DRAFT ENVIRONMENTAL ASSESSMENT FOR CONSTRUCTION AND OPERATION OF A NEW CHILD DEVELOPMENT CENTER JOINT BASE ANDREWS-NAVAL AIR FACILITY, MARYLAND

Prepared for:

DEPARTMENT OF THE AIR FORCE
Joint Base Andrews-Naval Air Facility, MD 20762

August 2020
Draft Environmental Assessment for
Child Development Center at
Joint Base Andrews-Naval Air Facility, Maryland

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Letters or other written comments provided may be published in the Final EA. As required by law, substantive comments will be addressed in the Final EA and made available to the public. Any personal information provided will be kept confidential. Private addresses will be compiled to develop a mailing list for those requesting copies of the Final EA. However, only the names of the individuals making comments and their specific comments will be disclosed. Personal home addresses and phone numbers will not be published in the Final EA.
Draft Environmental Assessment for
Child Development Center at
Joint Base Andrews-Naval Air Facility, MD

Lead Agency:  Department of the Air Force

Proposed Action:  Child Development Center (CDC) at Joint Base Andrews-Naval Air Facility (JBA), MD

Written comments and inquiries regarding this document should be directed to: Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762-4803.

Report Designation:  Environmental Assessment (EA)

Abstract:  The Air Force District of Washington (AFDW) proposes construction of a new CDC at Joint Base Andrews-Naval Facility, MD.

The Proposed Action is to construct and operate an approximately 29,200-square-foot (SF) CDC at the corner of Arkansas Road and California Avenue, adjacent to the existing Honor Guard building (Figure 2-1). The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support. Staff parking for the facility would be located across California Avenue at the site of the former dental clinic parking lot.

This EA evaluates the potential impacts of construction and operation activities associated with the Proposed Action to the human and natural environment. In addition, the EA evaluates the No Action Alternative, which would be to make no changes and continue to operate the current CDC #1. Other alternatives considered, but eliminated from further analysis included renovating existing CDC #1, or building a new CDC in one of four other locations – site of the former Firestone building and Building 1558; site of the former Officers’ Club and parking; site of the former Building 1558; and the corner of Washington Road and Vermont Road.

Facility design would be compatible with applicable Department of Defense (DoD), Air Force, and base design standards. Local materials and construction techniques would be used when cost effective. The facility would be designed as permanent construction in accordance with DoD United Facilities Criteria (UFC) 1-200-01, General Building Requirements, and UFC 1-200-02, High Performance and Sustainable Building Requirements. The project would comply with DoD Antiterrorism/Force Protection (AT/FP) requirements per UFC 4-010-01 and Air Force Instruction (AFI) 32-9010, Management and Reporting of Air Force Space and Building Services in OSD Assigned Facilities and in the Washington DC Area. During construction, the Proposed Action would provide temporary, socioeconomic benefits through the generation of construction jobs.
The Proposed Action is expected to result in short-term minor adverse impacts to noise; surface water; and potable water, sanitary sewer, electric, natural gas, and solid waste utilities. It is expected to result in long-term minor adverse impacts to stormwater drainage utilities. It is expected to result in both short- and long-term minor adverse impacts to stormwater runoff; vegetation, wildlife, and wildlife habitat; soils and topography; and transportation. No or negligible impacts are expected to air quality; groundwater, floodplains, coastal zone, and wetlands; threatened or endangered species; hazardous and toxic materials and waste; cultural resources; land use; safety and occupational health; or socioeconomics, environmental justice, and protection of children.

The No Action Alternative would have long-term adverse impacts to utilities and health and safety as a result of the continued deterioration of the existing CDC #1. This facility has had ongoing sewage issues; a leaking roof; heating, ventilation, and air conditioning (HVAC) system failures; and mold and pest management issues. There are also compliance concerns related to Anti-Terrorism/Force Protection (AT/FP) regulations for this building. There would be no impacts to the proposed site along Arkansas Road and California Avenue as a result of the No Action Alternative.

To implement the Proposed Action, various Federal and state reviews and permits would be required. Potential permits and environmental protection plans include, but are not limited to, the following:

- Individual Permit for Stormwater Associated with Construction Activity from the Maryland Department of the Environment (MDE)
- Soil Erosion Control Plan
- Air Quality Construction Permits
- Environmental Protection Plan

