is currently unknown, and it could potentially be linked to a current or former UST, oil/water separator, or another environmental concern (USAF 2023a).

Given the proposed EVCF site's previous use as part of an airfield, there exists a potential for the presence of perfluorooctanoic acid and perfluorooctane sulfonate, which are constituents of aqueous film-forming foam and other fire suppressants commonly used at airfields. These substances are part of a larger group of lab-made chemicals known as perfluoroalkyl and polyfluoroalkyl substances (PFAS), which may have residual presence on the site (USAF 2023a).

3.5.2.2 Joint Base Andrews (JBA)

The Environmental Restoration Program (ERP) at JBA addresses the remediation of contamination and damage resulting from past DoD activities. The program focuses on areas of the base where historical methods of hazardous waste disposal have contaminated surface waters, groundwater, and soils. In 1999, JBA was listed on the National Priorities List and, as of 2016, 153.7 acres of the base have been identified in various stages of study and remediation at 60 ERP sites (USAF 2018).

In addition to managing HAZMAT such as pesticides, herbicides, solvents, petroleum, oils, lubricants, paints, and deicing fluids, JBA operates a HAZMAT Pharmacy Program. This program allows for the reuse of partially used HAZMAT, particularly for those requiring only small

quantities. Due to the operation of a large airfield and the associated acquisition, use, and disposal of HAZMAT, JBA is classified by the USEPA as a Large Quantity Generator. This designation necessitates a bi-annual report to the USEPA on the HAZMAT generated at the base (USAF 2018).

The ongoing cleanup of past contamination is managed under CERCLA guidance through the ERP, which seeks to identify, assess, investigate, and clean up existing contamination on the base. The ERP is currently addressing 60 sites located at JBA, with cleanup efforts encompassing numerous individual sites both on and off the base.

EVCF Sites

DAF screening of the proposed EVCF sites for contamination potential resulted in the evaluation of two proposed EVCF sites in an EBS - the LRS Lot and CE Yard Lot. Both sites present environmental concerns due to their history and current status:

- The **LRS Lot** is positioned within the former location of Storage Tank 08 (ST-08), which was once a military gas station on JBA. Numerous investigations since 1985 revealed soil and groundwater contamination due to gasoline releases during the 1970s. The primary contaminants at ST-08 include benzene, ethylbenzene, toluene, total xylenes, and naphthalene, as well as diesel-range and gasoline-range organics (USAF 2023b).

  Parts of the LRS Lot also intersect with Solid Waste Management Unit 12 (SWMU-12), which was identified in 1988 as a result of a leaking underground storage tank. The primary contaminants at SWMU-12 include chlorinated compounds trichloroethene and 1,1,2,2-tetrachloroethane, along with several additional volatile organic compounds (VOCs) (USAF 2023b).

- The **CE Yard Lot** is situated within the ERP site ST-14 at JBA. This site was initially identified due to gasoline leaks from USTs and distribution lines at the Former East Side Gas Station (Building 3487). Subsequent investigations revealed the presence of VOCs in groundwater and a 54-acre groundwater trichloroethylene plume in the shallow aquifer. Additionally, a separate gasoline-related plume is associated with the former gas station. An area for storing old and new electrical transformers, many of which contain oil that could potentially contain polychlorinated biphenyls (PCBs), was also observed within the CE Yard Lot (USAF 2023b).

In addition, the potential exists for PFAS chemicals to be present in soil at these or any sites at JBA due to the extensive historical use of the installation as an airfield. PFAS was used extensively in aqueous film-forming foam (AFFF) and other fire suppression/fire retardant systems for aircraft. PFAS releases were common historically as AFFF and other chemicals were used for fire training, used for actual fires, and spilled as part of accidental releases.

3.5.2.3 Joint Base McGuire-Dix-Lakehurst (JBMDL)

JBMDL is actively involved in the transportation, handling, and storage of various fuels and hazardous substances, including jet fuels, fuel oils, diesel fuel, gasoline, and waste oil. These activities form a critical part of its military mission and facility support operations. To minimize the potential environmental impact, the installation is currently implementing strategies to reduce and consolidate all storage capacity and usage needs.

Most of the storage tanks at JBMDL are aboveground storage tanks (AST) that are either double-walled or housed within secondary containment dikes for added protection. Detailed information regarding the storage and handling of oils and hazardous substances is provided in the installation's Discharge Prevention, Containment and Countermeasures and Discharge Cleanup

and Removal Plans (DPCC/DCR), the Spill Prevention, Containment and Countermeasure Plan (SPCCP), and the Integrated Contingency Plan (USAF 2021a).

EVCF Sites

The following EVCF sites were identified by DAF screening for contamination potential in an EBS or their inclusion within the footprints of IRP sites. The sites present environmental concerns due to their history and current status (USAF 2023b).

- **1907: Contingency Response Wing** – Prop 3 (McGuire). The site known as CF011 within the Contingency Response Wing encompasses Buildings 1907, 1908, and 1909, which had contaminated soils discovered in Building 1907 in 1995 and subsequent detection of groundwater contaminants.

  An Interim Remedial Action was undertaken in 2013 to mitigate three identified hotspots of contamination. However, the complete removal of one hotspot was prevented due to the proximity of a gas line. Building 1907 (also designated as DP501) was specifically problematic due to the existence of a dry well. The design of this dry well allowed the potential for chemicals and petroleum products to be discharged into it via floor drains in the mechanical room.

  Despite these environmental concerns, DP501 achieved site closure in December 2017, having met the required environmental standards. The contaminants of concern at CF011 include VOCs, Semi-Volatile Organic Compounds (SVOCs), metals, and Polycyclic Aromatic Hydrocarbons (PAHs). These contaminants have been identified in both groundwater and subsurface soil below two feet.

  The management strategy for CF011 includes Land Use Controls for soil deeper than two feet below ground surface and Monitored Natural Attenuation for groundwater. This area's groundwater is part of the McGuire Base-wide Classification Exception Area, which restricts groundwater usage for nearly all purposes due to contamination. Groundwater at DP501 has been administratively transferred to CF011.

- **305th Passenger Terminal Flight Parking Area – Prop 5 (McGuire).** The SS032 and SS033 sites in the Passenger Terminal Flight Parking Area present different environmental challenges. SS032 is characterized by large diameter storm sewer pipelines, former stream beds, and hydrant crossing lines. These structures, along with the backfill material, traverse various landscapes, including an aircraft parking apron, interspersed green areas between buildings and parking lots, a golf course, and wetland and surface water locations near South Run and one of its tributaries. This diverse geographical coverage poses potential risks to the environment. Contaminants of concern at this site include metals, VOCs, and pesticides found in groundwater. The presence of these contaminants demands careful monitoring and management to minimize the impact on the surrounding ecosystem, especially given the proximity of sensitive wetland areas and surface water. Proposed EVCF activities would occur in existing developed areas avoiding sensitive wetland and surface water resources.

  SS033 comprises Buildings 1750 and 1751, which are primarily used as heavy equipment repair shops and a warehouse for aerial drop cargo. The activities carried out in these buildings, including repair and maintenance, have resulted in small spills over time. Contaminants of concern here include VOCs, SVOCs, and metals, primarily detected in groundwater.

- **3104 CE Water Shop – Prop 1 (McGuire).** The SS036 site at the 3104 CE Water Shop consists of the 2300 and 3200 series buildings. These facilities serve as heavy equipment

repair shops and warehouses for aerial drop cargo. Given the nature of activities carried out here, including equipment repair and maintenance, there have been instances of minor spills, which present environmental concerns. The primary contaminants of concern at this site include VOCs, SVOCs, and various metals, predominantly detected in groundwater. The presence of these contaminants could potentially affect the quality of the groundwater, and if left unmitigated, could lead to further environmental issues.

- **Outside Hobby Shop – Ex-2 (McGuire)**. The SS037 site generated waste oils, waste antifreeze, spent absorbents, and rags. An oil/water separator connected to the building's floor drains was removed in 2000 along with an associated waste oil tank in poor condition. The primary contaminants of concern were metals in groundwater. No vapor intrusion or soil concerns were identified at this site.
- **305th AMW HQ – Prop 6 (McGuire)**. IRP site TU023 Pumphouse B, Building 1707 had six 25,000-gallon USTs containing JP fuel that were removed in 1999. The contaminants of concern were VOCs, SVOCs, metals, and PAHs in groundwater and subsurface soil below 2 feet. The site received a No Further Action determination on November 19, 2020, indicating the contamination concerns have been addressed and are currently under control.
- **CE Yard – Prop 7 (McGuire).** Site SS042, demolished in 2013, previously facilitated the transfer of natural gas and fuel oil via underground pipelines. Wastes generated included waste oils, spent absorbents, coal, and coal ash. There is potential for mercury release from weathering. Contaminants of concern were PCBs, SVOCs, and metals in groundwater. There were no vapor intrusion or soil concerns identified for this site.
- **Parking Lot (between Engineering Personnel and Guard Support Compound) – Prop 20 (Dix)**. Site SS039 was associated with the usage of toluene, PD-680, diesel fuel, oils, antifreeze, and hydraulic fluids during aircraft maintenance and repair, including oil/water separators associated with all buildings. The contaminants of concern were metals in groundwater. No vapor intrusion or soil concerns were identified at this location.

In addition, the potential exists for PFAS chemicals to be present in soil at these or any sites at JBMDL due to the extensive historical use of the installation as an airfield. PFAS was used extensively in AFFF and other fire suppression/fire retardant systems for aircraft. PFAS releases were common historically as AFFF and other chemicals were used for fire training, used for actual fires, and spilled as part of accidental releases.

3.5.2.4 Los Angeles Air Force Base (LAAFB)

Building 229 is the largest producer of hazardous waste at LAAFB. Hazardous waste is subsequently transferred to Building 290 for processing. The waste produced mainly consists of cartridges, fluorescent tubes, and batteries, indicating a range of types of HAZMAT handled within the installation.

LAAFB, along with Fort MacArthur, are classified as large-quantity generators of hazardous waste, although this status is attained only three to four times per annum. Hazardous waste production is cyclical nature at these installations, peaking during specific periods each year (USAF 2017). LAAFB's IRP is designed to protect human health and ensure natural resources are restored for future use. Since implementation in 1988, 41 managed sites have been remediated, and the sites have been closed without posing constraints to new development. Any ground disturbance on the remediated sites goes through review and approval by the LAAFB Environmental Office prior to any digging. (USAF 2017).

EVCF Sites

DAF performed an initial screening of the single proposed EVCF site at LAAFB. The proposed site is an existing EV lot that is not part of LAAFB's IRP. LAAFB also confirmed that the areas surrounding the proposed site are all developed, and past development projects have not identified or encountered any contamination. LAAFB recently removed a 500-gallon biodiesel AST nearby that was in good condition with no leaks, holes, or identified contamination. As a result, DAF did not perform an EBS at this location.

However, the potential exists for PFAS chemicals to be present in soil at this or any site at LAAFB due to the extensive historical use of the installation as an airfield. PFAS was used extensively in AFFF and other fire suppression/fire retardant systems for aircraft. PFAS releases were common historically as AFFF and other chemicals were used for fire training, used for actual fires, and spilled as part of accidental releases.

3.5.2.5 Tyndall Air Force Base (TAFB)

This installation's hazardous waste program provides comprehensive guidance for waste identification, storage, transportation, disposal, landfill operations, and underground storage tanks. In compliance with the RCRA and its amendments, TAFB, like all DAF installations, adheres to USEPA guidelines for hazardous waste handling. These guidelines include the progressive phasing out of hazardous waste disposal on land (USAF 2015).

EVCF Sites

DAF screening of the proposed EVCF sites for contamination potential resulted in the evaluation of one proposed EVCF site in an EBS - the Evaluation Group/8500 Area. This site presents environmental concerns due to its history and current status.

- The surveyed proposed EVCF site **Weapons Evaluation Group/8500 Area** property lies within OU 21/SR169, known as Jeep Range, which is a part of the ERP. This 1,594-acre munitions response area (MRA) was operational from April 1942 to December 1945, comprising 12 individual training ranges. Range Number 5 was located approximately 400 feet south-southwest of the surveyed property.

  The Jeep Range is known to have metals contamination in both surface and subsurface soils. The contamination primarily consists of lead, but also includes copper, antimony, and other metals. In addition to metals, soil contamination from propellant residue, mainly consisting of 2,4-dinitrotoluene (2,4-DNT), is also present in certain areas of the Jeep Range. The potential presence of metals and/or 2,4-DNT contamination in the soil at the site implies a risk that contaminated soil will be encountered during construction activities. This presents a potential exposure concern for construction workers.

In addition, the potential exists for PFAS chemicals to be present in soil at these or any sites at TAFB due to the extensive historical use of the installation as an airfield. PFAS was used extensively in AFFF and other fire suppression/fire retardant systems for aircraft. PFAS releases were common historically as AFFF and other chemicals were used for fire training, used for actual fires, and spilled as part of accidental releases.

3.5.2.6 United States Air Force Academy (USAFA)

USAFA, like similar facilities, uses a variety of common hazardous substances such as fuels, solvents, lubricants, and caustics in the operation of aircraft, vehicles, and equipment. The activity posing the greatest potential environmental risk at USAFA related to hazardous waste is the transfer and storage of petroleum, oils, and lubricants. However, USAFA has implemented several environmental programs, such as spill control, hazardous waste management, and stormwater pollution prevention, to manage and mitigate the release of HAZMAT and waste into the environment.

USAFA's HAZMAT Plan outlines preventive actions designed to reduce the potential for HAZMAT spills and to prevent HAZMAT from entering the environment. The plan also provides required notification procedures and responses to possible releases.

USAFA has established a Hazmat Management System for the organized distribution of HAZMAT. Its objective is to minimize HAZMAT usage and reduce hazardous waste generation. As part of this system, all HAZMAT used are assessed to determine if less-toxic alternatives can be used in the industrial processes. These materials are approved for use at the Academy's industrial shops by the Installation Hazmat Management Process Team on an as-needed basis, and any unused material can be returned to the Hazmat for potential use by other entities.

The installation's Waste Management Plan outlines proper procedures for accumulating, collecting, transporting, and disposing of hazardous wastes. This plan ensures hazardous wastes are legally and timely disposed of, further reinforcing the USAFA's commitment to managing and mitigating environmental risks.

EVCF Sites

DAF screening of the proposed EVCF sites for contamination potential resulted in the evaluation of two proposed EVCF sites in an EBS: The LRS Lot and the Davis Airfield Lot. Both sites present environmental concerns due to their history and current status. Two additional sites were initially considered as well: The Medical Clinic site and Fairchild Garage site. Upon initial evaluation and site reviews, these two sites were determined to have negligible environmental concerns and an EBS was not deemed necessary.

- **LRS Lot.** Nearly the entire LRS Lot Site lies with an ERP area known as *Site 11: Civil Engineering Maintenance Yard Runoff Area.* Site 11 is approximately 105 acres in size and was used for vehicle and equipment cleaning and maintenance. The area of Site 11 was also used to store chemicals, including de- icers and solvents. Prior investigations have revealed the presence of petroleum-related contamination in shallow soils at the Site (including total petroleum hydrocarbons, toluene, and xylenes) as well as solvent-related contamination in groundwater at the Site (trichloroethene [TCE] and tetrachloroethene [PCE]).

  The risk assessment performed as part of the Remedial Investigation for Site 11, as referenced in the No Further Action Decision Document for Site 11 (USAF 2002), indicates that "localized" areas of shallow soil impacted by petroleum hydrocarbons may still be present within Site 11. Such soils may be encountered during construction activities, which would require proper characterization, handling, and management onsite and/or proper disposal offsite. The No Further Action Decision Document for Site 11 (USAF 2002) also acknowledges that shallow groundwater contamination containing VOCs (PCE and chloroform) is present within Site 11. The presence of VOCs presents a concern for vapor intrusion (VI) exposure for workers during construction activities associated with the EV charging facilities.

The LRS Lot currently contains a gasoline filling station and transfer area with a total of four petroleum USTs associated with it. In addition, the Site and surrounding buildings have been used for automotive service and maintenance since the 1950s and contain a used oil UST and underground oil/water separators. The presence of USTs at the site, as well as the long-term use of the site and surrounding facilities for automotive service and fueling, creates the potential for releases of petroleum or hazardous substances to have occurred.

- **Davis Airfield Lot.** This site is situated between two ERP areas at the USAFA: Site 6: *Landfill No. 1* and Site 7: *Landfill No. 2*. Site 6 was operated as a landfill from 1972 to 1978. During this period, municipal solid waste was disposed to this landfill at a rate of approximately 40,000 cubic yards per year (USGS 1994). Subsequent investigations have indicated the landfill has impacted shallow groundwater, as evidenced by the historic presence of VOCs, SVOCs, and elevated metals concentrations in groundwater samples. Most recently sampling has revealed exceedances only for 1,4-dioxane in groundwater samples collected at Site 6. Prior investigations at Site 6 have also revealed that groundwater flow at Site 6 runs east to west, which would put it side-gradient of the Davis Airfield Site (HGL 2022).

  Site 7 was operated as a municipal waste landfill from 1960 to 1972 (USGS 1994). From 1960 to 1965, the waste consisted of non-burnable trash and incinerator ash. From 1965 to 1972, the waste reportedly consisted of domestic trash, digester sludge, and operational wastes (USGS 1994). Contaminants of concern have included dissolved metals (arsenic, iron, and manganese) as well as 1,4-dioxane. Prior investigations at Site 7 have also revealed that groundwater flow at Site 7 runs northeast to southwest, in the opposite direction of the Davis Airfield Site. Therefore, the Davis Airfield Site is hydraulically upgradient from Site 7 (HGL 2022).

  Base-wide sampling for PFAS has revealed elevated concentrations present in groundwater, particularly in monitoring wells associated with the Airfield. the presence of PFAS in groundwater creates the potential for PFAS to be present in soil, as most PFAS releases occur at the surface. This creates the potential for exposure during construction. The potential for PFAS in soil is further raised by the current and historic airfield operations associated with the Davis Airfield Site

  The long-term presence of airfield and maintenance operations at the Davis Airfield Site creates the potential for releases of petroleum or hazardous substances to have occurred historically. This includes potential releases of PFAS, which is present in AFFF and other fire suppressants used at airfields.

  Additionally, the presence of USTs at the Site creates the potential for releases of petroleum or hazardous substances to have occurred.

3.5.3 Environmental Consequences

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

As discussed in Section 2.1.2, construction activities would include, but are not limited to, land clearing, excavating, grading, and trenching or boring. These activities if occurring in locations with contamination (e.g., contaminated soils, concrete and other impervious surfaces exposed to contamination) have the potential to disturb contaminated areas resulting in the further spread of the contaminant and in the potential exposure to construction workers. The following sections

discuss potential impacts to potentially contaminated proposed EVCF sites present at JBA, JBAB, JBMDL, TAFB, and USAFA as construction activities have the potential to impact the HAZMAT and waste on these sites.

Overall impacts to HAZMAT and waste across all proposed EVCF sites at all AFB locations analyzed within this PEA are anticipated to be less than significant. The area of disturbance required for EVCF installation is minimal, approximately 50 cubic feet per free-standing charger with minimal excavation (two feet or less) required. Greater disturbances, however, could occur depending on the required electrical connection to the existing electrical grid. With the exception of the proposed EVCF sites at JBA, most proposed sites at other installations are in preliminary conceptual design and would need to consider the distance and nature of connection to the existing electrical grid. Impacts to hazardous waste and materials would be minimized through effective characterization and remediation or containment of contamination within suspect areas according to each installation's respective hazardous waste management plans, which are typically developed in DoD, DAF, USEPA, OSHA, U.S. Department of Transportation, and State Environmental Worker Safety and Transportation Requirements. These plans, which include protocols for the identification, handling, storage, transportation, and disposal of HAZMAT and waste, serve as a guide to minimize the environmental footprint and protect the health and safety of all personnel. With careful planning and responsible management in accordance with each installation's respective hazardous waste management plans, the impacts associated with the construction and operation of EVCF sites are expected to be effectively managed to ensure regulatory compliance and minimize the potential for contamination.

3.5.3.1 JBA

Table 3.5-1 identifies the potential concern or contaminant, measures to address the concern or contaminant, and overall level of impact.

Table 3.5-1. Summary of Identified Contaminants and Potential for Impact at the Proposed JBA CE Yard Lot and LRS Lot EVCF Sites

Contaminant Concern	Corrective Measures	Overall Level of Impact
VOCs at both the CE Yard Lot and LRS Lot presents a concern for vapor intrusion exposure for workers during EVCF construction.	Avoided during EVCF construction. EVCF would be sited away from the USTs.	Less than Significant (No impact)
Construction and operation of EVCF at the site of a former gas station could potentially disturb existing residual shallow soil contamination, which could contain VOCs and/or PFAS. If the construction process disrupts the soil, there is a risk for release of trapped pollutants, which can lead to soil and groundwater contamination.	Monitoring of the soil with a photo-ionization detector (PID) or similar organic vapor meter should be performed during earth-moving activities to inspect for the presence of potentially harmful vapors from VOCs. Sampling may be recommended to screen for the presence of PFAS. Water should be used for dust suppression.	Less than Significant (Negligible impact)
The previous storage of oil-containing transformers directly on the ground at the proposed LRS Lot site may have led to subsurface soil or groundwater contamination due to potential leaks. During the construction of the EVCF, excavation activities may disturb contaminated soil, and groundwater may get further contaminated. Workers could be exposed to hazardous substances and potentially harmful levels of pollutants. As installation of concrete foundations to anchor	The construction contractor should be made aware of the potential presence of soil contaminated with residual gasoline-related contamination, PFAS, and/or PCBs. For any soil piles established during construction, due care should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. Any soil intended to be shipped for off-site disposal or reuse should be sampled and properly characterized prior to shipment.	Less than Significant (Minor impact)

Contaminant Concern	Corrective Measures	Overall Level of Impact
the EVCF would not disturb more than a few feet of soil under paved surfaces, potential for soil and groundwater contamination would be negligible to minor.		

CE = Civil Engineer; EVCF = Electric Vehicle Charge Facilities; LRS = Logistics Readiness Squadron; PCB = polychlorinated biphenyls; PID = photo-ionization detector; UST = underground storage tank; VOC = volatile organic compound

Given the historic contamination of these sites, The JBA Environmental Management Officer in coordinating with USEPA would oversee EVCF construction to ensure safety and compliance with environmental regulations.

During operation, any spills or leaks from the EVCF could contribute to existing contamination. The installation would follow the Spill Prevention, Control, and Countermeasures Plan for JBA (JBA 2017b) and the Hazardous Waste Management Plan for JBA (JBA 2016b), both which describe the installation's responsibilities and management of HAZMAT to minimize impacts to natural resources from contamination, as well as a contingency plan in the event of a spill or leak. JBA's ERP would also identify and facilitate the clean-up of the site. Any contaminated soils, however, if not remediated before construction would be protected (covered) by concrete (e.g., the EVCF concrete foundation slab) or asphalt surfaces (e.g., the parking lot), which would prevent exposure to EVCF users.

3.5.3.2 JBAB

Table 3.5-2 identifies the potential concern or contaminant, measures to address the concern or contaminant, and overall level of impact.

Table 3.5-2. Summary of Identified Contaminants and Potential for Impact at the Proposed JBAB Building 1311 – Shopette EVCF Site

Contaminant Concern	Measures	Overall Level of Impact
Operable gasoline USTs in the vicinity. If these tanks are disturbed during construction, there is risk of vapor release, which could lead to air pollution and potentially explosive conditions if not properly managed. Any residual gasoline could also contaminate soil and groundwater.	Avoided during EVCF construction. EVCF would be sited away from the USTs.	Less than Significant (No impact)
Unknown fill port-like feature is present at Building 1131. If associated with a current or former UST, Oil Water Separator, or another environmental concern, disturbance during EVCF construction could potentially release contaminants. This also applies to potential PFAS contaminants that may be present in shallow soils. In either case, this disturbance could lead to soil, groundwater, or air contamination and potentially explosive conditions.	Monitoring of the soil with a PID or similar organic vapor meter should be performed during earth-moving activities to inspect for the presence of potentially harmful vapors from VOCs. Sampling may be recommended to screen for the presence of PFAS. Water should be used for dust suppression.	Less than Significant (Negligible impact)
Elevated metals concentrations and a potential presence of PFAS exist at the site. If contaminated soil is disturbed during EVCF construction, contamination could spread further.	The construction contractor should be made aware of the likely presence of soil contaminated with metals and the possibility of the presence of PFAS in soil. For any soil piles established during construction, due care	Less than Significant (Negligible impact)

Contaminant Concern	Measures	Overall Level of Impact
	should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. Any soil intended to be shipped for off-site disposal or reuse should be sampled and properly characterized prior to shipment. However, note that Air Force Civil Engineer Center personnel indicated that off-site disposal of soil generated at JBAB is nearly impossible due to the widespread metals contamination and the potential for PFAS contamination in soil in various places. The construction contractor would minimize the amount of waste soil generated and attempt to re-use the soil onsite at JBAB to the maximum extent possible.	
Former Waste Oil UST. Although this UST has been removed, cleaned, and disposed of properly, and no environmental contamination was observed, there is potential for any residual contamination not detected during the removal process to be disturbed during EVCF construction.	The construction contractor should be made aware of the potential presence of soil contaminated with residual gasoline-related contamination and/or PCBs. For any soil piles established during construction, due care should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. Any soil intended to be shipped for off-site disposal or reuse should be sampled and properly characterized prior to shipment.	Less than Significant (Negligible impact)

EVCF = Electric Vehicle Charge Facilities; JBAB = Joint Base Anacostia-Bolling; PCB = polychlorinated biphenyls; PFAS = perfluoroalkyl and polyfluoroalkyl substances; PID = photo-ionization detector; UST = underground storage tank; VOC =

During operation, no changes to site drainage or soil conditions are expected, therefore the behavior of any residual soil contamination would not be affected. EVCF operations are not anticipated to impact groundwater conditions, as it would be protected (covered) by concrete (e.g., the EVCF concrete foundation slab) or asphalt surfaces (e.g., the parking lot), which would prevent groundwater contamination from surface operation activities. Additionally, any contaminated soils if not remediated before construction would be protected (covered) by concrete (e.g., the EVCF concrete foundation slab) or asphalt surfaces (e.g., the parking lot), which would prevent exposure to EVCF users.

3.5.3.3 JBMDL

Table 3.5-3 identifies the potential concern or contaminant, measures to address the concern or contaminant, and overall level of impact.

Table 3.5-3. Summary of Identified Contaminants and Potential for Impact at the Seven Potentially-Contaminated Proposed JBMDL Sites

Contaminant Concern	Corrective Measures	Overall Level of Impact
Metals, VOCs, and SVOCs contamination in groundwater; potential PFAS in shallow soils.	Monitoring of the soil with a PID or similar organic vapor meter should be performed during earth-moving activities to inspect for the presence of potentially harmful vapors from VOCs. Sampling may be recommended to screen for the presence of PFAS, metals, and/or SVOCs. Water should be used for dust suppression.	Less than Significant (Negligible impact)
Subsurface soil contamination present at greater than two feet below the surface.	The construction contractor should be made aware of the potential presence of soil contaminated with metals, VOCs, SVOCs, and PFAS. If digging utility trenches deeper than two feet, soil would be segregated for sampling and remediation determination. Otherwise, EVCF construction to avoid subsurface soil disturbance. For any soil piles established during construction, due care should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. Any soil intended to be shipped for off-site disposal or reuse should be sampled and properly characterized prior to shipment.	Less than Significant (Negligible impact)

EVCF = Electric Vehicle Charge Facilities; PID = photo-ionization detector; SVOC = semi-volatile organic compounds; VOC = volatile organic compound

During operation, no changes to site drainage or soil conditions are expected, therefore the behavior of any residual soil contamination would not be affected. EVCF operations are not anticipated to impact groundwater conditions, as it would be protected (covered) by concrete (e.g., the EVCF concrete foundation slab) or asphalt surfaces (e.g., the parking lot), which would prevent groundwater contamination from surface operation activities.

3.5.3.4 TAFB

Table 3.5-4 identifies the potential concern or contaminant, measures to address the concern or contaminant, and overall level of impact.

Table 3.5-4. Summary of Identified Contaminants and Potential for Impact at the Proposed Weapons Evaluation Group/8500 Area EVCF Sites

Contaminant Concern	Corrective Measures	Overall Level of Impact
If contaminated soil is disturbed during construction, it could spread the contaminants and expose construction workers to potentially harmful substances. Metals and/or PFAS contamination could lead to harm to local flora and fauna and pose a risk to human health. Moreover, 2,4-DNT, a compound often used in the manufacturing of explosives, is classified as a probable human carcinogen. The release of these contaminants could also contaminate local groundwater resources if not properly contained.	The construction contractor should be made aware of the likely presence of soil contaminated with metals and/or PFAS. For any soil piles established during construction, due care should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. In addition, any soil removed from the site during construction would need to be properly managed, characterized, and disposed, as applicable.	Less than Significant (Negligible impact)

2,4-DNT = 2,4-dinitrotoluene

During EVCF operation, the presence of these contaminants in proximity to the EVCF could pose a risk to users. Any contaminated soils, however, if not remediated before construction would be

protected (covered) by concrete (e.g., the EVCF concrete foundation slab) or asphalt surfaces (e.g., the parking lot), which would prevent exposure to EVCF users.

3.5.3.5 USAFA

Table 3.5-5 identifies the potential concern or contaminant, measures to address the concern or contaminant, and overall level of impact.

Table 3.5-5. Summary of Identified Contaminants and Potential for Impact at the Proposed Davis Airfield Lot and LRS Lot EVCF Sites

Contaminant Concern	Corrective Measures	Overall Level of Impact
"Localized" areas of shallow soil impacted by petroleum hydrocarbons may still be present within the LRS Lot site. Such soils may be encountered during construction activities, which would require proper characterization, handling, and management onsite and/or proper disposal offsite. Elevated concentrations of PFAS are present in groundwater associated with the Davis Airfield Site. Although groundwater is not anticipated to be encountered during construction activities and PFAS does not represent a VI exposure risk to construction workers, the presence of PFAS in groundwater creates the potential for PFAS to be present in soil, as most PFAS releases occur at the surface. This creates the potential for exposure during construction. The long-term presence of airfield and maintenance operations at the Davis Airfield Site creates the potential for releases of petroleum or hazardous substances to have occurred historically. This includes potential releases of PFAS, which is present in AFFF and other fire suppressants used at airfields	The construction contractor should be made aware of the potential presence of soil contaminated with residual petroleum-related contamination and/or PFAS compounds. For any soil piles established during construction, due care should be made to cover soil piles and protect stormwater conveyances from sediment runoff from these piles during stormwater events. Any soil intended to be shipped for off-site disposal or reuse should be sampled and properly characterized prior to shipment.	Less than Significant (Negligible impact)
Shallow groundwater contamination containing VOCs (PCE and chloroform) is present within the LRS Lot Site. The presence of VOCs presents a concern for VI exposure for workers during construction activities associated with the EV charging facilities. The presence of USTs at the LRS Lot and Davis Airfield Lot Site, as well as the long-term use of the LRS Lot Site and surrounding facilities for automotive service and fueling, creates the potential for releases of petroleum or hazardous substances to have occurred.	Monitoring of the soil with a PID or similar organic vapor meter should be performed during earth-moving activities, to inspect for the presence of potentially harmful vapors.	Less than Significant (No impact)

AFFF = aqueous film-forming foam; LRS = Logistics Readiness Squadron; PCE = tetrachloroethene; PFAS = perfluoroalkyl and polyfluoroalkyl substances; PID = photo-ionization detector; SVOC = semi-volatile organic compounds; UST = underground storage tank; VI = vapor intrusion; VOC = volatile organic compound

3.5.3.6 Cumulative Impacts

Overall impacts to HAZMAT and waste across all proposed EVCF sites at all AFB locations analyzed within this PEA are anticipated to have negligible to minor impacts through effective characterization, remediation, and/or containment of contamination within suspect areas. Such

activities would be conducted according to each AFB's respective IRP procedures, land use control plans, and waste management plans, as well as in accordance with USEPA, OSHA, U.S. Department of Transportation, and State Environmental Worker Safety and Transportation Requirements. Projects identified in Appendix D would not contribute to significant adverse impacts from hazardous materials and waste. Most involve interior improvements or would be similar in size and scale to the EVCF analyzed within this PEA. It is likely that regional sites, similar to the sites considered within this PEA at the respective AFBs, would be located in existing fueling and parking areas with the potential for contamination due to past spills and leaks. Overall cumulative impacts, however, would not be significant as similar USEPA, OSHA, U.S. Department of Transportation, and State Environmental Worker Safety and Transportation Requirements would be followed.

3.5.3.7 No Action

Under the No Action Alternative, the construction and operation of new EVCF would not occur and, therefore, no impacts to hazardous materials and waste would occur. DAF would not have a programmatic NEPA analysis to tier future placement and operations of EVCF equipment at their AFBs. Installations would conduct independent site-specific NEPA review as EVCF sites are identified to assess potential for hazardous materials and waste.

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Chapter 5 List of Preparers

5.1 PHE-Baker JV2

Name	Role	Degree	Years of Experience
Robert Naumann	Project Manager, EA Oversight	M.S. Environmental Science B.S. Resource Ecology and Management	25
Joe Grieshaber	EA Reviewer	M.B.A. Finance M.S. and B.S. Biology	32
Samir Qadir	Preparation of Air Quality Section	M.S. Environmental Policy B.S. Electrical and Electronics Engineering	19
Virginia Boone	Preparation of Soils Section	B.A. English	11
Cynthia Ong	Preparation of Noise and Transportation Sections	M.S. Environmental Science B.S. Civil Engineering	12
Jeff Kupko	Site reviews of Air Force Facilities for EV Charging Technical Input to EV Charging Deployment Plan	B.S. Civil Engineering M.S. Transportation Engineering	18
Gabrielle DaSilva	Site reviews of Air Force Facilities for EV Charging Preparation of Utility and Infrastructure Section	B.S. Construction Engineering Technology	8
Mimi Drozdetski	Preparation of Hazardous Waste and Materials Section	B.S. Environmental Science	2
Katelyn Kopp	Researcher and Supporting Analyst for Air Quality	B.S. Environmental Science	1
Stephen Kuch	Preparation of Maps and Figures, GIS Support	B.S. Geoenvironmental Science	10

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Appendix A
EVCF Environmental Review Checklist

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Electric Vehicle Charge Facilities (EVCF) Project Checklist

PROJECT/PROPOSED ACTION TITLE:

PROPONENT INFORMATION:

WORK ORDER NUMBER:

DESCRIPTION AND LOCATION:

Enter building number and/or affiliated parking facility:

Enter square feet of estimated disturbance:
Describe type of activity (number and type of EVCF).

Describe physical conditions at site (e.g. impervious surface, landscaped areas).

Describe any other relevant project components (linear feet of trenching, other improvements required such as new transformers).

FORM COMPLETED BY: _____ DATE: _____

After providing a description of the proposed project, proponents are to complete the attached Checklist and corresponding environmental review based on available project information and site-specific information and design. Comment sections are provided for each resource section for further evaluation of a resource (if present) and for consideration of potential mitigation measures for avoidance of the resource or minimization of impacts.