These permits and approvals would be obtained prior to the start of construction.
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<th>Acronym</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AADT</td>
<td>Average annual daily traffic</td>
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<tr>
<td>ACAM</td>
<td>Air Conformity Applicability Model</td>
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<tr>
<td>ACM</td>
<td>Asbestos-Containing Materials</td>
</tr>
<tr>
<td>AFDW</td>
<td>Air Force District of Washington</td>
</tr>
<tr>
<td>AFI</td>
<td>Air Force Instruction</td>
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<tr>
<td>AICUZ</td>
<td>Air Installation Compatible Use Zone</td>
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<tr>
<td>AIRFA</td>
<td>American Indian Religious Freedom Act</td>
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<td>ANSI</td>
<td>American National Standards Institute</td>
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<tr>
<td>AOC</td>
<td>Area of Concern</td>
</tr>
<tr>
<td>APE</td>
<td>Area of Potential Effect</td>
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<tr>
<td>ARPA</td>
<td>Archaeological Resource Protection Act</td>
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<tr>
<td>AST</td>
<td>Above-ground Storage Tank</td>
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<td>AT/FP</td>
<td>Antiterrorism/Force Protection</td>
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<tr>
<td>BCC</td>
<td>Birds of Conservation Concern</td>
</tr>
<tr>
<td>bgs</td>
<td>Below ground surface</td>
</tr>
<tr>
<td>BMP</td>
<td>Best Management Practice</td>
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<tr>
<td>CAA</td>
<td>Clean Air Act</td>
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<td>CDC</td>
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<td>CEQ</td>
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<td>CERCLA</td>
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<td>CFR</td>
<td>Code of Federal Regulations</td>
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<td>COMAR</td>
<td>Code of Annotated Maryland Regulations</td>
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<td>CWA</td>
<td>Clean Water Act</td>
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<td>Coastal Zone Management Act</td>
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<td>DAF</td>
<td>Department of the Air Force</td>
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<tr>
<td>dB</td>
<td>Decibel</td>
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<tr>
<td>dBA</td>
<td>A-weighted decibels</td>
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<td>DNL</td>
<td>Day-Night Average Sound Level</td>
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<td>Department of Defense</td>
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<td>Greenhouse Gas</td>
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<tr>
<td>GIS</td>
<td>Geographic Information System</td>
</tr>
<tr>
<td>GWP</td>
<td>Global Warming Potential</td>
</tr>
<tr>
<td>HAP</td>
<td>Hazardous Air Pollutant</td>
</tr>
<tr>
<td>HTMW</td>
<td>Hazardous and Toxic Materials and Waste</td>
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</table>
SPCCP  Spill Prevention, Control, and Countermeasure Plan
SWPPP  Stormwater Pollution Prevention Plan
TCP    Traditional Cultural Property
tpy    tons per year
TSCA   Toxic Substance Control Act
TSS    Total Suspended Solids
UFC    United Facilities Criteria
USACE  United States Army Corps of Engineers
USAF   United States Air Force
USC    United States Code
USEPA  United States Environmental Protection Agency
USFWS  United States Fish and Wildlife Service
UST    Underground Storage Tank
VOC    Volatile Organic Compound
WSSC   Washington Suburban Sanitary Commission
1 PURPOSE AND NEED FOR ACTION

1.1 INTRODUCTION

The U.S. Air Force’s (USAF) Joint Base Andrews-Naval Air Facility (JBA), Maryland, has identified the need to construct a new Child Development Center (CDC) to support the need for an updated, safe environment for childcare of military and Department of Defense (DoD) families. This Environmental Assessment (EA) was prepared to evaluate the potential environmental impacts of this proposed project in compliance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code [USC] 4331 et seq.), the regulations of the President’s Council on Environmental Quality (CEQ) that implement NEPA procedures (40 Code of Federal Regulations [CFR] 1500-1508), the Air Force Environmental Impact Analysis Process (EIAP) Regulations at 32 CFR Part 989, and Air Force Instruction (AFI) 32-7061.

JBA is located five miles southeast of Washington, D.C., in southern Prince George’s County, Maryland, and occupies 4,390 acres of land (Figures 1-1 and 1-2). JBA is home to multiple units that are critical to national security, including emergency reaction rotary-wing airlift for the National Capital Region (NCR), the Air Force District of Washington (AFDW), Air National Guard Readiness Center, Naval Air Facility Washington, U.S. Army Priority Air Transport, and Defense Intelligence Agency. Members of these units, and many others in the NCR, rely on military CDCs for high quality, reliable, and affordable childcare so that they are able to focus on their missions.

The information presented in this document will serve as the basis for deciding whether the Proposed Action would result in a significant impact to the human environment, requiring the preparation of an Environmental Impact Statement (EIS), or whether no significant impacts would occur, in which case a Finding of No Significant Impact (FNSI) would be appropriate. If the execution of the Proposed Action would involve “construction” in a wetland as defined in Executive Order (EO) 11990, Protection of Wetlands, or “action” in a floodplain under EO 11988, Floodplain Management, a Finding of No Practicable Alternative (FONPA) would be prepared in conjunction with the FNSI.

1.2 PURPOSE OF THE ACTION

The purpose of the proposed construction of the CDC facility is to provide an adequately sized and functionally configured childcare facility at JBA to support the need for reliable and affordable childcare for military and DoD families. A new CDC facility would provide a centrally located, safe, and up-to-date space for children to play and learn.
Figure 1-1: Location of Joint Base Andrews
Figure 1-2: Location of Proposed Child Development Center on JBA
1.3 NEED FOR THE ACTION

The need for the proposed construction of the CDC facility is driven by the current utility, structural, and public health issues that have plagued the existing facility in recent years. The existing CDC #1 (Building 4575) was originally built in 1943 as a medical clinic, and has been renovated multiple times to serve different purposes in the last 76 years. The current CDC has suffered from sewage backups and kitchen drainage issues; a leaking roof; heating, ventilation, and air conditioning (HVAC) system failures; and mold and pest management issues. These issues have resulted in frequent work orders that maintenance staff cannot address in a timely manner, and have made it more difficult to maintain accreditation each year. There are also compliance concerns related to Anti-Terrorism/Force Protection (AT/FP) regulations for this building. The project would reduce life-cycle costs; provide systems and facilities that meet current health and safety standards for childcare facilities, including Unified Facilities Criteria (UFC) 4-740-14, Design: Child Development Centers; and provide more space to accommodate the children of military and DoD families.