Information contained within this Checklist may support a finding as to whether the proposed project falls within the scope of the *Programmatic Environmental Assessment for Electric Vehicle Charge Facilities at Multiple Air Force Bases*, 2023. Air Force Base NEPA staff should be provided a copy of this checklist and consulted prior to project activity to ensure project compliance with NEPA. Air Force Base NEPA staff are to review each project description and checklist and certify whether the proposed project may be "tiered" off the PEA. Project managers should also maintain this checklist as part of the proposed project administrative record. Submission of the checklist as early in the planning process as possible is recommended.

NEPA Review: Based on the information contained within this Checklist and an independent assessment of potential impacts to the environment, it is determined that construction and operation of the proposed EVCF at the site(s) identified within this Checklist does not warrant preparation of a separate EA. The EVCF would not degrade the existing environment, is not environmentally controversial, nor would it adversely affect environmentally sensitive resources. Anticipated impacts associated with this project are comparable with those addressed in the *Programmatic Environmental Assessment for Electric Vehicle Charge Facilities at Multiple Air Force Bases*, 2023 (PEA)**.**

Form Reviewed by: _____

Signature: _____ Date:_____

Note: No other NEPA Review Form is required to supplement the above certification.

Air Quality and Greenhouse Gas/Climate Change

Would the construction of the EVCF pose a violation of National Ambient Air Quality Standards or adversely affect the attainment status of the region?

Is the EVCF site located within a nonattainment or maintenance area? If yes, would the construction or operation produce emissions that would exceed *de minimis* levels.

Would the proposed project generate significant greenhouse gas emissions (>25,000 metric tons of carbon dioxide equivalents per year)?

Section 3.1, Air Quality and Greenhouse Gas/Climate Change, of the *PEA* describes the potential EVCF impacts to this resource as short-term, negligible to minor from construction and beneficial impacts from operations. Could impacts to air quality, greenhouse gases and climate change from the proposed EVCF be greater than addressed in the *PEA?*

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Water Resources

Is any part of the proposed EVCF site footprint (including required connections to the electrical grid) near a water resource (ditch, stream, wetland, etc.) or within the mapped 100-year floodplain?

Would the proposed EVCF site be located somewhere other than existing developed/ impervious areas, resulting in increases of impervious surfaces?

Would ground disturbance caused by construction result in indirect impacts of sedimentation and erosion to water resources?

Could the proposed project result in potential impacts to surface water quality resulting in long-term impacts (chemical, physical, or biological effects) that would adversely alter the historical baseline or a change in surface water impairment status?

Would the potential exist for the project to impact groundwater?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis as negligible impacts from construction or operations were anticipated; EVCFs were all located in the vicinity of existing parking lot areas away from water resources. The minimal amount of ground disturbance required for construction along with the use of standard best management practices would result in negligible indirect impacts of sedimentation and erosion to water resources. Would the location of the proposed EVCF be other than the vicinity of an existing parking area away from water resources, such that it could cause impacts to water resources not addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Soil and Geological Resources

Is the EVCF site located on previously undisturbed ground? If no, what existing site disturbances are present?

Would the EVCF project disturb soils that are susceptible to soil erosion?

Would the EVCF project be constructed on soils with high clay content (i.e. shrink-swell characteristics)?

Would the EVCF project require extensive grading of topography or impacts to geological resources?

Table 1-1, of the *PEA* dismisses geological resources from detailed analysis as no impacts to geology or topography are anticipated. Section 3.2, Soil Resources, concluded that potential EVCF impact to soils would be negligible to minor and temporary from construction and there would be no anticipated impacts to soils from operations. Would the extent of soil disturbance exceed the conditions indicated in the PEA or the proposed location be in a geologic hazard area such that impacts to soil or geological resources from the proposed EVCF may be greater than addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Cultural Resources

As outlined in Table 1-1 of the *PEA,* locations selected for EVCF within the PEA were anticipated to meet all requirements contained within the Advisory Council on Historic Preservation October 26, 2022 exemption, that relieves federal agencies from the historic preservation review requirements under the National Historic Preservation Act regarding the effects of the installment of certain EVCF on historic properties. All federal agencies are exempt from the Section 106 requirements of considering the effects of the installation, maintenance, repair, or expansion of EVCF and Level 1, 2, or 3 charging stations, provided that (87 FR 66201):

(1) activities take place in existing parking facilities with no major electrical infrastructure modifications and are located as close to an existing electrical service panel as practicable;
(2) use reversible, minimally invasive, non-permanent techniques to affix the infrastructure;
(3) minimize ground disturbance to the maximum extent possible, and ensure that it does not exceed previous levels of documented ground disturbance;
(4) use the lowest profile EVCF reasonably available that provides the necessary charging capacity;

(5) place the EVCF in a minimally visibly intrusive area; and
(6) use colors complementary to surrounding environment, where possible.

Does the EVCF project not comply with the above exemptions?

Would the EVCF project involve earth-moving or excavation activities required for connection to the electrical grid in areas undisturbed or possibly containing archaeological resources or result in above-ground structures (i.e., transformers, utility lines) within the viewshed of a historic structure or historic district?

Does the area require a cultural resource survey because it has not been addressed in previous surveys (requires consultation with the installation Cultural Resources Manager to determine the answer)?

Would the proposed project potentially restrict access or increase safety concerns of Native Americans using Traditional Cultural Properties or Sacred Sites?

Does the area contain archaeological, architectural, or historic resources that are eligible for the National Register of Historic Places or resources of Native American significance such as Traditional Cultural Properties or Sacred Sites (requires consultation with the installation Cultural Resources Manager to determine the answer)?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Biological Resources

Would the EVCF site occur somewhere other than previously disturbed areas containing low-quality habitat?

Does the EVCF site contain wildlife habitat?

Are sensitive or protected species known to occupy the EVCF site?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis as construction of EVCF would occur within previously disturbed areas with low-quality habitat (e.g. parking lots or maintained lawn and landscaping); therefore, negligible impacts would result from both construction and operations. Would the location of the proposed EVCF be other than the vicinity of previously disturbed areas, such that it could cause impacts to biological resources not addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Land Use

Would the location of the EVCF site require a change in land use?

Would the location of the EVCF site be incompatible with adjacent land uses and installation master planning?

Would temporary laydown and storage areas be located in areas requiring additional disturbance?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis as construction of EVCF would not require a change in land use and would be compatible with adjacent land uses and installation master planning. Therefore, no impacts would occur to land use from construction and operations. Could the location of the proposed EVCF be such that it could cause impacts to land use not addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Noise

Would construction of the EVCF generate noise that would substantially annoy communities within or nearby the area?

Would the EVCF violate any Federal, state, or local noise ordinance?

Would the EVCF generate adverse long-term/permanent noise impacts?

Section 3.3, Noise, describes the potential EVCF impact to the noise environment as negligible to moderate short-term (a few weeks duration) from construction and negligible from operations. Could the location or features of the proposed EVCF be such that it could cause impacts to the noise environment greater than those addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Utilities and Infrastructure

Would the EVCF project cause an impairment of utility service to local communities, homes, or businesses?

Would the EVCF project impact utilities other than electrical infrastructure, such as water, HVAC, wastewater?

Would the proposed EVCF project require additional infrastructure (e.g., transformers, linear connections) greater than existing infrastructure located within the proposed parking facilities and adjacent buildings?

Section 3.4, Utilities and Infrastructure, describes the potential EVCF impact to electric utilities as minor, localized and temporary from construction and negligible from operations. Could the location or features of the proposed EVCF be such that it could cause impacts to utilities and infrastructure greater than those addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Transportation

Would the EVCF project cause an increase in traffic volumes or delays to levels that impair a roadway's handling capacity or increase traffic safety hazards?

Could the EVCF project cause road failure resulting in rutting, cracking, or other pavement problems that require substantial maintenance or construction activities?

Could the construction activities for the EVCF project last longer than a few weeks?

Would placement of the EVCF cause a constraint on parking capacity?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis concluding that temporary negligible impacts during construction activities from construction vehicle traffic and/or temporary road closures or delays required for connecting the EVCF to the existing electrical grid (up to a few week duration) would occur. Placement of the EVCF could also result in minor impacts during operations to parking as spaces would be dedicated for EVs. Could the location or operations of the proposed EVCF be such that it could cause impacts to transportation not addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Public Health and Safety

Does the EVCF project have considerable potential for severe worker injury to occur during construction, even when conducted in accordance with applicable federal, state, DAF, and local worker safety and regulatory requirements and guidelines, including those established by the Occupational Safety and Health Administration?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis concluding that adherence to applicable federal, state, DAF, and local worker safety and regulatory requirements and guidelines, including those established by the Occupational Safety and Health, would substantially minimize the potential for severe worker injuries during construction. Overall impacts to public health and safety would be negligible for construction and operations. Could the location, construction, or operations of the proposed EVCF be such that it could cause impacts to public health and safety not addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Hazardous Materials and Waste

Does the EVCF site contain contamination concerns?

Could the EVCF project disturb hazardous materials present in older buildings?

Is the EVCF project located on a solid waste management unit (SWMU)?

Would the EVCF project result in an increased risk to the health and safety of airmen, installation personnel, or contractors?

Would the EVCF project impair the AFB's ability to meet federally mandated or Air Force objectives for waste minimization and pollution prevention or exceed the existing facility or system capacity for hazardous waste/hazardous material management?

Section 3.5, Hazardous Materials and Waste, describes the potential EVCF impact to hazardous materials and waste as negligible to minor impacts for both construction and operations through effective characterization and remediation or containment of contamination within suspect areas according to each AFB's respective hazardous waste management plans, USEPA, OSHA, U.S. Department of Transportation, and State Environmental Worker Safety and Transportation Requirements. Could the location or conditions of the proposed EVCF be such that it could cause impacts to hazardous materials and waste greater than those addressed in the *PEA*?

Was "yes" answered to any of the above questions? *If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.*

Comments:_____
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Socioeconomics

Could the proposed EVCF location, construction, or operations adversely affect housing, schools, or community services?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis concluding that construction activities associated with EVCF installation would generate temporary jobs and minor beneficial economic impacts and operations would have negligible impacts. Could the location or conditions of the proposed EVCF be such that it could cause impacts to socioeconomics not addressed in the *PEA*?

Was "yes" answered to any of the above questions? If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.

Comments:_____
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Environmental Justice

Is the proposed EVCF project site located outside of an AFB boundary?

Does the proposed EVCF project have the potential to create a disproportionate environmental, economic, social, or health impacts on minority or low-income populations (EO 12898)?

Does the proposed project have the potential to create a disproportionate environmental health or safety risk to children?

Table 1-1, of the *PEA* dismisses this resource from detailed analysis concluding that sites chosen for EVCF installment are located within AFB boundaries and would not present high and adverse disproportionate impacts to environmental justice communities. Overall, operations would benefit surrounding communities through the deployment of climate-resilient infrastructure and by lowering emissions of particulate matter known to cause adverse health effects (such as respiratory conditions). Could the location or conditions of the proposed EVCF be such that it could cause disproportionate adverse impacts to environmental justice populations or children's health and safety not addressed in the *PEA*?

Was "yes" answered to any of the above questions? If "yes", provide specific mitigation measures, practices, or procedures that would be implemented to reduce impact.

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Appendix B
Intergovernmental Coordination, Public and Agency Participation

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Intergovernmental Coordination, Public and Agency Participation

The DAF coordinated with other federal agencies with jurisdiction by law or special expertise over the Proposed Action, as well as state and local agencies relevant to each alternative location, to inform the range of issues to be addressed in the EA. The DAF sent an Early Notification Letter, delivered by mail or email, to each agency listed below in June 2023. A sample of these letters, as well as all responses received, is provided in this appendix.

B.1 Federal, State and Local Agencies Consultation

The DAF coordinated with federal, state, and local agencies and other entities with jurisdiction by law or special expertise over the Proposed Action to inform the range of issues to be addressed in the EA. A sample early notification letter is presented in Exhibit 1. Section B.1.1 contains a list of stakeholders to whom DAF sent the early notification letters and Section B.1.2 contains responses received.

B.1.1 List of Stakeholders

JBA, JBAB and JBMDL

Federal

Federal Aviation Administration
Susan Stafford, Environmental Protection Specialist
Beckley Airports Field Office
176 Airport Circle, Rm 101
Beaver, WV 25813

National Park Service
Joel Gorder, Regional Environmental Coordinator
National Capitol Region
1100 Ohio Dr SW
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Naval Research Lab
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Services Division
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Protected Resources Division
Atlantic Regional Fisheries Office
ESA Section 7 Consultation Branch
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Annapolis, MD 21401-7307

Natural Resources Conservation Service
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Somerset, NJ 08873-4115

U.S Fish and Wildlife Service
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Conservation
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Endangered Species Act Consultation
New Jersey Field Office, Ecological Services
4 East Jimmie Leeds Rd, Unit 4
Galloway NJ 08205

Mark Murray-Brown, Endangered Species Act Section 7 Coordinator
Protected Resources Division
ESA Section 7 Consultation Branch
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Gloucester, MA 01930

U.S. Environmental Protection Agency
Carrie Traver, Life Scientist
Assessment
Region 3, Office of Communities, Tribes, & Environmental
1650 Arch St
Philadelphia, PA 19103

Chief of Environmental Review
Region 2, Environmental Review Section

290 Broadway
New York NY 10007-1866

U.S. Navy Ceremonial Guard
Lisa Bracken, Supply Specialist
2798 Doherty Dr SW
Anacostia Annex DC 20373

United States Coast Guard Headquarters
2703 Martin Luther King Jr. Ave SE
Washington DC 20020

District of Columbia (JBAB)

Commission of Fine Arts
Fred Linstrom
401 F St NW, Suite 312
Washington, DC 20001-2728

DC Water
Maureen Schmelling, Director, Water Quality and Technology
1385 Canal St, SE
Washington, DC 20003

Department of Energy & Environment, Natural Resources Administration
Meredith Upchurch, Associate Director
Regulatory Review
Division 1200 First St NE
Washington, DC 20002

Department of Transportation
Aaron Zimmerman, PTP
Development Review Program
250 M St SE
Washington, DC 20003

National Capital Planning Commission
Diane Sullivan, Director
Urban Design and Plan Review Division
401 9th St, NW
Suite 500N
Washington, DC 20004

D.C. Office of Planning
Anita Cozart, Director
1100 4th St SW, Suite 650
Washington, DC 20024

State (New Jersey)

Department of Environmental Protection
Katheriner Marcopul, Administrator
Historic Preservation Office
PO Box 420
Trenton, NJ 08625-0420

Division of Fish and Wildlife
Endangered and Nongame Species Office
Mail Code 501-03
PO Box 420
Trenton NJ 08625-0420

Historical Commission
Sara Cureton, Executive Director
225 West State St
PO Box 305
Trenton, NJ 08625

Office of Permitting and Project Navigation
Dave Pepe and Katie Nolan
401 East State St
Mail Code 401-07J
PO Box 420
Trenton, NJ 08625

Pinelands Commission
Susan Grogan, Executive Director
PO Box 359
15 Springfield Rd
New Lisbon, NJ 08064

Local (JBAB)

Anacostia Watershed Society (AWS)
Christopher E. Williams, President/Chief Executive Officer
The George Washington House
4302 Baltimore Ave
Bladensburg, MD 20710

Advisory Neighborhood Commission, 8D
Devon Lesesne
PO Box 54781
Washington, DC 20032

Advisory Neighborhood Commission, 8C
Salim Adofo
c/o RISE Center
2730 MLK Jr. Ave, SE
Washington, DC 20032

Local (JBMDL)

Burlington County Soil Conservation District
Robert Reitmeyer, District Manager
1971 Jacksonville-Jobstown Rd
Columbus, NJ 08022

Burlington Department of Planning
Joseph Brickley, Director of Public Works
49 Rancocas Rd
P.O. Box 6000
Mount Holly, NJ 08060

Burlington County Department of Resource Conservation
Mary Pat Robbie, Director

PO Box 6000
Mount Holly NJ 08060

LAAFB, California

Federal

United States Army Corps of Engineers
Los Angeles District Planning
915 Wilshire Blvd
Los Angeles CA 90017

U.S. Environmental Protection Agency Region 9
75 Hawthorne St
San Francisco CA 94105

U.S. Fish and Wildlife Service
Carlsbad Field Office
2177 Salk Ave, Suite 250
Carlsbad CA 92008-7385

State

California Department of Environmental Protection
1001 I Street
Sacramento, CA 95814

California Department of Fish and Wildlife
South Coast Region
388 Ruffin Rd.
San Diego, CA 92123

State Clearinghouse
1400 Tenth St
Sacramento, CA 95814

Local

Los Angeles Regional Quality Control Board
320 W 4th St., Suite 200
Los Angeles, CA 90013

County of Los Angeles
Department of Regional Planning
320 W Temple St
Los Angeles CA 90012

City of Los Angeles
Los Angeles City Planning
201 N Figueroa St, 4th Floor
Los Angeles CA 90012

City of Hawthorne
Planning Department
Hawthorne City Hall
4455 W 126th St
Hawthorne CA 90250

City of El Segundo
Planning & Building Safety Department
El Segundo City Hall
350 Main St
El Segundo CA 90245

TAFB, Florida

Federal

U.S Fish and Wildlife Service
Catrina Martin, Supervisor
Environmental Review
1601 Balboa Ave
Panama City, FL 32405

State

Florida State Clearinghouse
Chris Stahl
Office of Intergovernmental Programs
3900 Commonwealth Blvd
Tallahassee, FL 32399-3000

Florida Fish and Wildlife Commission
Diana K. Pepe, Conservation Biologist
Northwest Region
620 S Meridian St 2A
Tallahassee, FL 32399

State Historic Preservation Office
Alissa Slade Lotane, Director
500 South Bronough St
R.A. Gray Building, Room 305
Tallahassee, FL 32399-0250

USAFA, Colorado

Federal

U.S. Air Force Academy
Lisa Welch, Environmental Planner
10CES/CENPP
8120 Edgerton Drive
USAF Academy, CO 80840

National Park Service
Intermountain Region
Justin Henderson, Program Manager
Heritage Partnerships Program
12795 West Alameda Parkway
P.O. Box 25287
Denver, CO 80225-0287

State

Colorado State Historic Preservation Office
Dawn DiPrince, Executive Director
1200 Broadway
Denver CO 80203-2137

Early Notification Letter Sample

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE INSTALLATION AND MISSION SUPPORT CENTER
JOINT BASE SAN ANTONIO LACKLAND TEXAS

20 June 2023

Julianne Turko, EIAP SME
Air Force Civil Engineer Center
National Environmental Policy Act Division (AFCEC/CZN)
AFCEC/CZN, Bldg. 1
2261 Hughes Ave, Suite 155
JBSA-Lackland TX 78236-9853

Catrina Martin, Supervisor, Environmental Review
United States Fish and Wildlife Service
1601 Balboa Ave
Panama City FL 32405

Dear Catrina Martin,

The U.S. Department of the Air Force (DAF) is preparing a Programmatic Environmental Assessment (PEA) under the National Environmental Policy Act (NEPA) to evaluate the range of potential environmental impacts associated with the Electric Vehicle Charge Facilities (EVCF) Program to be implemented as part of DAF's obligations to meet clean energy initiatives set forth within Executive Orders (EOs) 14008, *Tackling the Climate Crisis at Home and Abroad* and 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. EO 14057 specifically requires all federal agencies to ensure that all light-duty non-tactical vehicle (NTV) acquisitions are zero emission vehicles (ZEVs) by end of fiscal year (FY) 2027, and all vehicle acquisitions (including medium- and heavy-duty vehicles) are ZEVs by end of FY 2035. The PEA will evaluate the potential environmental impacts associated with the DAF EVCF Program at the following Air Force bases (AFBs) identified by DAF for consideration within the PEA: Joint Base Anacostia-Bolling (JBAB) in Washington D.C., Joint Base Andrews (JBA) in Maryland, Joint Base McGuire Dix Lakehurst (JBMDL) in New Jersey, Los Angeles Air Force Base (LAFB) in California, Tyndall AFB (TAFB) in Florida, and the United States Air Force Academy (USAFA) in Colorado (see Attachments 1 through 6).

The purpose of the Proposed Action is to provide AFBs with EV charging stations to enable on-base usage and charging for government owned vehicles (GOVs). The Proposed Action is needed to increase the number of EV charging stations on AFBs for creating the necessary infrastructure to expand EV usage, which would minimize carbon emissions in the long-run and help DAF meet White House goals for EV usage under Executive Orders 14008 and 14057.

As part of the DAF's Environmental Impact Analysis Process (EIAP), we request your input in identifying general or specific issues or areas of concern you feel should be addressed in the environmental analysis. DAF has selected various sites for the proposed EVCF at the six

AFBs which contain larger concentrations of DAF fleet of light-duty vehicles and maximize use of existing electrical utilities and available buildings and parking areas to limit the overall level of disturbance.

To ensure the DAF has sufficient time to consider your input in the preparation of the Draft PEA, please forward your written comments or requests for additional information to Mr. Nicolas Post, AFCEC/CZN, ATTN: EVCF Programmatic EA, Bldg. 1, 2261 Hughes Ave, Suite 155, JBSA-Lackland, TX 78236-9853, by email to nicolas.post@us.af.mil, or by phone at (210) 925-3516. We request your comments within 30 days of receipt of this letter to ensure we can address them during the EIAP. Thank you for your assistance.

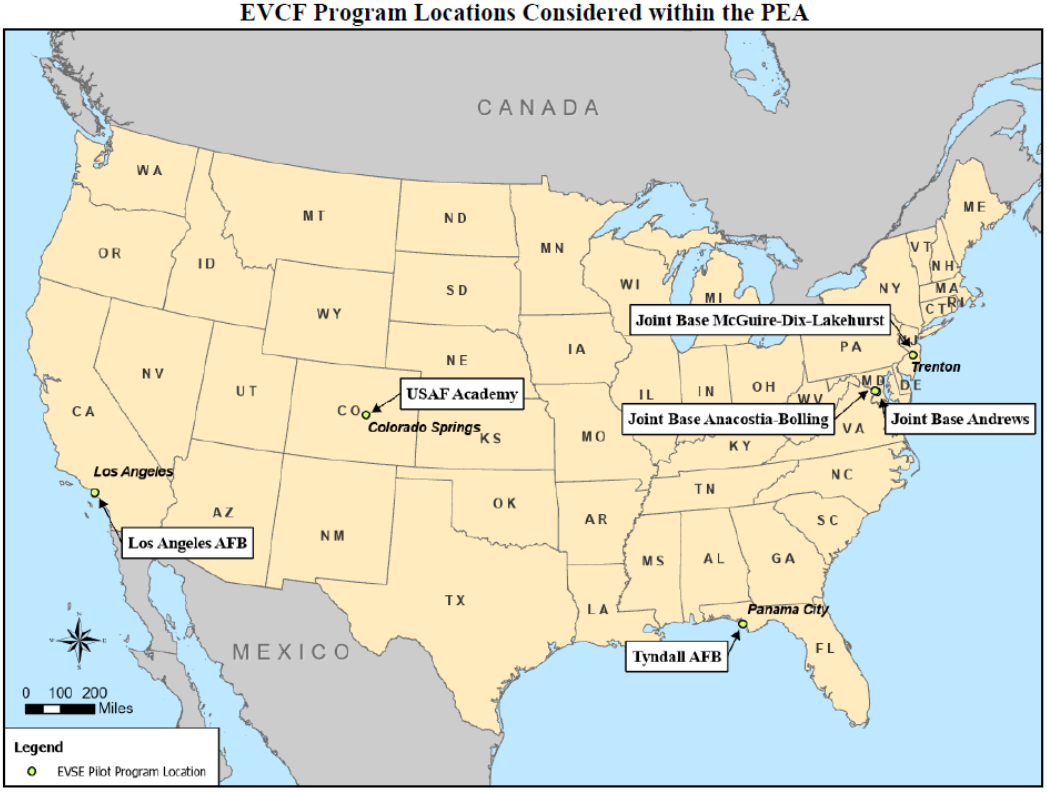
Julianne Turko

Julianne Turko
Department of the Air Force
Environmental Planning, Program Manager

7 Attachments:
1. EVCF Program Locations Considered within the PEA
2. Joint Base Andrews EV Charging Site Locations
3. Joint Base Anacostia-Bolling EV Charging Site Locations
4. Joint Base McGuire Dix Lakehurst EV Charging Site Locations
5. Los Angeles Air Force Base EV Charging Site Locations
6. Tyndall Air Force Base EV Charging Site Locations
7. United States Air Force Academy EV Charging Site Locations

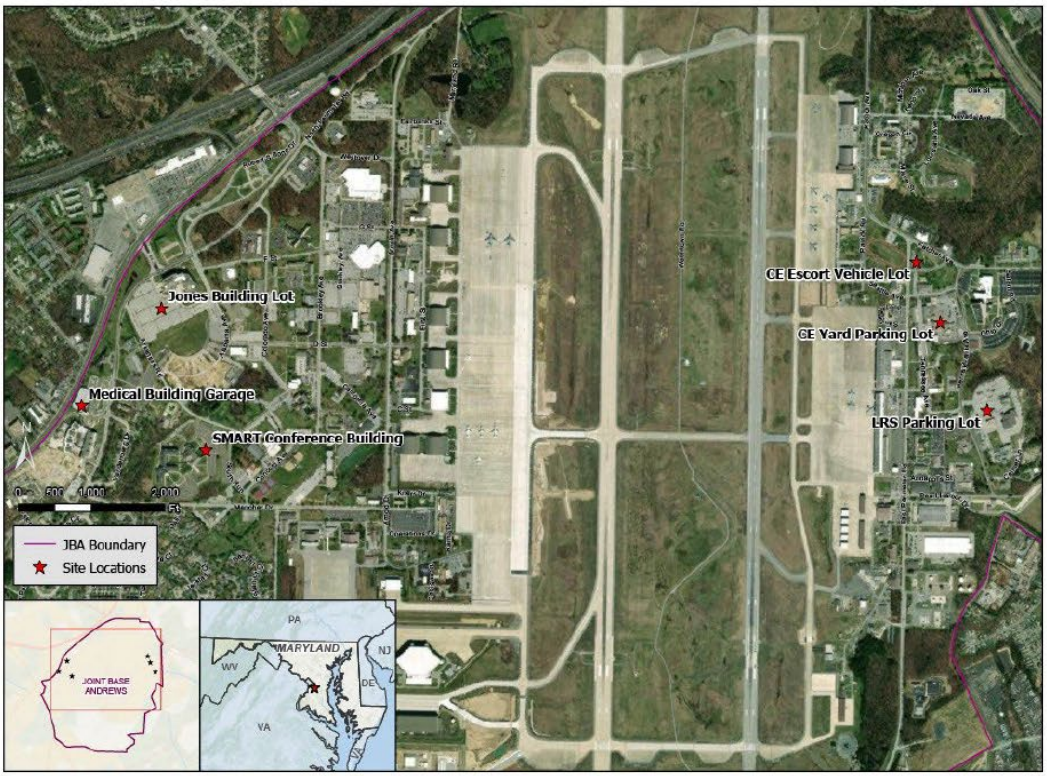
2

Attachment 1:
EVCF Program Locations Considered within the PEA



3

Attachment 2:
Joint Base Andrews EV Charging Site Locations



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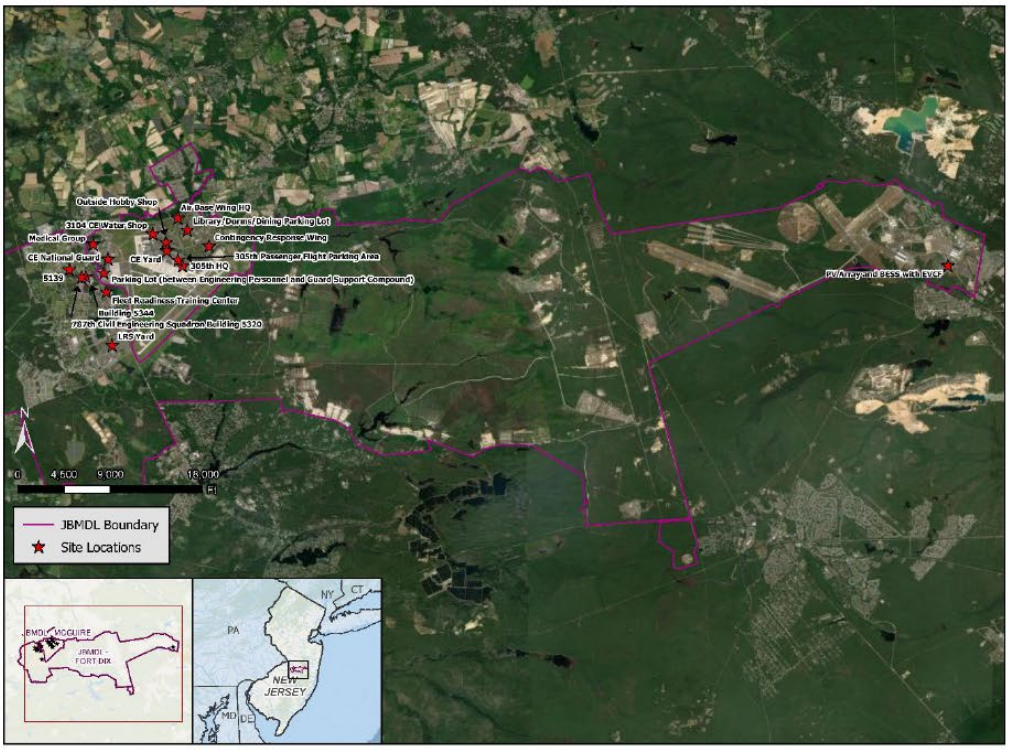
Attachment 3:
Joint Base Anacostia-Bolling EV Charging Site Locations

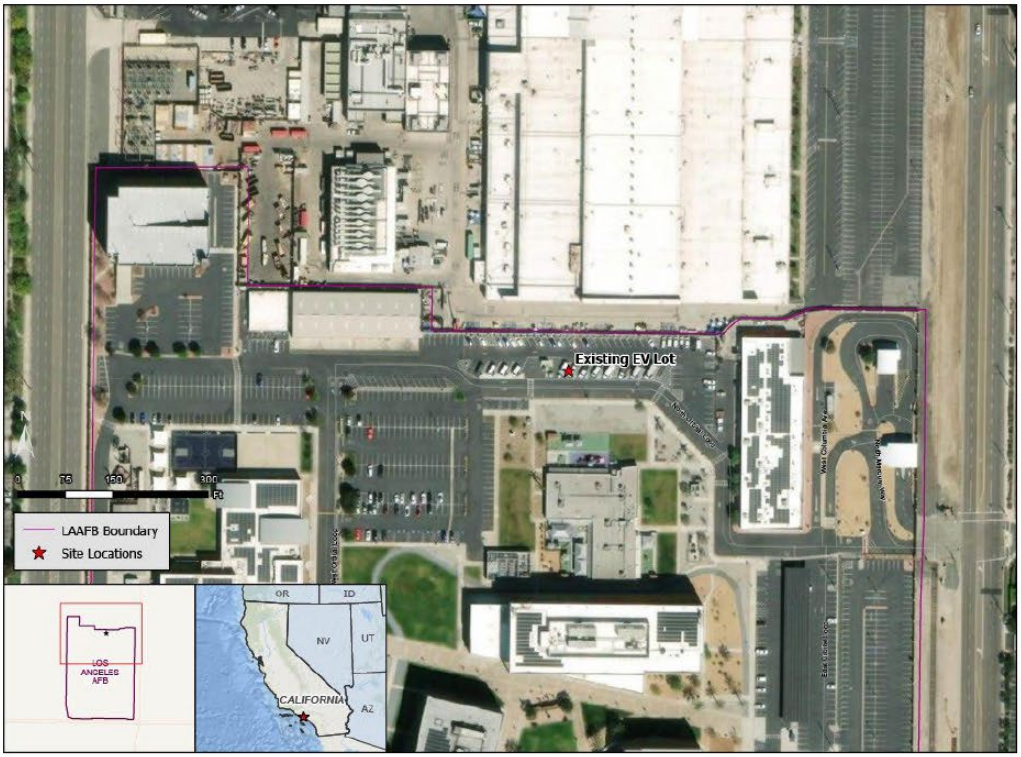
5

Attachment 4:
Joint Base McGuire Dix Lakehurst EV Charging Site Locations



6

Attachment 5:
Los Angeles Air Force Base EV Charging Site Locations

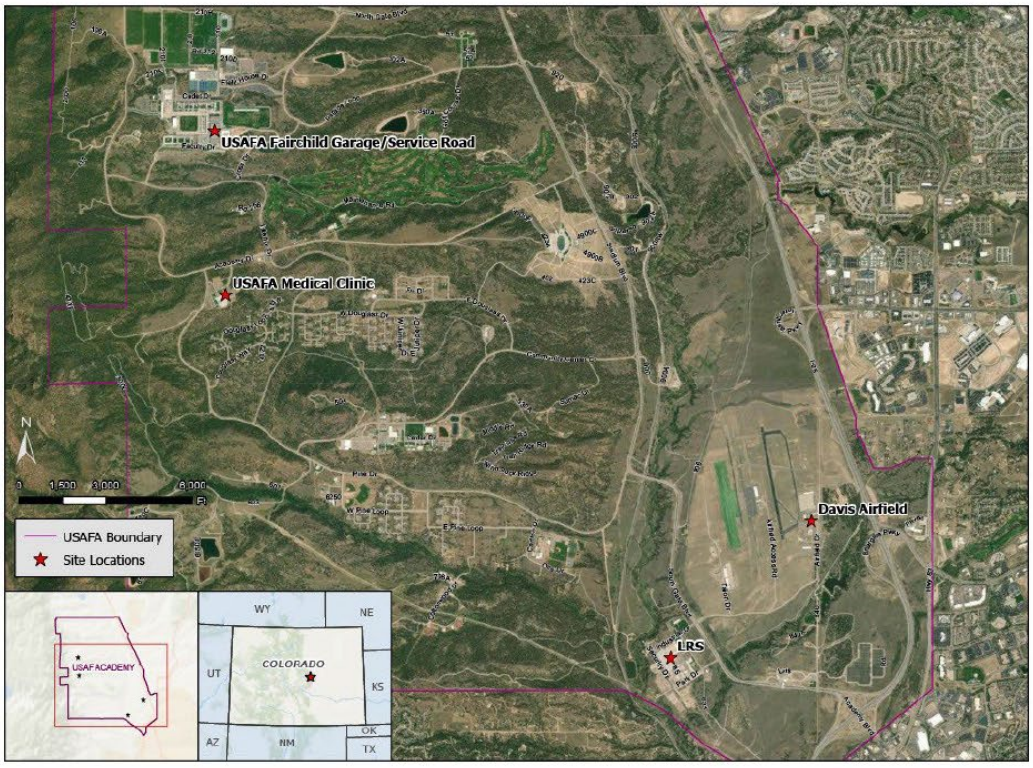


7

Attachment 6:
Tyndall Air Force Base EV Charging Site Locations

8

Attachment 7:
United States Air Force Academy EV Charging Site Locations



9

B.1.2. Stakeholder Responses

Florida State Clearinghouse

From: State_Clearinghouse [redacted]>
Sent: Friday, June 23, 2023 1:35 PM
To: Stacy Herrick [redacted]>; State_Clearinghouse [redacted]>
Subject: RE: Scoping Information - USAF Programmatic Environmental Assessment (PEA) for the Electric Vehicle Charge Facilities (EVCF) Program

While it is covered by EO 12372, the Florida State Clearinghouse does not select the project for review. You may proceed with your project.

Please send future electronic requests directly to the State of Florida Clearinghouse email address, [redacted]

Good Luck.