1.4 INTERAGENCY/INTERGOVERNMENTAL COORDINATION AND CONSULTATIONS

1.4.1 Interagency Coordination and Consultations

Scoping is an early and open process for developing the breadth of issues to be addressed in the EA and for identifying significant concerns related to a Proposed Action. Per the requirements of Intergovernmental Cooperation Act of 1968 (42 USC 4231(a)) and EO 12372, Intergovernmental Review of Federal Programs, Federal, state, and local agencies with jurisdiction that could be affected by the Proposed Action were notified during the development of this EA.

Appendix A contains the list of agencies consulted during this analysis and copies of correspondence.

1.4.2 Government to Government Consultations

EO 13175, Consultation and Coordination with Indian Tribal Governments, directs Federal agencies to coordinate and consult with Native American tribal governments whose interests might be directly and substantially affected by activities on federally administered lands. Consistent with that EO, Department of Defense Instruction (DoDI) 4710.02, Interactions with Federally-Recognized Tribes, and AFI 90-2002, Air Force Interaction with Federally-recognized Tribes, federally-recognized tribes that are historically affiliated with the JBA geographic region were invited to consult on all proposed undertakings that have a potential to affect properties of cultural, historical, or religious significance to the tribes. The tribal consultation process is distinct from NEPA consultation or the interagency coordination process, and it requires separate notification of all relevant tribes. The timelines for tribal consultation are also distinct from those of other consultations. The JBA point-of-contact for Native American tribes is the Installation Tribal Liaison Officer (ITLO).
The Native American tribal governments that were coordinated or consulted with regarding these actions are listed in Appendix A.

1.4.3 Other Agency Consultations

Per the requirements of Section 106 of the National Historic Preservation Act (NHPA) and implementing regulations (36 CFR Part 800); Section 7 of the Endangered Species Act (ESA) and implementing regulations; the Migratory Bird Treaty Act (MBTA); and Coastal Zone Management Act (CZMA); findings of effect and request for concurrence were transmitted to the Maryland Historic Trust (MHT) and the United States Fish and Wildlife Service (USFWS). Because the Proposed Action is located within Maryland’s Coastal Zone, a consistency determination was drafted, and will be sent to the Maryland Coastal Zone Management Program for review. JBA also initiated consultation with the following agencies for the proposed project: Maryland Department of Natural Resources (MDNR), Maryland State Clearinghouse Office of Planning, Maryland Department of the Environment (MDE), Prince George’s County Department of Planning, National Capital Parks-East, and National Capital Planning Commission (NCPC). JBA did not coordinate with the National Marine Fisheries Service (NMFS) because no marine resources will be impacted from this project.

Concurrence indicating a finding of no effect for the construction of the new CDC was sent by the MHT on 2 June 2020. On 15 May 2020, a report was generated through the Information for Planning and Conservation (IPaC) system, the USFWS online system for searching for species protected under the ESA, which notes that one protected species – the Northern Long-Eared Bat (NLEB) – has the potential to occur on the proposed CDC site. Per USFWS guidance included in the IPaC report, further consideration and consultation for the NLEB only needs to be undertaken when the project includes tree clearing of 15 or more acres. As this Proposed Action does not meet or exceed this threshold of tree clearing, no further consultation is needed for the NLEB at this time.

Correspondence regarding the findings and concurrence and resolution of any adverse impact is included in Appendix A.

1.5 PUBLIC AND AGENCY REVIEW OF EA

A Notice of Availability (NOA) of the Draft EA and FNSI was published in the newspapers of record (listed below), announcing the availability of the Draft EA for review on [date]. The NOA invited the public to review and comment on the Draft EA. The public and agency review period ended on [date]. The NOA and public and agency comments are provided in Appendix A.

The NOA was published in the Maryland Independent. Electronic copies of the EA and Draft FNSI were also made available for review on the JBA environmental website, https://www.jba.af.mil/About-Us/Environmental-Mission/.
1.6 DECISION TO BE MADE

The EA evaluates whether the Proposed Action would result in significant impacts on the human and natural environment. If significant impacts are identified, JBA would undertake mitigation to reduce impacts to below the level of significance, undertake the preparation of an EIS addressing the Proposed Action, or abandon the Proposed Action.

This EA is a planning and decision-making tool that will be used to guide JBA in implementing the Proposed Action in a manner consistent with USAF standards for environmental stewardship.
2 DESCRIPTION OF THE PROPOSED ACTION AND ALTERNATIVES

2.1 PROPOSED ACTION

The Proposed Action is to construct and operate an approximately 29,200-square-foot (SF) CDC at the corner of Arkansas Road and California Avenue, adjacent to the existing Honor Guard building (Figure 2-1). The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support. Staff parking for the facility would be located across California Avenue at the site of the former dental clinic parking lot. No additional construction is expected to be needed for staff parking.

The proposed location for the new CDC was previously developed, but there are currently no buildings on site. It is also approximately 1/3 mile from the Jones Building (Building 1500) and the Malcolm Grow Medical Clinic and Surgery Center, which encompass a large portion of JBA’s workforce. All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The proposed site would also preserve the area designated for the potential future relocations of Arkansas Road and California Avenue as designated in the JBA Installation Development Plan (IDP).

Building 4575 – the existing CDC on Windsor Road – would remain operational throughout the construction of the new CDC. Once the new CDC is completed and certified for use, childcare functions would be relocated to the new CDC.