Chris Stahl

Chris Stahl, Coordinator
Florida State Clearinghouse
Florida Department of Environmental Protection
3900 Commonwealth Blvd., M.S. 47
Tallahassee, FL 32399-2400
[redacted]

Burlington County New Jersey

From: Brickley, Joseph [redacted]
Sent: Wednesday, June 28, 2023 7:57 AM
To: POST, NICOLAS G CIV USAF AFMC AFCEC/CZN [redacted]
Cc: Buono, Ashley [redacted]; Cullinan, Eve [redacted]; Wirth, Todd [redacted]; Stanuikynas, Thomas [redacted]
Subject: [Non-DoD Source] EVCF - JBMDL

Ms. Turko:

I have received and reviewed your letter of 6/20/23 regarding the abovementioned (attached).

Based on the information provided the County of Burlington has no concerns, but appreciates the opportunity to review and comment.

Good luck with your projects.

Best regards,

Joseph T. Brickley, P.E., C.M.E., C.P.W.M.
Director of Public Works/County Engineer
Burlington County Engineering Department
1900 Briggs Road
Mt. Laurel, New Jersey 08054
[redacted]

District Department of Transportation

From: Zimmerman, Aaron (DDOT) [redacted]>
Sent: Tuesday, July 11, 2023 10:47:03 AM
To: nicolas.post@us.af.mil [redacted]
Cc: Stacy Herrick [redacted]>; Rogers, Jonathan D. (DDOT) [redacted]>
Subject: DDOT Comments on PEA for the Electric Vehicle Charge Facilities at JBAB

Mr. Post –

Thank you for giving the District Department of Transportation (DDOT) the opportunity to review the package of materials, dated June 20, 2023. We have no comments on the proposal to install EV charging stations within the parking garages on Joint Base Anacostia-Bolling (JBAB) as there are no impacts to DDOT right-of-way.

Shifting from fossil fuel powered vehicles to EV charging is important to DDOT and the District of Columbia government as a whole, so we commend the U.S. Department of Air Force for pursuing this action. If you would like to further discuss the District of Columbia's rapidly advancing and evolving strategies for EV infrastructure deployment, please do not hesitate to reach out.

Thank you,

Aaron Zimmerman, PTP
Development Review Program Manager

Planning and Sustainability Division
District Department of Transportation
250 M Street SE, Suite 517-16
Washington, DC 20003

o. [redacted]
e. [redacted]
w. ddot.dc.gov

District Department of Transportation
Planning and Sustainability Division

Florida Fish and Wildlife Conservation Commission

From: Paredes, Jennifer [redacted]>
Sent: Wednesday, July 12, 2023 2:57:56 PM
To: Stacy Herrick [redacted]>
Subject: RE: Scoping Information - USAF Programmatic Environmental Assessment (PEA) for the Electric Vehicle Charge Facilities (EVCF) Program

Hi Stacy,

The FWC has no comments since it appears that all areas impacted within Tyndall AFB are already developed. However, if you would like to discuss my findings, please feel free to give me a call. Have a great week!

Sincerely,

Jennifer Paredes
Fish & Wildlife Biologist
Office of Conservation Planning Services
Florida Fish and Wildlife Conservation Commission
1875 Orange Ave. East, Tallahassee, FL 32311
[redacted]

New Jersey Department of Environmental Protection

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Office of Permitting and Project Navigation
401 East State Street, Mail Code 401-07J, P.O. Box 420
Trenton, New Jersey 08625-0420
Phone: (609) 292-3600 Fax: (609) 292-1921
www.nj.gov/dep/pcer

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

SHAWN M. LaTOURETTE
Commissioner

July 19, 2023

Nicolas Post, AFCEC/CZN
Air Force Civil Engineer Center
EVCF Programmatic EAAFCEC/CZN, Bldg. 1
2261 Hughes Ave, Suite 155
JBSA-Lackland TX 78236-9853

RE: Request for Guidance: USAF Programmatic Environmental Assessment (PEA) for the Electric Vehicle Charge Facilities (EVCF) Program
Joint Base McGuire Dix Lakehurst
Burlington and Ocean Counties

Dear Mr. Post,

The New Jersey Department of Environmental Protection's (Department) Office of Permitting and Project Navigation (OPPN) distributed for review and comment a request to obtain guidance on the preparation of a Programmatic Environmental Assessment (PEA) in compliance with the National Environmental Policy Act (NEPA). The purpose of the Proposed Action is to provide Air Force bases with EV charging stations to enable on-base usage and charging for government owned vehicles to minimize carbon emissions and help DAF meet White House goals for EV usage under Executive Orders 14008 and 14057.

Based on the information provide for review, the Department offers the following comments for your consideration:

Division of Land Resource Protection
If the proposed EV Charging facilities are within Flood Hazard, Freshwater Wetlands, or Coastal Areas, permits or approvals may be required from the Division of Land Resource Protection.

If you have any questions, please contact Colleen Keller at Colleen.Keller@dep.nj.gov.

Division of Climate Change Mitigation and Monitoring
It is recommended that the EV chargers be elevated if they are located in the floodplain.

If you have any questions, please contact Peg Hanna at Peg.Hanna@dep.nj.gov.

Fish and Wildlife
The New Jersey Division of Fish and Wildlife (NJFW) understands JBMDL's primary mission and relies on the Integrated Natural Resources Management Plan (INRMP) to protect resources under the purview of NJFW.

DAF should consult Landscape mapping (v3.3) and Surface Water Quality Classifications on the NJ-GeoWeb which indicates habitats valued for, and possible occurrences of resources under the purview of NJFW which may be impacted during construction and/or operation of the Proposed Action and would need to be addressed in an EA.

Consideration should also be given to the Northern Long-eared Bat, Little Brown Bat, Eastern Small-footed Myotis, and Tri-colored Bat, all of which are found state-wide and after review by Endangered and Non-game Species Program Biologists and the NJ Endangered and Nongame Advisory Committee, have a "Consensus Status" of "Endangered" in NJ, and should be considered when tree clearing is part of any project.

To protect summer roosting habitat for bats, NJFW would recommend a general timing restriction on trimming or removal of trees from April 1 to September 30.

NJFW recommends that any tree/brush clearing/trimming be done outside the nesting season (March 1 to August 31), to minimize impact to nesting migratory birds/raptors.

The comments and recommendations of the NJFW's Office of Environmental Review (OER) are subject to change, if any additional environmental issues or concerns that may negatively affect resources under the purview of the NJFW are discovered during pre-construction surveys or the construction phase. The OER should be contacted upon discovery at (609) 960-4502 or (609) 292-9451.

If you have any questions, please contact Kelly Davis at Kelly.Davis@dep.nj.gov.

NJPDES Stormwater

If more than one acre will be disturbed, a general permit for Construction Activities, (5G3) may be required. The permit application process is available online at http://www.state.nj.us/dep/DWQ/5G3.htm.

If you have any questions, please contact Eleanor Krukowski at Eleanor.Krukowski@dep.nj.gov.

Historic Preservation Office

Based on the documentation submitted, the proposed project is being undertaken by the United States Department of the Air Force. Therefore, the project will require the Air Force to consult with the New Jersey Historic Preservation Office (HPO), pursuant to Section 106 of the National Historic Preservation Act, for the identification, evaluation and treatment of historic properties within the project's area of potential effects. As a result, the HPO looks forward to consultation with the Air Force, pursuant to their obligations under Section 106 of the National Historic Preservation Act of 1966, as amended, and it's implementing regulations, 36 CFR §800.

In addition, if future project activities require any Freshwater Wetlands permits, Waterfront Development permits, and/or Upland Development permits issued by the State of New Jersey's Division of Land Use Regulation, Highland Preservation Area Approval Permits, as well as environmental assessments under Executive Order 215, further consultation with the HPO will be necessary.

If additional consultation with the HPO is needed for this undertaking, please reference the HPO project number 22-1643 in any future calls, emails, submissions or written correspondence to help expedite your review and response.

If you have any questions, please contact Scott Gerlica at Scott.Gerlica@dep.nj.gov.

Air Permitting

The applicant should review the requirements of N.J.A.C. 7:27-8.2(c) 1-22 for stationary permitting requirements. This includes but is not limited to, construction equipment-stationary construction equipment or emergency generators, may require air pollution permits if it is located on the site for longer than one year N.J.A.C. 7:27-8.2(d)15.

- There are general permits for boilers and emergency generators (https://www.state.nj.us/dep/aqpp/gp.html) if the units can meet the prescribed requirement in the general permits.

Idling Vehicles- any vehicles involved on the project must adhere to the idling standards (less than 3 minutes) in N.J.A.C. 7:27-14 and 15.

Air pollution including odors that are detectable offsite that are injurious to human health or would result in citizen complaints are prohibited. N.J.A.C. 7:27-5.2.

Fugitive Dust - dust emissions either windblown or generated from construction activities should be controlled to prevent offsite impacts or material tracked onto the roadways. N.J.A.C. 7:27-5.2.

An Air permit may be needed if a generator producing 37 KW or greater will be used for the project (N.J.A.C. 7:27-8.2(c)21).

If you have any questions, please contact Danny Wong at Danny.Wong@dep.nj.gov.

Thank you for providing the New Jersey Department of Environmental Protection the opportunity to comment on the request for guidance on the Programmatic Environmental Assessment for the proposed project. Should you have any questions or need additional information, please contact Hannah Locke at the Office of Permitting and Project Navigation at Hannah.Locke@dep.nj.gov.

Sincerely,

David Pepe, Director
Office of Permitting and Project Navigation

U.S. Environmental Protection Agency

From: Willson, Matthew (he/him/his) [redacted]>
Sent: Thursday, July 20, 2023 2:10 PM
To: POST, NICOLAS G CIV USAF AFMC AFCEC/CZN [redacted]>
Cc: TURKO, JULIANNE M CIV USAF AFMC AFCEC/CZ [redacted]>; [redacted]; Witman, Timothy [redacted]>; Traver, Carrie [redacted]>; Davis, Jamie [redacted]>
Subject: [URL Verdict: Neutral][Non-DoD Source] EPA Scoping Comments - USAF Programmatic Environmental Assessment (PEA) for the Electric Vehicle Charge Facilities (EVCF) Program

Mr. Post,

Thank you for providing the Project Overview for the Electric Vehicle Charge Facilities-Programmatic Environmental Assessment (PEA or plan). The U.S. Department of the Air Force (DAF) is preparing the PEA to evaluate the potential environmental impacts associated with the plan at the following Air Force bases identified by DAF for consideration within the PEA: Joint Base Anacostia-Bolling in Washington D.C., Joint Base Andrews in Maryland, Joint Base McGuire Dix Lakehurst in New Jersey, Los Angeles Air Force Base in California, Tyndall AFB in Florida, and the United States Air Force Academy in Colorado.

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

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

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

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

To reduce GHG emissions associated with the electricity production used to charge the electric vehicles, we recommend considering choosing a clean energy supplier that produces electricity using renewable sources. For example, DOD has the ability to purchase electricity from third-party owned generation. In addition, EPA recommends DAF consider the addition of solar canopies to the project, this will reduce or eliminate the GHGs associated with the electricity production used to charge the electric vehicles and may provide extra electricity for the facility.
Lastly EPA recommends using low embodied carbon construction materials to reduce GHG Emissions consistent with the goals of the Federal Buy Clean Initiative.

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

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

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

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

For wetlands, the PEA should include information such as the total area of the wetland(s), vegetation type, sources of hydrology, and the area of any likely direct or indirect permanent or temporary impacts. If impacts are planned or likely, we suggest an analysis of the wetland's functions and values be included in the PEA. If wetlands are to be permanently impacted, compensation for lost or reduced functions will likely be needed.

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

EPA recommends that DAF avoid locating charging facilities in flood zones. EO 13690 established the Federal Flood Risk Management Standard (FFRMS) and we recommend that the proposed charging stations comply with the FFRMS by ensuring electrical system components such as service panels, meters, switches and outlets, including all wiring, is at least one foot above the new flood level as determined by the FFRMS (which is either the 500-yr floodplain, or other ways to protect per the standard).

Wildlife and Biological Resources
We suggest evaluation of the vegetative communities and habitat functions of existing natural resources on properties studied be included in the PEA. Impacts to wildlife could potentially include vegetation clearing and/or maintenance, noise, lighting, spread of invasive species, or other concerns. Impacts to species, including state and federally-listed species of special concern, should be evaluated in consultation with appropriate federal and state agencies. We recommend that consultation be documented in the PEA.

Hazardous wastes and contamination
We recommend indicating if any of the proposed activities may be located in areas that are known or suspected to be contaminated and whether construction may have the potential to mobilize contaminants or impact remedial actions.

The PEA should clarify if hazardous materials such as lead paint and asbestos are known or anticipated to be present in buildings to be demolished or renovated. If unknown, we suggest

that the PEA include discussion of the plan for testing for hazardous materials.

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

Cultural Resources
Demolition, renovation, and construction activities have the potential to impact historic resources. The PEA should study and determine if any historic resources exist on site. If historic resources are identified within the Area of Potential Effects, an assessment of impacts anticipated from the proposed activities, and mitigative measures that may be taken to avoid or reduce such impact should be provided. It may be useful to include a description or list of cultural surveys and Section 106 of The National Historic Preservation Act consultation for the sites.

Environmental Justice
We recommend that an assessment be conducted to identify whether areas of potential environmental justice (EJ) concern are present and may be disproportionately impacted by each project's activities. This identification should inform appropriate outreach to affected communities to assure that communication regarding the Proposed Action reaches citizens in an appropriate way and feedback from the affected communities is fully considered. Methodologies are discussed by several agencies including CEQ. EPA's environmental justice screening tool, EJSCREEN, can be utilized to provide such information. It can be accessed at: https://www.epa.gov/ejscreen. EJSCREEN provides demographic information on the census block group level. An assessment of this level can address the question as to whether low-income and/or minority communities may be disproportionately impacted by the activities described in the PEA. Specifically, consideration should be given to the block group(s) which contain the communities most impacted by each project's activities. Additionally, please consider referring to "Promising Practices for EJ Methodologies in NEPA Reviews": https://www.epa.gov/environmentaljustic/ej-iwgpromising-practices-ej-methodologies-nepa-reviews.

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

EPA encourages incorporating energy efficient features, lighting, and infrastructure. Please consider recommendations such as those included in the LEED (Leadership in Energy and

Environmental Design) Green Building Rating System. LEED is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. For more information, please review information from the U.S. Green Building Council.

Noise and Traffic
Impacts to nearby residences or sensitive receptors should be fully evaluated. We suggest that the PEA include an evaluation of issues such as noise, emissions, safety, and traffic during construction, renovation, and demolition activities and identify best management practices and minimization measures that may be employed.

We recommend the PEA assess whether each project may increase noise, traffic congestion, lighting, or cause other impacts to the surrounding community. We recommend outreach to the community and residences that may be impacted by the project.

Thank you for the opportunity to provide comments. We request that you provide an email copy of the PEA when it is complete. We would welcome the opportunity to discuss any of these comments and to work with you as more information becomes available. Feel free to contact me via email or at the phone number below.

Thank you,

Matthew Willson
Life Scientist- Air Permits Branch
Air & Radiation Division
EPA Region 3
Philadelphia, PA
Phone: [redacted]
Email: [redacted]
Pronouns: He/Him/His

B.2 Native American Consultation

Consistent with the NHPA of 1966 implementing regulations (36 CFR Part 800), DoD Instruction 4710.02, *DoD Interactions with Federally Recognized Tribes*, DAFI 90-2002, *Interaction with Federally Recognized Tribes,* and AFMAN 32- 7003, *Environmental Conservation*, the DAF offered consultation with federally recognized tribes that are historically affiliated with the geographic region of each alternative site being considered for the Proposed Action regarding the potential to affect properties of cultural, historical, or religious significance to the tribes. A sample consultation letter is presented in Exhibit 2. Section B.2.1 contains a list of stakeholders DAF to whom sent the early notification letters and Section B.2.2 contains responses received. Table B-1 provides a summary of responses from Tribes who responded to this initial inquiry (see Section B.2.1 for a list of Tribal Contacts).

Table 1-3: Summary of Native American Tribal Consultation

Tribe Affiliation by Installation	Status of Response
JBAB and JBA	
Delaware Nation	No response received to date.
Delaware Tribe of Indians	No response received to date.
JBMDL	
Delaware Nation	No response received to date.
Delaware Nation Historic Preservation Office	No response received to date.
Delaware Tribe of Indians	No response received to date.
Delaware Tribe Historic Preservation Pennsylvania Office	No response received to date.
LAAFB	
Gabrielino-Tongva Tribe	No response received to date.
TAFB	
Miccosukee Tribe	No response received to date.
Muscogee (Creek) Nation	No response received to date.
Poarch Band of Creek Indians	No response received to date.
Seminole Nation of Oklahoma	No response received to date.
Seminole Tribe of Florida	No response received to date.
Thlopthlocco Tribal Town	No response received to date.
USAFA	
Flandreau Santee Sioux Tribe	E-mailed response on June 28, 2023 stating the tribe has no issues with the project as proposed. They request to be contacted immediately if the project inadvertently disturbs any human remains and or cultural material.
Northern Cheyenne Tribe	E-mailed response on August 9, 2023 stating the tribe has no concerns or comments regarding the project. They request to be contacted should the design and/or plans change in a way that increases site boundaries. The tribe further assumes that fire flames from vehicles and the difficulty of putting out such fire will be assessed as part of the NEPA process. The tribe provided a formal determination of “No Historic Properties” for this project.
Southern Ute Indian Tribe	No response received to date.
Ute Mountain Ute Tribe	No response received to date.