The total acreage of limit of disturbance (LOD) for construction of the new CDC would be approximately 5 acres. Facility design would be compatible with applicable DoD, USAF, and base design standards. Local materials and construction techniques would be used when cost effective. The facility would be designed as permanent construction in accordance with DoD UFC 1-200-01, General Building Requirements, and UFC 1-200-02, High Performance and Sustainable Building Requirements.
Figure 2-1: Project Area for Proposed Child Development Center on JBA
2.2 SELECTION STANDARDS

NEPA and the CEQ regulations mandate the consideration of reasonable alternatives for the Proposed Action. “Reasonable alternatives” are those that also could be utilized to meet the purpose of and need for the Proposed Action. Per the requirements of 32 CFR §989, the Air Force EIAP regulations, selection standards are used to identify alternatives for meeting the purpose of and need for the Proposed Action.

In selecting possible alternative locations for the construction of the new CDC facility at JBA, the Air Force evaluated sites that met the following selection standards:

a. Site encompasses approximately 5 acres  
b. Close to the Jones Building (Building 1500) and medical clinics  
c. In compliance with AT/FP requirements as identified in DoD UFC 4-010-01  
d. Utilities available on site  
e. Requires minimal other construction/demolition

2.3 DETAILED DESCRIPTION OF THE ALTERNATIVES

The following potential location alternatives that might meet the purpose and need were considered:

2.3.1 Alternative 1: Corner of Arkansas Road and California Avenue (Proposed Action)

The Proposed Action is the preferred alternative. Under this alternative, JBA would implement the project at the corner of Arkansas Road and California Avenue, adjacent to the Honor Guard building, as defined in section 2.1. This alternative would also include the construction of a staff parking lot across California Avenue at the site of the former dental clinic parking lot.

2.3.2 Alternative 2: Site of former Firestone building and Building 1558

This alternative is located at the corner of Alabama Avenue and F Street, at the site of the former Firestone building and Building 1558. Both of these buildings would need to be demolished prior to construction on this site.

2.3.3 Alternative 3: Site of former Officers’ Club and parking

This alternative is located at the corner of Arkansas Road and Arizona Loop, at the site of a parking lot and the former Officers’ Club. This is a smaller lot at just over 4 acres; therefore, the building may not fit on site, and it would require the reconfiguration of the current Arizona Loop and Lutman Drive as part of the construction on this site.
2.3.4 Alternative 4: Former Building 1558

This alternative is located along Alabama Avenue, at the site of Building 1558. This building would need to be demolished prior to construction on the site.

2.3.5 Alternative 5: Corner of Washington Road and Vermont Road

This alternative is located along Washington Drive between Vermont Road and Youngstown Road, at the site of a current youth soccer and football field. The current small buildings and storage facilities on site would need to be demolished or removed prior to construction on this site.

2.3.6 Alternative 6: Renovation of existing CDC #1 in Building 4575

This alternative would include the renovation of the existing CDC #1 in Building 4575 to bring the building up to code and fix existing health, safety, and AT/FP deficiencies.

2.4 SCREENING OF THE ALTERNATIVES

The selection standards described in Section 2.2 were applied to these alternatives to determine which alternative(s) could serve the purpose of and need for the action.

Table 2-1: Screening of the Alternatives

<table>
<thead>
<tr>
<th>Alternative Descriptions</th>
<th>Site encompasses 5-6 acres</th>
<th>Close to Jones Building (Bldg 1500) and medical clinics</th>
<th>In compliance with AT/FP requirements as identified in DoD UFC</th>
<th>Utilities available on site</th>
<th>Requires minimal other construction or demolition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alternative 1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Alternative 2</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Alternative 3</td>
<td>Partially</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Alternative 4</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Alternative 5</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Alternative 6</td>
<td>Yes</td>
<td>No</td>
<td>Partially</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Yes = Fully satisfies Selection Standard
Partially = Does not fully satisfy Selection Standard
No = Does not satisfy Selection Standard

Based on the screening of alternatives in Table 2-1, no alternatives to the Proposed Action were identified, as there is no reasonable alternative capable of answering the purpose of and need for the Proposed Action. The Proposed Action satisfies applicable Air Force, DoD, state and/or Federal requirements, and supports current and future mission requirements.

The NEPA process is intended to support flexible, informed decision-making. The analysis provided by this EA and feedback from the public and other agencies will inform decisions made
about whether, when, and how to execute the Proposed Action. Among the alternatives evaluated is a No Action Alternative. The No Action Alternative will analyze the consequences of not undertaking the Proposed Action, and will serve to establish a comparative baseline for analysis.

Only one alternative, Alternative 1: Corner of Arkansas Road and California Avenue, was found to answer the purpose of and need for the action and to satisfy the selection standards. This alternative and a No Action Alternative, discussed in Section 2.4.1, are carried forward for detailed analysis in this EA. Alternatives considered, but eliminated from further consideration, are discussed in Section 2.4.2.

2.5 ALTERNATIVES CARRIED FORWARD

2.5.1 Alternative 1: Corner of Arkansas Road and California Avenue (Preferred Alternative)

Alternative 1 fully satisfies all selection standards, and thus meets the purpose of and need for the Proposed Action.

2.5.2 No Action Alternative

The No Action Alternative cannot be considered reasonable as it fails to address the purpose of and need for the action as described in Chapter 1. However, it will be carried forward for further analysis, consistent with CEQ regulations, to provide a baseline against which the impacts of the Proposed Action can be assessed.

2.6 ALTERNATIVES ELIMINATED FROM FURTHER CONSIDERATION

2.6.1 Alternative 2: Site of former Firestone building and Building 1558

Alternative 2 fully satisfies Selection Standards A through D, but only partially satisfies Standard E because it requires the demolition of both the former Firestone building and Building 1558.

2.6.2 Alternative 3: Site of former Officers’ Club and parking

Alternative 3 fully satisfies Selection Standards B through D, but only partially satisfies Standard A because it is just over 4 acres; so while the CDC may fit, it would be a tight fit on this site. Alternative 3 also does not satisfy Standard E because it would require the removal of the existing parking lot and the reconfiguration of the current Arizona Loop and Lutman Drive.

2.6.3 Alternative 4: Former Building 1558

Alternative 4 fully satisfies Selection Standards A through D, but does not satisfy Selection Standard E because it requires the demolition of Building 1558.
2.6.4 Alternative 5: Corner of Washington Road and Vermont Road

Alternative 5 fully satisfies Selection Standards A, C, and E, but does not satisfy Standard B because it is located close to the Virginia Avenue gate, which is approximately 2 miles from the Jones Building and medical clinics. Also, Alternative 5 only partially satisfies Selection Standard D, as the site is previously undeveloped and does not have full access to all necessary utilities. There are, however, utilities in the vicinity of the site.

2.6.5 Alternative 6: Renovation of existing CDC #1 in Building 4575

Alternative 6 fully satisfies Selection Standards A, D, and E, but does not satisfy Standard B because it is approximately 2 miles from the Jones Building and medical clinics. It also does not satisfy Selection Standard C because it does not meet AT/FP standards.
3 AFFECTED ENVIRONMENT

3.1 SCOPE OF ANALYSIS

This section describes the relevant environmental conditions at the project site and surrounding area for resources potentially affected by the Proposed Action and No Action Alternative described in Section 2.0. Although the region of influence (ROI) or the expected geographic scope of potential impacts is considered to be all of Joint Base Andrews, the total acreage of LOD would be approximately 5 acres. In compliance with guidelines contained in NEPA and CEQ regulations, and in AFI 32-7061, Environmental Impact Analysis Process, each environmental, cultural, and social resource category typically considered in an EA was reviewed for its applicability to the Proposed Action and No Action Alternative. Affected resources applicable to the Proposed Action are discussed further in this section and in Section 4.0, Environmental Consequences.

3.1.1 Resource Areas Eliminated from Detailed Analysis

To the extent possible, analyses of the various resources presented in this EA are streamlined based on the anticipated level of potential impact. The focus of this EA is on the potential environmental impacts associated with the construction and operation associated with the proposed CDC. The following resource areas are not analyzed in this EA because the Proposed Action either has no potential to affect them, or the potential impacts would be negligible:

**Airspace.** No impacts to airspace from construction or operation activities related to the proposed CDC are expected to occur.

**Designated Natural Areas.** No Wild or Scenic Rivers, Natural Areas, or National Forests are present in the proposed project area.

**Prime and Unique Farmlands.** There are no prime and unique farmland soils located within the proposed project area.

3.2 NOISE / ACOUSTIC ENVIRONMENT

Sound is a physical phenomenon consisting of vibrations that travel through a medium such as air and are sensed by the human ear. Noise is defined as any sound that is undesirable because it interferes with communication, is intense enough to damage hearing, or is otherwise intrusive. Human response to noise varies depending on the type and characteristics of the noise distance between the noise source and the receptor, receptor sensitivity, and time of day. Noise often is generated by activities essential to a community’s quality of life such as construction or vehicular traffic.

Sound varies by both intensity and frequency. Sound pressure level, described in decibels (dB), is used to quantify sound intensity. The dB is a logarithmic unit that expresses the ratio of a sound pressure level to a standard reference level. Sounds encountered in everyday life and their dB levels are provided in Table 3-1. Hertz are used to quantify sound frequency. The human ear
responds differently to different frequencies. A-weighting, measured in A-weighted decibels (dBA), approximates a frequency response expressing the perception of sound by humans.

### Table 3-1: Common Sound Analysis

<table>
<thead>
<tr>
<th>Sound</th>
<th>Sound Level (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing near sirens</td>
<td>120</td>
</tr>
<tr>
<td>Approaching subway train</td>
<td>100</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>95</td>
</tr>
<tr>
<td>Gas-powered lawnmowers</td>
<td>80-85</td>
</tr>
<tr>
<td>City traffic (inside the car)</td>
<td>80-85</td>
</tr>
<tr>
<td>Dishwasher</td>
<td>70</td>
</tr>
<tr>
<td>Normal conversation</td>
<td>60</td>
</tr>
<tr>
<td>Refrigerator hum</td>
<td>40</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control (CDC), 2019

The dBA noise metric describes steady noise levels, although very few noises are, in fact, constant. Therefore, A-weighted day-night sound level has been developed. Day-night sound level (DNL) is defined as the average sound energy in a 24-hour period with a 10-dB penalty added to the nighttime levels (10:00 p.m. to 7:00 a.m.). DNL is a useful descriptor for noise because it (1) averages ongoing yet intermittent noise and (2) measures total sound energy over a 24-hour period. In addition, equivalent sound level (Leq) often is used to describe the overall noise environment. Leq is the average sound level in dB.

The Noise Control Act of 1972 (Public Law 92-574) directs Federal agencies to comply with applicable Federal, state, and local noise control regulations. In 1974, the United States Environmental Protection Agency (USEPA) provided information suggesting continuous and long-term noise levels in excess of DNL 65 dBA are normally unacceptable for noise-sensitive land uses such as residences, schools, churches, and hospitals.