B.2.1 List of Tribal Contacts

Delaware Nation
Carissa Speck, Historic Preservation Director
P.O. Box 825
Anadarko, OK 73005

Katelyn Lucas, Historic Preservation Assistant
Delaware Nation Historic Preservation Office
2825 Fish Hatchery Rd
Allentown, PA 18103

Delaware Tribe of Indians
Larry Heady, THPO
125 Dory Ln
Grants Pass, OR 97527

Susan Bachor
Delaware Tribe Historic Preservation
Pennsylvania Office
PO Box 64
Pocono Lake, PA 1834

Gabrielino-Tongva Tribe
Councilwoman Linda Candelaria,
80839 Camino Santa Juliana
Indio, CA 92203

Flandreau Santee Sioux Tribe
Sarah Childers, Tribal Historic Preservation Assistant
603 W. Broad Avenue
Flandreau, SD 57028

Miccosukee Tribe
Talbert Cypress, Chairman
PO Box 44002
Miami, FL 33144

Muscogee (Creek) Nation
David Hill, Principal Chief
Hwy 75 & Loop 56
Okmulgee, OK 74447

Northern Cheyenne Tribe
Serena Wetherelt, President
PO Box 128
Lame Deer, MT 59043

Poarch Band of Creek Indians
Stephanie A. Bryan, Tribal Chair
5811 Jack Springs Rd
Atmore, AL 36502

Seminole Nation of Oklahoma
Lewis J. Johnson, Principal Chief
36645 US-2704
Wewoka, OK 74884

Seminole Tribe of Florida
Marcellus W. Osceola Jr., Chairman
6300 Stirling Rd
Hollywood, Florida 33024

Thlopthlocco Tribal town
Galen Cloud, Tribal Historic Preservation Officer
P.O. Box 188
Okemah, Oklahoma 74859

Southern Ute Indian Tribe
Melvin Baker, Chairman
P.O. Box 737
356 Ouray Drive
Ignacio CO 81137

Ute Mountain Ute Tribe
Manuel Heart, Chairman
P.O. Box JJ
Towaoc CO81334-0248

Consultation Letter Sample

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE INSTALLATION AND
MISSION SUPPORT CENTER
JOINT BASE SAN ANTONIO LACKLAND TEXAS

20 June 2023

Julianne Turko, EIAP SME
Air Force Civil Engineer Center
National Environmental Policy Act Division (AFCEC/CZN)
AFCEC/CZN, Bldg. 1
2261 Hughes Ave, Suite 155
JBSA-Lackland TX 78236-9853

Manuel Heart, Chairman
Ute Mountain Ute Tribe
P.O. Box JJ
Towaoc CO81334-0248

Dear Manuel Heart,

The U.S. Department of the Air Force (DAF) is preparing a Programmatic Environmental Assessment (PEA) under the National Environmental Policy Act (NEPA) to evaluate the range of potential environmental impacts associated with the Electric Vehicle Charge Facilities (EVCF) Program to be implemented as part of DAF's obligations to meet clean energy initiatives set forth within Executive Orders (EOs) 14008, *Tackling the Climate Crisis at Home and Abroad* and 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. EO 14057 specifically requires all federal agencies to ensure that all light-duty non-tactical vehicle (NTV) acquisitions are zero emission vehicles (ZEVs) by end of fiscal year (FY) 2027, and all vehicle acquisitions (including medium- and heavy-duty vehicles) are ZEVs by end of FY 2035. The PEA will evaluate the potential environmental impacts associated with the DAF EVCF Program at the following Air Force bases (AFBs) identified by DAF for consideration within the PEA: Joint Base Anacostia-Bolling (JBAB) in Washington D.C., Joint Base Andrews (JBA) in Maryland, Joint Base McGuire Dix Lakehurst (JBMDL) in New Jersey, Los Angeles Air Force Base (LAFB) in California, Tyndall AFB (TAFB) in Florida, and the United States Air Force Academy (USAFA) in Colorado (see Attachments 1 through 6). Per Section 306108 of the National Historic Preservation Act (NHPA) of 1966, as amended, and 36 Code of Federal Regulations (CFR) Part 800, Protection of Historic Properties, the DAF is engaging early with tribal governments as it formulates the undertaking.

As part of the proposed undertaking, the Program includes installation of EV charging stations to expand necessary infrastructure supporting the planned conversion of AFB light duty government owned vehicles (GOV) to EVs. Program implementation would minimize carbon emissions and help meet White House Goals for EV usage under Executive Orders 14008 and 14057, which concern the climate crisis and clean energy industries. Placements of EVCF would occur in previously disturbed areas (e.g., parking lots) or previously surveyed areas where there

were determined to be no archaeological resources. Please refer to Attachments 2-6 for specific placements by AFB.

The NHPA requires that Federal agencies consult with tribes when an agency action may affect historic properties of religious and cultural significance to the tribes. In order to help us fulfill that obligation, we ask for your assistance in identifying any such properties on the respective AFBs and within the area of the Proposed Action that are of significance to your Tribe. Historic properties include Traditional Cultural Properties and landscapes, archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, plant and animal communities, and buildings and structures with significant tribal association.

Please indicate in any response, within 30 days of receiving this letter, whether you will be providing information or would like to formally consult on this undertaking. Your choice now applies only to providing information and consultations under the NHPA. It will not affect the handling or disposition of human remains, funerary objects, sacred objects, or objects of cultural patrimony under the Native American Graves Protection and Repatriation Act. In the event such items are discovered, we will contact you regarding their handling and disposition.

For any questions, comments, or requests for more information, please contact Mr. Nicolas Post, AFCEC/CZN, ATTN: EVCF Programmatic EA, Bldg. 1, 2261 Hughes Ave, Suite 155, JBSA-Lackland, TX 78236-9853, by email to nicolas.post@us.af.mil, or by phone at (210) 925-3516. Thank you in advance for your assistance in this effort.

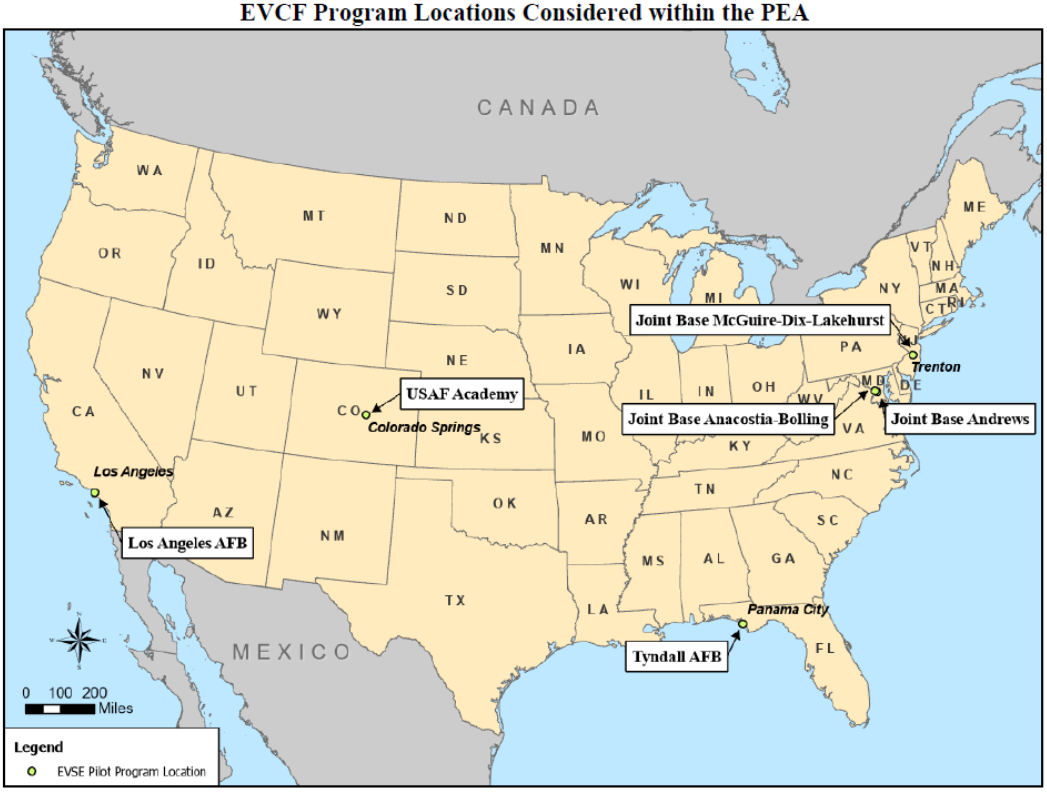
Julianne Turko

Julianne Turko
Department of the Air Force
Environmental Planning, Program Manager

7 Attachments:
1. EVCF Program Locations Considered within the PEA
2. Joint Base Andrews EV Charging Site Locations
3. Joint Base Anacostia-Bolling EV Charging Site Locations
4. Joint Base McGuire Dix Lakehurst EV Charging Site Locations
5. Los Angeles Air Force Base EV Charging Site Locations
6. Tyndall Air Force Base EV Charging Site Locations
7. United States Air Force Academy EV Charging Site Locations

2

Attachment 1:
EVCF Program Locations Considered within the PEA



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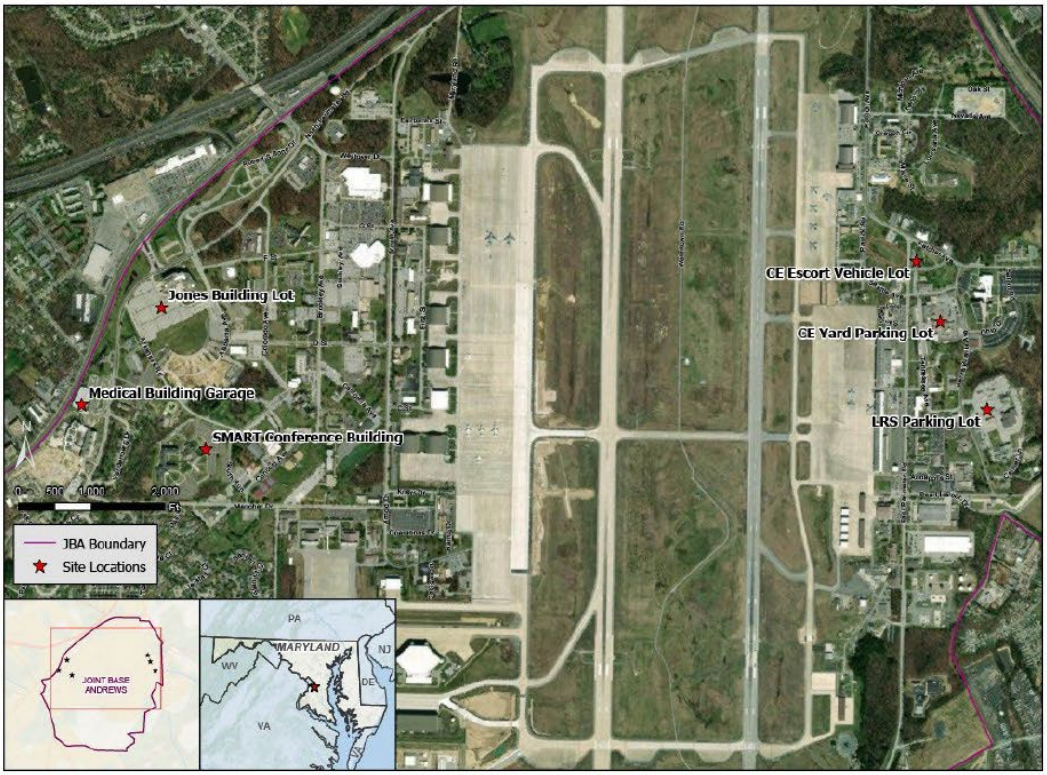
Attachment 2:
Joint Base Andrews EV Charging Site Locations



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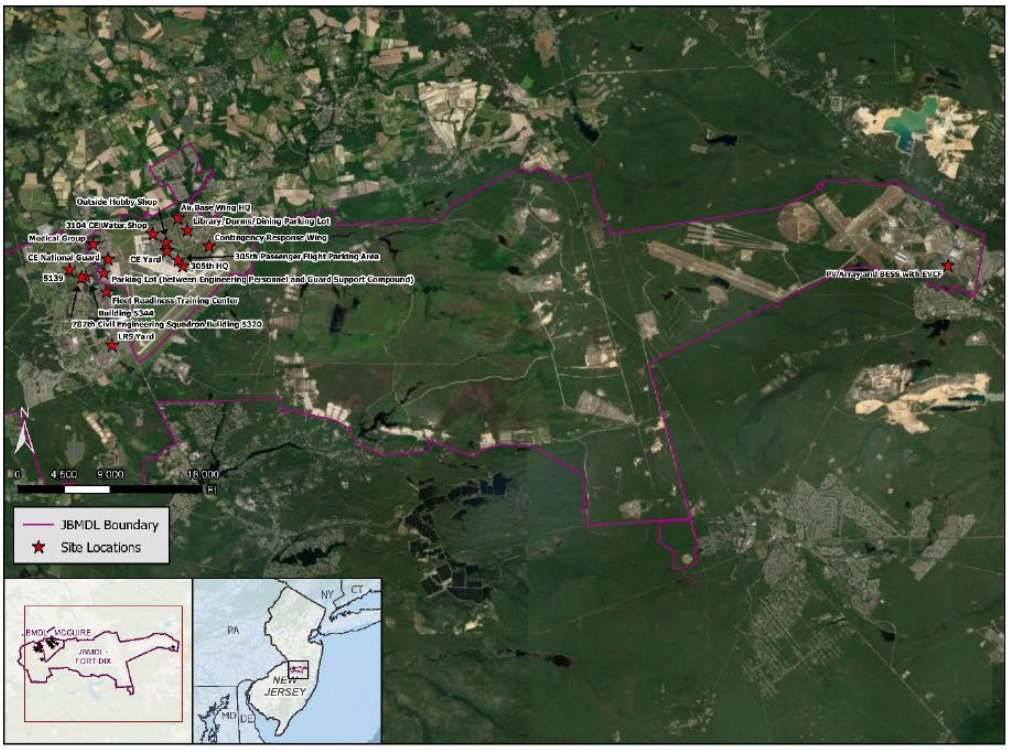
Attachment 3:
Joint Base Anacostia-Bolling EV Charging Site Locations

5

Attachment 4:
Joint Base McGuire Dix Lakehurst EV Charging Site Locations



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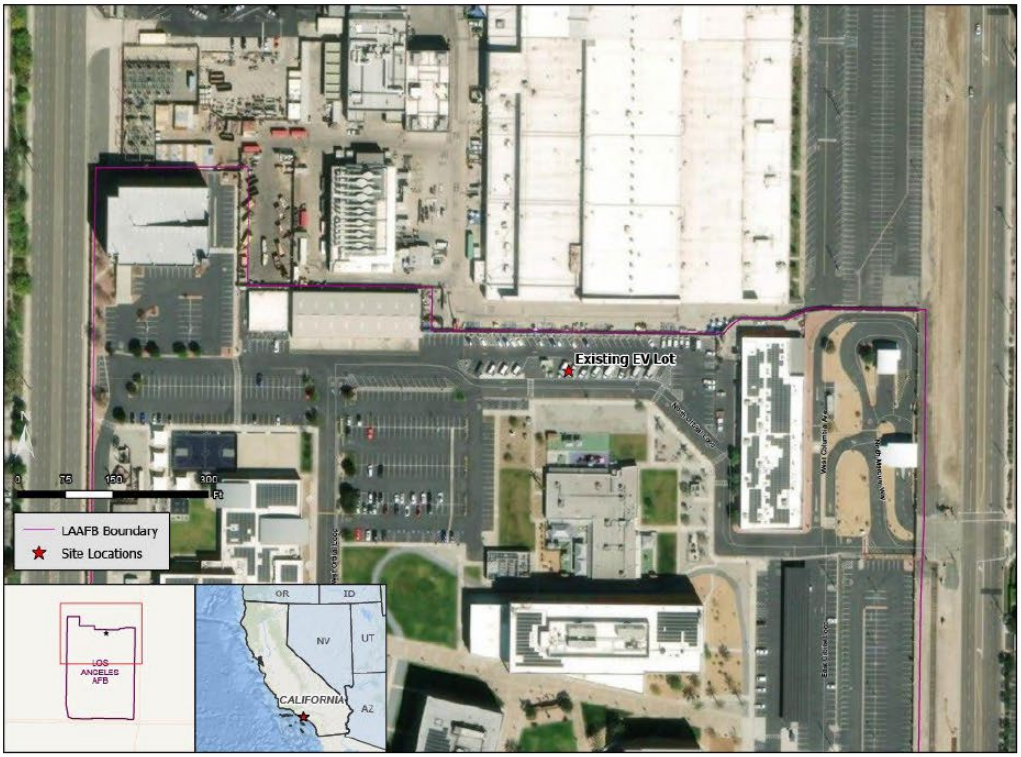
Attachment 5:
Los Angeles Air Force Base EV Charging Site Locations



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Attachment 6:
Tyndall Air Force Base EV Charging Site Locations