Maryland’s Environmental Noise Act of 1974 limits noise to the level that will protect the health, general welfare, and property of the people of the state. Maryland limits both the overall noise environment and the maximum allowable noise level for residential, industrial, and commercial areas (Code of Maryland [COMAR] 26.02.03). Maximum levels in residential areas cannot exceed 65 dBA in the daytime (7:00 a.m. to 10:00 p.m.) and 55 dBA at night. In addition, the DNL cannot exceed 55 dBA in residential areas and 64 dBA in commercial areas. For construction and demolition activities, a person may not cause or permit noise levels that exceed 90 dBA during daytime hours (COMAR 26.02.03).

DoDI 4165.57 establishes and requires the military departments to develop, implement, and maintain an Air Installation Compatible Use Zone (AICUZ) program for installations with flying operations. AFI 32-7063, *Air Installations Compatible Use Zones Program*, provides installations with an overview of the Air Force’s AICUZ program. AFI 32-7063 outlines noise level reduction (NLR) for new construction exposed to greater than 65 dB DNL. These NLR measures must be
incorporated into the design and construction of portions of the new buildings where the public is received, office areas, noise-sensitive areas (NSA), and where the normal noise level is low.

Existing sources of noise at JBA include aircraft overflights, road traffic, and other noises such as lawn maintenance equipment, construction noise, and bird and animal vocalizations. Background noise levels without aircraft overflights (Leq and DNL) were estimated for the surrounding areas using the techniques specified in the American National Standards Institute’s (ANSI’s) *Quantities and Procedures for Description and Measurement of Environmental Sound Part 3: Short-term measurements with an observer present* (American National Standards Institute [ANSI], 2013). A NSA is an area that, because of its use by humans or special status wildlife species and the importance of reduced noise levels to such use, is designated for management which limits the noise level from long-term and/or continuous noise producing sources. The closest NSA to the proposed CDC is approximately 1,590 feet to the west. The NSA type is residential and located in the Urban and Noisy Suburban Land Use Category. The estimated dBA for this NSA is as follows: DNL is 56 dBA; daytime Leq is 55 dBA; and nighttime Leq is 49 dBA (Department of the Air Force [DAF], 2017).

### 3.3 AIR QUALITY AND GREENHOUSE GASES

#### 3.3.1 National Ambient Air Quality Standards and Attainment Status

The USEPA Region 3 and the MDE regulate air quality in Maryland. The Clean Air Act (CAA) (42 USC §7401–7671q), as amended, gives USEPA the responsibility to establish the primary and secondary National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) acceptable concentration levels for seven criteria pollutants: particulate matter less than 10 microns (PM$_{10}$), particulate matter less than 2.5 microns (PM$_{2.5}$), sulfur dioxide (SO$_2$), carbon monoxide (CO), nitrogen dioxide (NO$_2$), ozone (O$_3$), and lead (Pb). Short-term standards (i.e., 1-, 8-, and 24-hour periods) have been established for pollutants that contribute to acute health effects, while long-term standards (i.e., annual averages) have been established for pollutants that contribute to chronic health effects. These standards identify the maximum allowable concentrations of criteria pollutants that regulatory agencies consider safe, with an additional adequate margin of safety to protect human health and welfare. Each state has the authority to adopt standards stricter than those established under the Federal program. MDE has adopted the NAAQS and is responsible for maintaining air quality standards for the State of Maryland.

Primary and secondary NAAQS for the aforementioned criteria are presented in Table 3-2. The attainment status of Prince George’s County is included, for that is where all project activities would take place. Areas that exceed the NAAQS ambient concentration (i.e., have poor air quality) are labeled as nonattainment areas and are designated by federal regulations. According to the severity of the pollution problem, areas exceeding the established NAAQS are categorized as marginal, moderate, serious, severe, or extreme nonattainment. JBA is within the National Capital Interstate Air Quality Control Region and the region is in marginal nonattainment for the 2015 8-hour O$_3$ standards (United States Environmental Protection Agency [USEPA], 2020). Additionally, the Proposed Action is located within the O$_3$ transport region that includes 11 states and Washington, D.C. Metropolitan Statistical Area, including the northern Virginia suburbs.
### Table 3-2: National Ambient Air Quality Standards

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Standard</th>
<th>Averaging Time</th>
<th>Ambient Concentration</th>
<th>Prince George’s County Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO</td>
<td>Primary</td>
<td>1-hour&lt;sup&gt;a&lt;/sup&gt; (ppm)</td>
<td>35</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8-hour&lt;sup&gt;a&lt;/sup&gt; (ppm)</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>NO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>Primary</td>
<td>1-hour&lt;sup&gt;b&lt;/sup&gt; (ppm)</td>
<td>100</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Primary and Secondary</td>
<td>Annual&lt;sup&gt;c&lt;/sup&gt; (ppm)</td>
<td>53</td>
<td></td>
</tr>
<tr>
<td>O&lt;sub&gt;3&lt;/sub&gt;</td>
<td>Primary and Secondary</td>
<td>8-hour&lt;sup&gt;d&lt;/sup&gt;(ppm)</td>
<td>0.070</td>
<td>Nonattainment</td>
</tr>
<tr>
<td>SO&lt;sub&gt;2&lt;/sub&gt;</td>
<td>Primary</td>
<td>1-hour&lt;sup&gt;a&lt;/sup&gt; (ppb)</td>
<td>75</td>
<td>Attainment</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>3-hour&lt;sup&gt;a&lt;/sup&gt; (ppm)</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
<td>Primary</td>
<td>24-hour&lt;sup&gt;e&lt;/sup&gt; (μg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td>Annual arithmetic mean&lt;sup&gt;g&lt;/sup&gt; (μg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>12</td>
<td>Attainment</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>Primary and Secondary</td>
<td>24-Hour&lt;sup&gt;h&lt;/sup&gt; (μg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>150</td>
<td>Attainment</td>
</tr>
<tr>
<td>Pb</td>
<td>Primary and Secondary</td>
<td>Rolling 3-month Average&lt;sup&gt;i&lt;/sup&gt; (μg/m&lt;sup&gt;3&lt;/sup&gt;)</td>
<td>0.15</td>
<td>Attainment</td>
</tr>
</tbody>
</table>

Source: 40 CFR 50.1-50.12; USEPA, 2020

CO = carbon monoxide; μg/m<sup>3</sup> = micrograms per cubic meter; NAAQS = National Ambient Air Quality Standards; NO<sub>2</sub> = nitrogen dioxide; O<sub>3</sub> = ozone; ppb = parts per billion; ppm = parts per million; PM<sub>2.5</sub> = particulate matter less than 2.5 microns; PM<sub>10</sub> = particulate matter less than 10 microns; SO<sub>2</sub> = sulfur dioxide

<sup>a</sup> Not to be exceeded more than once per year.
<sup>b</sup> 98th percentile, averaged over 3 years.
<sup>c</sup> Annual mean.
<sup>d</sup> Annual fourth highest daily maximum 8-hour average O<sub>3</sub> concentrations, averaged over 3 years.
<sup>e</sup> The 3-year average of the 99th percentile of 1-hour daily maximum concentrations.
<sup>f</sup> The 3-year average of the 98th percentile of 24-hour concentrations.
<sup>g</sup> The 3-year average of the weighted annual mean.
<sup>h</sup> Not to be exceeded more than once per year, on average over 3 years.
<sup>i</sup> Not to be exceeded.

### 3.3.2 Regulatory Requirements for Hazardous Air Pollutants

In addition to criteria pollutant standards, the USEPA also regulates hazardous air pollutant (HAP) emissions for each state. HAPs differ from criteria pollutants for they are known or suspected to cause cancer and other diseases or have adverse environmental impacts. The National Emission Standards for HAPs (NESHAP) found in 40 CFR Part 63 regulate 187 HAPs that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. NESHAP requires application of technology-based emissions standards referred to as Maximum Achievable Control Technology (MACT).

Stationary sources of HAP emissions at JBA include the boilers, generators, fuel storage tanks, fuel-dispensing facilities, vehicle maintenance shops, laboratories, solvent degreasers, and aircraft engine testing facilities. JBA is an existing minor source of HAP, meaning total annual emissions of any single HAP are less than 10 tpy and annual emissions of combined HAP are less than 25 tpy.
### 3.3.3 Clean Air Act Conformity

32 CFR 989, *Environmental Impact Analysis Process* (EIAP) is the Air Force’s implementation tool for NEPA. EIAP provides the Air Force with a framework on how to comply with NEPA and the CEQ Regulations for Implementing the Procedural Provisions of NEPA (40 CFR Parts 1500-1508). Additionally, for air quality (according to 32 CFR 989.30), all EIAP documents must address the CAA Conformity Rules (CRs) requirements. States (in this case MDE) develop air quality plans, which are also referred to as State Implementation Plans (SIPs) that are designed to attain and maintain the NAAQS, and to prevent significant deterioration of air quality in areas with air quality that exceeds NAAQS standards. Maryland has individual SIPs for various pollutants, including NO₂, PM².₅, 8-hour O₃, regional haze, lead, etc. Federal agencies must ensure that their actions conform to the SIP in a nonattainment area, and do not contribute to new violations of ambient air quality standards, or an increase in the frequency or severity of existing violations, or a delay in timely state and/or regional attainment standards.

The 1990 amendments to the CAA require Federal agencies to ensure that their actions conform to the SIP in a nonattainment area. The purpose of the General Conformity Rule (GCR) is to ensure that:

- Federal activities do not cause or contribute to new violations of NAAQS;
- actions do not worsen existing violations of the NAAQS; and
- attainment of the NAAQS is not delayed.

USEPA has developed two distinctive sets of conformity regulations: one for transportation projects and one for non-transportation projects. Non-transportation projects are governed by general conformity regulations (40 CFR 93). The Proposed Action is a non-transportation project within an O₃ nonattainment area. Pursuant to 40 CFR 93.153(b), a conformity determination is required for each criteria pollutant or precursor where the total of direct and indirect emissions of the criteria pollutant or precursor in a nonattainment or maintenance area caused by a Federal action would equal or exceed threshold emissions levels provided under 40 CFR 93.153 (b)(1) or (2).

Two levels of GCR documentation exist under a Conformity Evaluation: Applicability Analysis and Conformity Determination. Applicability Analysis is the process of determining if the Federal action must be supported by a Conformity Determination. This is accomplished through the use of the Air Force’s approved tool, Air Conformity Applicability Model (ACAM). ACAM will perform a quantitative analysis of projected emissions against regulatory thresholds which trigger a Conformity Determination. The Conformity Determination is a complex assessment of air quality impacts and, if necessary, mitigation measures to ensure that a Federal action conforms to the applicable implementation plan and meets the requirements of the GCR. Conformity Determination is made after an Applicability Analysis is completed and identifies if a Conformity Determination is required. The General Conformity thresholds intended to be used to perform an Applicability Analysis can also be used as a general indicator for air quality NEPA assessments when the General Conformity thresholds are compared directly to the estimated net total direct and indirect emissions from the Proposed Action (or alternatives). The Applicability Analysis and
the NEPA Assessment are referred to as Level II, Air Quality Quantitative Assessment, in the Air Force EIAP Guide.