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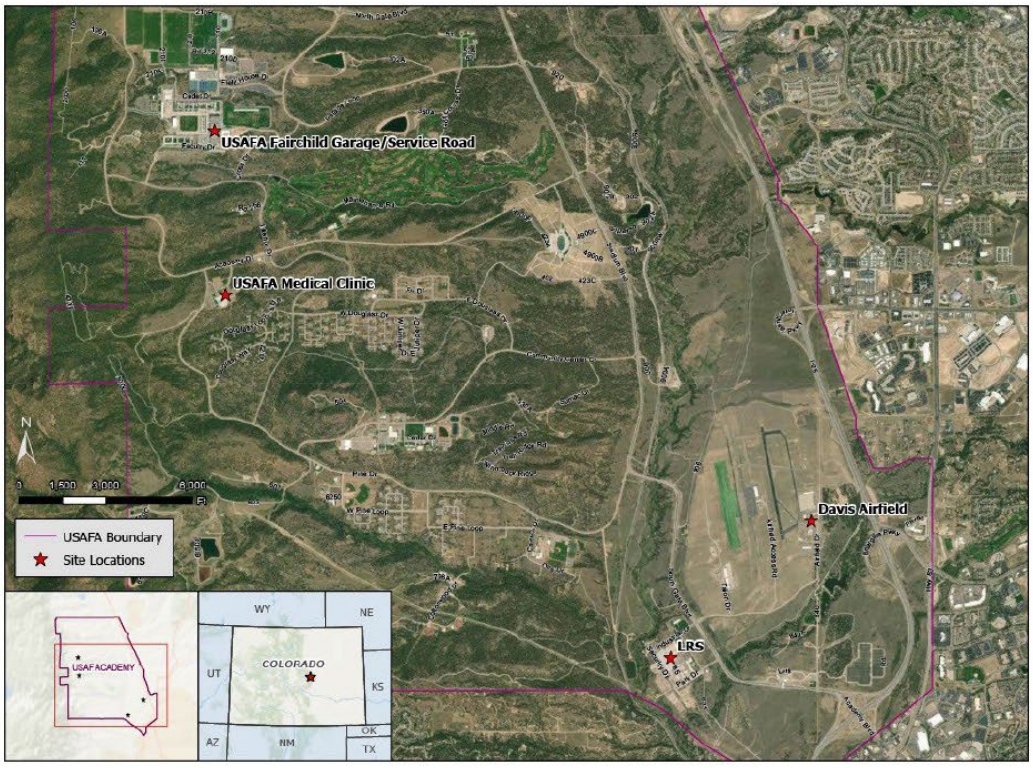
Attachment 7:
United States Air Force Academy EV Charging Site Locations



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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AIR FORCE INSTALLATION AND MISSION SUPPORT CENTER
JOINT BASE SAN ANTONIO LACKLAND TEXAS

20 June 2023

Julianne Turko, EIAP SME
Air Force Civil Engineer Center
National Environmental Policy Act Division (AFCEC/CZN)
AFCEC/CZN, Bldg. 1
2261 Hughes Ave, Suite 155
JBSA-Lackland TX 78236-9853

Carissa Speck, Historic Preservation Director
Delaware Nation
P.O. Box 825
Anadarko OK 73005

Dear Carissa Speck,

The U.S. Department of the Air Force (DAF) is preparing a Programmatic Environmental Assessment (PEA) under the National Environmental Policy Act (NEPA) to evaluate the range of potential environmental impacts associated with the Electric Vehicle Charge Facilities (EVCF) Program to be implemented as part of DAF's obligations to meet clean energy initiatives set forth within Executive Orders (EOs) 14008, *Tackling the Climate Crisis at Home and Abroad* and 14057, *Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability*. EO 14057 specifically requires all federal agencies to ensure that all light-duty non-tactical vehicle (NTV) acquisitions are zero emission vehicles (ZEVs) by end of fiscal year (FY) 2027, and all vehicle acquisitions (including medium- and heavy-duty vehicles) are ZEVs by end of FY 2035. The PEA will evaluate the potential environmental impacts associated with the DAF EVCF Program at the following Air Force bases (AFBs) identified by DAF for consideration within the PEA: Joint Base Anacostia-Bolling (JBAB) in Washington D.C., Joint Base Andrews (JBA) in Maryland, Joint Base McGuire Dix Lakehurst (JBMDL) in New Jersey, Los Angeles Air Force Base (LAFB) in California, Tyndall AFB (TAFB) in Florida, and the United States Air Force Academy (USAFA) in Colorado (see Attachments 1 through 6). Per Section 306108 of the National Historic Preservation Act (NHPA) of 1966, as amended, and 36 Code of Federal Regulations (CFR) Part 800, Protection of Historic Properties, the DAF is engaging early with tribal governments as it formulates the undertaking.

As part of the proposed undertaking, the Program includes installation of EV charging stations to expand necessary infrastructure supporting the planned conversion of AFB light duty government owned vehicles (GOV) to EVs. Program implementation would minimize carbon emissions and help meet White House Goals for EV usage under Executive Orders 14008 and 14057, which concern the climate crisis and clean energy industries. Placements of EVCF would occur in previously disturbed areas (e.g., parking lots) or previously surveyed areas where there

were determined to be no archaeological resources. Please refer to Attachments 2-6 for specific placements by AFB.

The NHPA requires that Federal agencies consult with tribes when an agency action may affect historic properties of religious and cultural significance to the tribes. In order to help us fulfill that obligation, we ask for your assistance in identifying any such properties on the respective AFBs and within the area of the Proposed Action that are of significance to your Tribe. Historic properties include Traditional Cultural Properties and landscapes, archeological sites, burial grounds, sacred landscapes or features, ceremonial areas, plant and animal communities, and buildings and structures with significant tribal association.

Please indicate in any response, within 30 days of receiving this letter, whether you will be providing information or would like to formally consult on this undertaking. Your choice now applies only to providing information and consultations under the NHPA. It will not affect the handling or disposition of human remains, funerary objects, sacred objects, or objects of cultural patrimony under the Native American Graves Protection and Repatriation Act. In the event such items are discovered, we will contact you regarding their handling and disposition.

For any questions, comments, or requests for more information, please contact Mr. Nicolas Post, AFCEC/CZN, ATTN: EVCF Programmatic EA, Bldg. 1, 2261 Hughes Ave, Suite 155, JBSA-Lackland, TX 78236-9853, by email to nicolas.post@us.af.mil, or by phone at (210) 925-3516. Thank you in advance for your assistance in this effort.

Julianne Turko

Julianne Turko
Department of the Air Force
Environmental Planning, Program Manager

7 Attachments:
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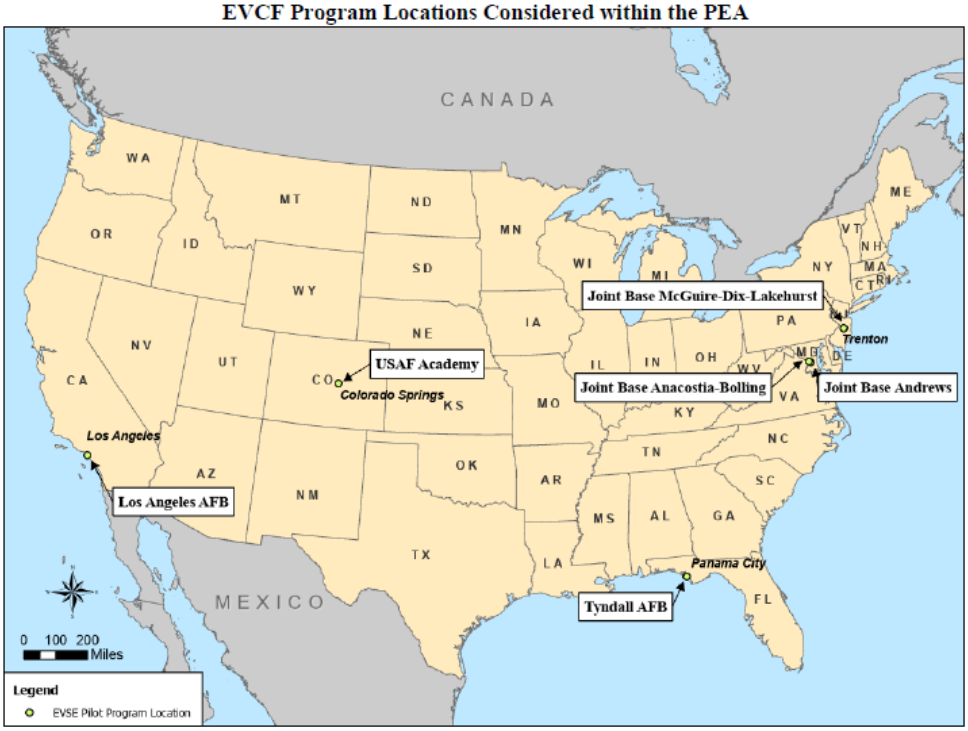
7. United States Air Force Academy EV Charging Site Locations

2

Attachment 1:
EVCF Program Locations Considered within the PEA



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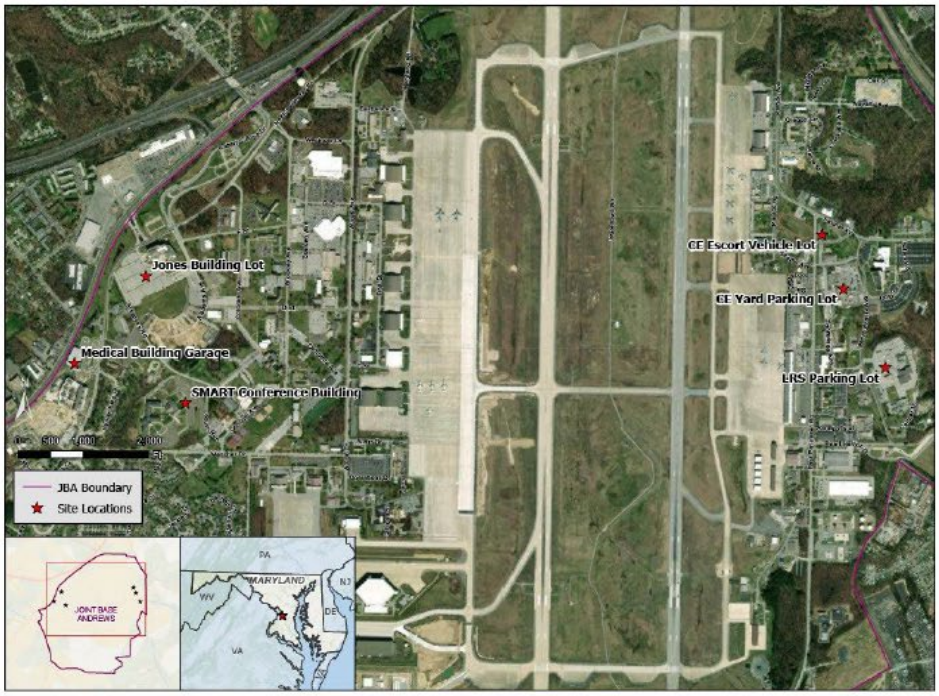
Attachment 2:
Joint Base Andrews EV Charging Site Locations



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Attachment 3:
Joint Base Anacostia-Bolling EV Charging Site Locations

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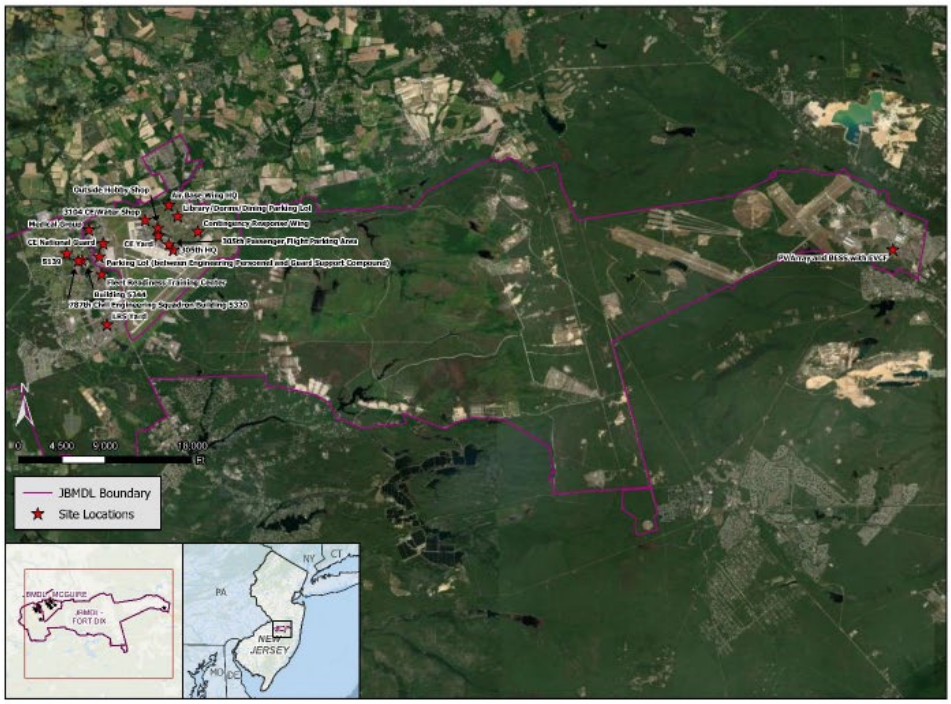
Attachment 4:
Joint Base McGuire Dix Lakehurst EV Charging Site Locations



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Attachment 5:
Los Angeles Air Force Base EV Charging Site Locations

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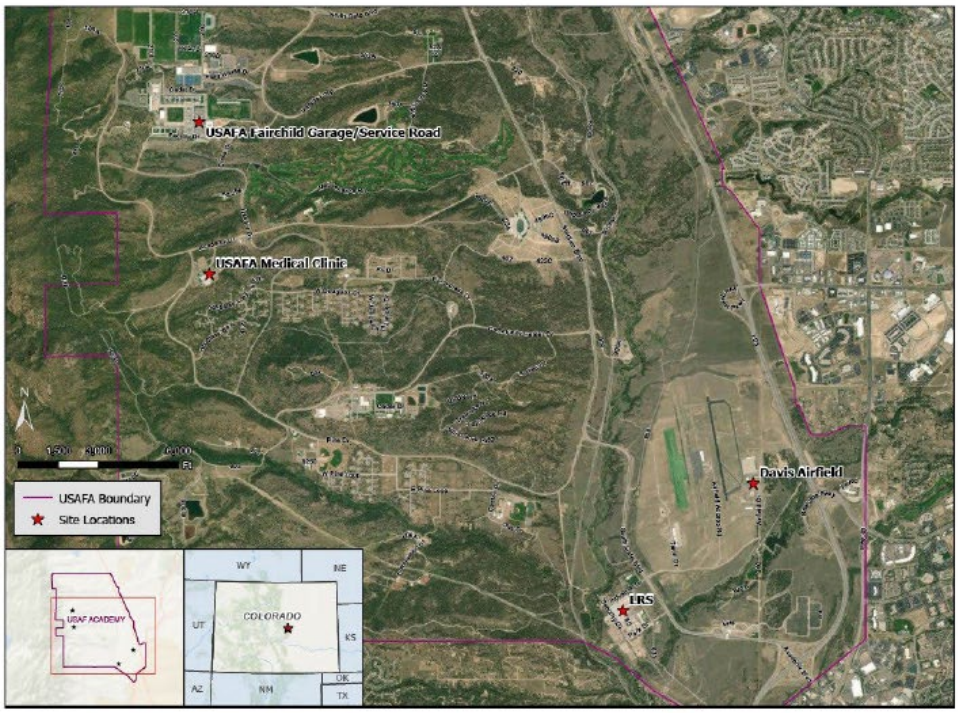
Attachment 6:
Tyndall Air Force Base EV Charging Site Locations

8

Attachment 7:
United States Air Force Academy EV Charging Site Locations



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B.1.2. Tribal Responses

From: Sara Childers [redacted]
Sent: Wednesday, June 28, 2023 2:54 PM
To: POST, NICOLAS G CIV USAF AFMC AFCEC/CZN [redacted]
Subject: [URL Verdict: Neutral][Non-DoD Source] Electric Vehicle Charge facilities

Hello,

The Flandreau Santee Sioux Tribe does not have an issue with your project as designed.

We ask that in the event your project inadvertently disturbs any human remains and or cultural material, that you contact us ASAP.

Thank you,

Sara Childers – THPO Assistant

Sara Childers
Tribal Historic Preservation Assistant
Flandreau Santee Sioux Tribe
603 W Broad Ave | Flandreau, SD 57028
p. [redacted] | www.fsst-nsn.gov

From: Susan Bachor
To: Stacy Herrick; [redacted]
Cc: Robert Naumann
Subject: RE: Scoping Information - USAF Programmatic Environmental Assessment (PEA) for the Electric Vehicle Charge Facilities (EVCF) Program
Date: Thursday, July 20, 2023 11:19:05 AM
Attachments: image001.png

Hè Stacy.

Thank you for notifying the Delaware Tribe of the plans for the above-referenced project. The Delaware Tribe is committed to protecting sites important to our tribal heritage, culture, and religion. Our review indicates that there are no known religious or culturally significant sites within the selected project area and we have no objection to the proposed project.

Please remove Larry Heady from your contact list. He is no longer THPO for Delaware Tribe. Historic Preservation prefers electronic documents, if a paper copy is necessary, please send to our main headquarters whose address is in my signature.

Best,

Susan Bachor
Historic Preservation Officer
Delaware Tribe of Indians
Historic Preservation
5100 Tuxedo Blvd.
Bartlesville, OK 74006
P-[redacted]

From: Teanna Limpy <[redacted]>
Sent: Wednesday, August 9, 2023 5:31 PM
To: POST, NICOLAS G CIV USAF AFMC AFCEC/CZN <[redacted]>
Subject: [Non-DoD Source] USAF EVCF Project Comment

Mr. Post:
Thank you for consulting with our office regarding the proposed Electric Vehicle Charge Facilities project located at the United States Air Force Academy in Colorado. This project area in particular is the ancestral homelands of the Cheyenne tribe. Upon review of the project information provided, I have determined that there are no concerns or comments from our office regarding the parameters of this undertaking. However, I do want to request that our office be contacted should the design and/or plans change to increase the site boundaries. Any changes beyond what was stated in the letter will need to be reviewed again. I assume that fire flames from the vehicles and the difficulty to put the fires will be assessed as a part of NEPA, as well.

The Northern Cheyenne Tribe provides a formal determination of 'No Historic Properties' for this project undertaking.

Respectfully,
Teanna Limpy, Director
Tribal Historic Preservation Office
Northern Cheyenne Tribe
14 E. Medicine Lodge Drive
PO Box 128
Lame Deer, MT. 59043
[redacted]

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Appendix C. Air Conformity Applicability Model Report Summaries

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AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: BOLLING AFB
State: District of Columbia
County(s): Entire District
Regulatory Area(s): Washington, DC-MD-VA

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use.

f. Point of Contact:

Name: Katelyn Kopp
Title: Contractor
Organization: Potomac Hudson Engineering
Email: Katelyn.Kopp@phe.com
Phone Number: 301-907-9078

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
__X__ not applicable

Conformity Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	0.078	50	No
NOx	0.366	100	No
CO	0.680	100	No
SOx	0.002		
PM 10	0.181		

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
PM 2.5	0.013		
Pb	0.000		
NH3	0.001		
CO2e	154.3		

2025 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	0.000	50	No
NOx	0.000	100	No
CO	0.000	100	No
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	0.0		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Katelyn Kopp

_____ ___08/21/23_____

Katelyn Kopp, Contractor DATE

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
PM 10	0.192		
PM 2.5	0.011		
Pb	0.000		
NH3	0.001		
CO2e	124.3		

2025 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	0.000	50	No
NOx	0.000	100	No
CO	0.000		
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	0.0		
Washington, DC-MD-VA			
VOC	0.000		
NOx	0.000		
CO	0.000	100	No
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	0.0		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Katelyn Kopp

_____ ___08/21/23_____

Katelyn Kopp, Contractor DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: JOINT BASE MCGUIRE-DIX-LAKEHURST
State: New Jersey
County(s): Burlington
Regulatory Area(s): Philadelphia-Wilmington-Atlantic City, PA-NJ-MD-DE; Burlington, NJ; Philadelphia-Wilmington, PA-NJ-DE

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use.

f. Point of Contact:

Name: Katelyn Kopp
Title: Contractor
Organization: Potomac Hudson Engineering
Email: katelyn.kopp@phe.com
Phone Number: 301-907-9078

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
__X__ not applicable

Conformity Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Burlington, NJ			
VOC	0.075		
NOx	0.338		
CO	0.673	100	No

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
SOx	0.002		
PM 10	0.589		
PM 2.5	0.012		
Pb	0.000		
NH3	0.001		
CO2e	148.2		
Philadelphia-Wilmington, PA-NJ-DE			
VOC	0.041	100	No
NOx	0.199	100	No
CO	0.332		
SOx	0.001	100	No
PM 10	0.584		
PM 2.5	0.007	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	81.8		

2025

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Burlington, NJ			
VOC	0.002		
NOx	0.010		
CO	0.024	100	No
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	4.7		
Philadelphia-Wilmington, PA-NJ-DE			
VOC	0.000	100	No
NOx	0.000	100	No
CO	0.000		
SOx	0.000	100	No
PM 10	0.000		
PM 2.5	0.000	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	0.0		

2026 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Burlington, NJ			
VOC	0.000		
NOx	0.000		
CO	0.000	100	No
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
NH3	0.000		
CO2e	0.0		
Philadelphia-Wilmington, PA-NJ-DE			
VOC	0.000	100	No
NOx	0.000	100	No
CO	0.000		
SOx	0.000	100	No
PM 10	0.000		
PM 2.5	0.000	100	No
Pb	0.000		
NH3	0.000	100	No
CO2e	0.0		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Katelyn Kopp

_____ __08/21/23_____

Katelyn Kopp, Contractor DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:

Base: LOS ANGELES AFB
State: California
County(s): Los Angeles
Regulatory Area(s): Los Angeles County-South Coast Air Basin, CA; Los Angeles South Coast Air Basin, CA; NOT IN A REGULATORY AREA

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use .

f. Point of Contact:

Name: Katelyn Kopp
Title: Contractor
Organization: Potomac Hudson Engineering
Email: Katelyn.Kopp@phe.com
Phone Number: 301-907-9078

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
__X__ not applicable

Conformity Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Los Angeles County-South Coast Air Basin, CA			
VOC	0.051		
NOx	0.245		

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
CO	0.404		
SOx	0.001		
PM 10	0.049		
PM 2.5	0.009		
Pb	0.000	25	No
NH3	0.000		
CO2e	102.2		
Los Angeles South Coast Air Basin, CA			
VOC	0.051	10	No
NOx	0.245	10	No
CO	0.404	100	No
SOx	0.001	70	No
PM 10	0.049	100	No
PM 2.5	0.009	70	No
Pb	0.000		
NH3	0.000	70	No
CO2e	102.2		
NOT IN A REGULATORY AREA			
VOC	0.010		
NOx	0.047		
CO	0.082		
SOx	0.000		
PM 10	0.002		
PM 2.5	0.002		
Pb	0.000		
NH3	0.000		
CO2e	21.1		

2025 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Los Angeles County-South Coast Air Basin, CA			
VOC	0.000		
NOx	0.000		
CO	0.000		
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000	25	No
NH3	0.000		
CO2e	0.0		
Los Angeles South Coast Air Basin, CA			
VOC	0.000	10	No
NOx	0.000	10	No
CO	0.000	100	No
SOx	0.000	70	No
PM 10	0.000	100	No
PM 2.5	0.000	70	No
Pb	0.000		
NH3	0.000	70	No
CO2e	0.0		
NOT IN A REGULATORY AREA			

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
VOC	0.000		
NOx	0.000		
CO	0.000		
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	0.0		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Katelyn Kopp

_____ ____08/21/23_____

Katelyn Kopp, Contractor DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:
Base: ANDREWS AFB
State: Maryland
County(s): Prince George's
Regulatory Area(s): Washington, DC-MD-VA

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use.

f. Point of Contact:
Name: Katelyn Kopp
Title: Contractor
Organization: Potomac Hudson Engineering
Email: katelyn.kopp@phe.com
Phone Number: 301-907-9078

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
__X__ not applicable

Conformity Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Washington, DC-MD-VA			
VOC	0.063	50	No
NOx	0.288	100	No
CO	0.554		
SOx	0.001		

AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:
Base: TYNDALL AFB
State: Florida
County(s): Bay
Regulatory Area(s): NOT IN A REGULATORY AREA

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use.

f. Point of Contact:

Name:	Katelyn Kopp
Title:	Contractor
Organization:	Potomac Hudson Engineering
Email:	katelyn.kopp@phe.com
Phone Number:	301-907-9078

2. Air Impact Analysis: Based on the attainment status at the action location, the requirements of the General Conformity Rule are:

_____ applicable
__X__ not applicable

Total net direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the start of the action through achieving "steady state" (i.e., net gain/loss upon action fully implemented) emissions. The ACAM analysis used the latest and most accurate emission estimation techniques available; all algorithms, emission factors, and methodologies used are described in detail in the USAF Air Emissions Guide for Air Force Stationary Sources, the USAF Air Emissions Guide for Air Force Mobile Sources, and the USAF Air Emissions Guide for Air Force Transitory Sources.

"Insignificance Indicators" were used in the analysis to provide an indication of the significance of potential impacts to air quality based on current ambient air quality relative to the National Ambient Air Quality Standards (NAAQSs). These insignificance indicators are the 250 ton/yr Prevention of Significant Deterioration (PSD) major source threshold for actions occurring in areas that are "Clearly Attainment" (i.e., not within 5% of any NAAQS)

and the GCR de minimis values (25 ton/yr for lead and 100 ton/yr for all other criteria pollutants) for actions occurring in areas that are "Near Nonattainment" (i.e., within 5% of any NAAQS). These indicators do not define a significant impact; however, they do provide a threshold to identify actions that are insignificant. Any action with net emissions below the insignificance indicators for all criteria pollutant is considered so insignificant that the action will not cause or contribute to an exceedance on one or more NAAQSs. For further detail on insignificance indicators see chapter 4 of the Air Force Air Quality Environmental Impact Analysis Process (EIAP) Guide, Volume II - Advanced Assessments.

The action's net emissions for every year through achieving steady state were compared against the Insignificance Indicator and are summarized below.

Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.063	250	
NOx	0.285	250	
CO	0.578	250	
SOx	0.001	250	
PM 10	0.216	250	
PM 2.5	0.010	250	
Pb	0.000	25	No
NH3	0.001	250	
CO2e	124.2		

2025 - (Steady State)

Pollutant	Action Emissions (ton/yr)	INSIGNIFICANCE INDICATOR	
		Indicator (ton/yr)	Exceedance (Yes or No)
NOT IN A REGULATORY AREA			
VOC	0.000	250	
NOx	0.000	250	
CO	0.000	250	
SOx	0.000	250	
PM 10	0.000	250	
PM 2.5	0.000	250	
Pb	0.000	25	No
NH3	0.000	250	
CO2e	0.0		

None of estimated annual net emissions associated with this action are above the insignificance indicators, indicating no significant impact to air quality. Therefore, the action will not cause or contribute to an exceedance on one or more NAAQS. No further air assessment is needed.

Katelyn Kopp

_____ ____08/21/23_____

Katelyn Kopp, Contractor DATE

AIR CONFORMITY APPLICABILITY MODEL REPORT
RECORD OF CONFORMITY ANALYSIS (ROCA)

1. General Information: The Air Force's Air Conformity Applicability Model (ACAM) was used to perform an analysis to assess the potential air quality impact/s associated with the action in accordance with the Air Force Manual 32-7002, Environmental Compliance and Pollution Prevention; the Environmental Impact Analysis Process (EIAP, 32 CFR 989); and the General Conformity Rule (GCR, 40 CFR 93 Subpart B). This report provides a summary of the ACAM analysis.

a. Action Location:
Base: USAF ACADEMY
State: Colorado
County(s): El Paso
Regulatory Area(s): Colorado Springs, CO

b. Action Title: Electric Vehicle Supply Equipment

c. Project Number/s (if applicable):

d. Projected Action Start Date: 4 / 2024

e. Action Description:

The Proposed Action includes installation of new EV charging stations on six AFBs as part of the DAF's program for the planned conversion of light-duty GOV acquisitions at all AFBs to EVs by 2027. The Proposed Action considers required utility grid modifications, as necessary, to accommodate the conversion of the respective AFB to support increased EV vehicle use.

f. Point of Contact:
Name: Katelyn Kopp
Title: Contractor
Organization: Potomac Hudson Engineering
Email: katelyn.kopp@phe.com
Phone Number: 301-907-9078

2. Analysis: Total combined direct and indirect emissions associated with the action were estimated through ACAM on a calendar-year basis for the "worst-case" and "steady state" (net gain/loss upon action fully implemented) emissions. General Conformity under the Clean Air Act, Section 1.76 has been evaluated for the action described above according to the requirements of 40 CFR 93, Subpart B.

Based on the analysis, the requirements of this rule are: _____ applicable
__X__ not applicable

Conformity Analysis Summary:

2024

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Colorado Springs, CO			
VOC	0.051		
NOx	0.241		
CO	0.445	100	No
SOx	0.001		

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
PM 10	0.160		
PM 2.5	0.009		
Pb	0.000		
NH3	0.000		
CO2e	101.4		

2025 - (Steady State)

Pollutant	Action Emissions (ton/yr)	GENERAL CONFORMITY	
		Threshold (ton/yr)	Exceedance (Yes or No)
Colorado Springs, CO			
VOC	0.000		
NOx	0.000		
CO	0.000	100	No
SOx	0.000		
PM 10	0.000		
PM 2.5	0.000		
Pb	0.000		
NH3	0.000		
CO2e	0.0		

None of estimated emissions associated with this action are above the conformity threshold values established at 40 CFR 93.153 (b); Therefore, the requirements of the General Conformity Rule are not applicable.

Katelyn Kopp

_____ _____08/21/23_____

Katelyn Kopp, Contractor DATE

Appendix D. Projects Identified for Cumulative Impacts

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Past, Present, and Reasonably Foreseeable Actions

The DAF identified past, present, and reasonably foreseeable future projects (listed in Table D-1), then reviewed cumulative effects within the Proposed Action's ROI for each resource area defined in Chapter 3. DAF analyzed the direct, indirect, and cumulative effects of projects occurring at each installation with an emphasis on energy improvements and energy usage, projects involving electrical upgrades, and projects involving planning efforts for EV conversion and supporting infrastructure upgrades. Environmental trends associated with these types of projects indicate increased infrastructure capacity for support and use of EVs, conversion of fleet vehicles and public transportation to EVs and education for the general public and EV access to economically disadvantaged populations.

The DAF focused the cumulative impacts analysis consistent with NEPA regulations 40 CFR 1508.1(g)(3). Because construction for the EVCF projects considered in this PEA would be very limited in scope and duration, the projects would cause negligible incremental additions to the impacts from construction of larger projects in the affected areas. However, the completed EVCF projects would make long-term contributions to the development of carbon pollution-free electricity initiatives.

Table D-1: Actions with Potential Cumulative Impacts

EVCF Installation	Name of Action /Description	Location	Timeframe
JBA	Retrofit Lighting Systems in 40 Facilities	Base-wide	1-5 Years
	Replace Existing Street Lights with Efficient LED Fixtures Basewide	Base-wide	1-5 Years
	Energy Upgrade to Backup Generators in Eight Buildings	Base-wide	1-5 Years
	Lighting Upgrades in 36 Facilities	Base-wide	1-5 Years
	Prince George's County Electric Vehicle & Charging Infrastructure Action Plan - This plan is an operational government action plan for the county to deploy EVs in the county fleet and install EVFC at County facilities over the next 10 years. The county's Green Fleet Policy outlines a 25 percent reduction goal in GHG emissions by 2025 and a 20 percent improvement in fuel economy by 2020, supported by a 50 percent goal of all applicable vehicle purchases to be ZEVs or partial ZEVs by 2025.	Prince George's County	0-10 years
	Prince George's County Sustainable Energy - The program coordinates the county's efforts to reduce the 3 C's of energy: Consumption; Cost; and Carbon emissions that includes: i. Reduce County-wide GHG or carbon emissions by 80 percent below 2008 levels by 2050; ii. Meet percent of County government buildings electricity demand with distributed, renewable energy generation by 2022; iii. Help grant recipients achieve at least 15 percent energy savings for energy efficiency projects and 10 percent energy savings for solar projects; iv. Help grant recipients reduce energy consumption by 20 percent or greater for office buildings and multifamily dwellings.	Prince George's County	Ongoing

EVCF Installation	Name of Action /Description	Location	Timeframe
	EVSE Prototype – Installation of EV charging stations and associated electrical equipment. Including: • (2) 150kW Level 3 Single Port EV Charger • Rectifier Unit • Switchboard (pad mounted) • Meter and mount • Pre-cast concrete trenches • Protective Bollards • Future infrastructure capacity to support an additional up to twenty-four (24) 32A Level 2 EV Chargers. TechFlow will utilize an existing transformer located outside of building 362 and run conduit underground to connect to an existing utility vault and raceways to existing manhole near the project location. From existing manhole, underground conduit will be extended to existing island to install the above listed electrical equipment.	JBAB – Building 362 (same location as proposed Building 361/362 site)	1-5 Years
JBAB	Washington D.C. Transportation Electrification Roadmap - helps transition D.C.'s local transportation modes to zero-emission vehicles by 2045. The Roadmap includes various initiatives to maximize EV adoption and emissions reduction, including but not limited to: • Public engagement targeted to low/middle-income and working-class communities to support a fair and equitable transition to electric vehicles; • Educational opportunities on benefits of EV charging with large DC-area employers, commercial entities, Business Improvement Districts (bids), property developers, car dealerships and others; • Training opportunities with labor unions, trade organizations, and other groups to build a workforce that can support EVs and also deliver good-paying jobs for District residents; • A substantial increase in EV charging in publicly accessible locations, residential neighborhoods, multi-unit dwellings and workplaces, as well as a direct current fast charging network to help the taxi-cab industry transition to electric and meet their high mileage needs; and • Creating EV and charging infrastructure policies that affect all transportation modes.	Washington D.C.	0-10+ Years
JBMDL	United Communities (UC) Housing EV Chargers - UC (in partnership with TRO Energy Solutions) will install EV chargers at the resident's home. Residents can purchase a monthly subscription catered to their usage.	Cantonment Area	1-5 Years
LAAFB	Los Angeles City Electric Vehicle Master Plan - aimed at developing an entirely electric fleet of more than 10,000 city-owned vehicles and deploying EV charging infrastructure across the city	City of Los Angeles	0-10+ Years

EVCF Installation	Name of Action /Description	Location	Timeframe
	Los Angeles County Transportation Electrification Blueprint - provides a regional outlook regarding the infrastructure planning considerations including potential associated grid impacts and recommendations on how to meet these potential challenges. The analysis emphasizes that proper consideration of load management must be prioritized to cost-effectively integrate this aggressive expansion in the existing grid and concluded that EV charging may stress existing near- or over- capacity transformer banks, but bus and workplace EV load itself does not cause any significant substation degradation in the near term (2018–2025), based on initial demand estimates.	Los Angeles County	0-10+ Years
TAFB	Florida Electric Vehicle Infrastructure Master Plan – The Master Plan has three primary goals: 1. Support short-range and long-range electric vehicle travel as well as emergency evacuation in the state. 2. Adapt state highway infrastructure consistent with market demand. 3. Ensure the availability of adequate and reliable EV charging stations.	Florida - Statewide	0-10+ Years
USAFA	Electric Vehicle Readiness Plan – the plan currently under development will provide an analysis of the community's needs, opportunities, and challenges regarding EV adoption, as well as a thorough exploration and prioritization of implementation options. Primary project components will include: • A roadmap for conversion of City and Utilities fleet to electric vehicles • Public education and EV adoption incentives • Policy adoption, including rate structure, infrastructure ownership, and land use and building code recommendations to support EVs • Identification of ideal EV charging station locations, including needed utility infrastructure upgrades	City of Colorado Springs	0-10+ Years

D.C. = Washington D.C.; EV = electric vehicle; EVSE = Electric Vehicle Supply Equipment; GHG = greenhouse gas; JBA = Joint Base Andrews; JBAB = Joint Base Anacostia-Bolling; JBMDL = Joint Base McGuire-Dix-Lakehurst; LAAFB = Los Angeles Air Force Base; TAFB = Tyndall Air Force Base; UC = United Communities; USAFA = U.S. Air Force Academy; ZEV = zero emission vehicle

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