Prince George’s County has marginal ozone nonattainment classification (USEPA, 2020). Due to the proximity to the urbanized east coast of the United States, Prince George’s County is considered an Ozone Transport Region. Because ozone formation is driven by other direct emissions, the air quality analyses focus on ozone precursors that include VOCs and NOX. For an area in marginal nonattainment for the 8-hour O₃ NAAQS within the O₃ transport region, the applicability criteria are 100 tpy for NOₓ and 50 tpy for VOCs (40 CFR 93.153). Also, routine operation of facilities, mobile assets and equipment are exempt from the General Conformity Rule in accordance with 40 CFR 93.153(c)(2)(xiii). Therefore, operational emissions from JBA need not be included in the applicability analysis.

### 3.3.4 Greenhouse Gas Emissions

Greenhouse gases (GHGs) are a particular group of gases that have the ability to trap heat by absorbing infrared radiation in the atmosphere. Scientific evidence indicates a trend of increasing global temperature over the past century which may be due to an increase in GHG emissions from human-based activities. The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO₂), methane (CH₄), and nitrous oxide. The main source of GHGs from human activities is the combustion of fossil fuels, including natural gas, gasoline, diesel fuel, crude oil and coal. Other examples of GHGs created and emitted primarily through human-based activities include fluorinated gases (hydrofluorocarbons and perfluorocarbons) and sulfur hexafluoride.

Each GHG is assigned a global warming potential (GWP). The GWP is the ability of a gas or aerosol to trap heat in the atmosphere. The GWP rating system is standardized to CO₂, which has a value of one. For example, CH₄ has a GWP of 25, which means that it has a global warming effect 25 times greater than CO₂ on an equal-mass basis.

To simplify GHG analyses, total GHG emissions from a source are often expressed as a CO₂ equivalent (CO₂e). The CO₂e is calculated by multiplying the emissions of each GHG by its GWP and adding the results together to produce a single, combined emission rate representing all GHGs. While CH₄ and nitrous oxide have much higher GWPs than CO₂, CO₂ is emitted in such higher quantities that it is the overwhelming contributor to CO₂e from both natural processes and human activities.

### 3.3.5 Regulatory Review and Permitting

Currently the USEPA has two primary GHG regulations for regulated stationary emission sources: 1) 40 CFR Part 98 - requires annual GHG emissions reporting and applies to fossil fuel suppliers and industrial gas suppliers, facilities that inject CO₂ underground for sequestration or other reasons, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and engines. The rule does not require control of GHGs, rather it requires only that sources above certain threshold levels monitor and report emissions, and 2) GHG emission limits in 40 CFR Parts 51, 52, 60, 70 and 71 – establishes CO₂ emission limits to be addressed in Prevention of Significant
Deterioration (PSD) and Title V permits required for electric utility generating units that are major stationary sources for regulated pollutants other than GHG. A 75,000 tpy threshold is used by EPA as a de minimis value to determine whether a PSD permit must include an emission limitation for CO2 and a 100,000 tpy threshold is applied for Title V permits.

The CEQ provides guidance to Federal agencies on how to evaluate GHGs for federal actions under NEPA. The current CEQ guidance is a draft document published on June 26, 2019 titled “Draft NEPA Guidance on Consideration of GHG Emissions” that proposes a much more streamlined approach to analyzing the impacts of GHGs under NEPA. The draft guidance notes (CEQ, 2019):

- Agencies should quantify a project’s projected direct and reasonably foreseeable indirect GHG emissions when emissions are “substantial enough to warrant quantification,” and when it is “practicable” to do so using available data and GHG quantification tools. The guidance stresses that agencies should consider whether quantification of GHG emissions “would be overly speculative” or where necessary information is “not of high quality.”

- The guidance does not address what “substantial” means, however it notes that following the “rule of reason,” there must be a close causal relationship between potential impact and anticipated GHG emissions to include GHG emissions in the analysis.

- Agencies are not required to prepare separate cumulative effects analyses, nor undertake new research or analysis of climate effects.

- Although NEPA requires agencies to consider reasonable alternatives to the proposed action, they are not required to adopt mitigation measures.

- Finally, the 2019 draft guidance clarifies that federal agencies are not required to monetize the cost and benefit of a proposed project, and specifically, the social cost of carbon (SCC) need not be considered.

Additionally, the USAF Air Quality EIAP Guide provides an overview and specific procedures on addressing GHGs for air quality NEPA assessments. GHGs are treated like any other air pollutant under air quality EIAP (where the action’s impacts on the environment are evaluated). Currently there is no established quantity or threshold of GHG emissions that would be considered “significant” relating to impacts to the environment or human health. The EIAP Guide recommends comparing GHG annual emissions of each action/alternative against each other in a relative comparison analysis to establish relative significance of each. The results of the relative comparison analysis are evaluated using the rule of reason and the concept of proportionality.

### 3.3.6 Executive Orders and Federal Laws

In April 2007, the U.S. Supreme Court determined that the USEPA has the regulatory authority to list GHGs as pollutants under the federal CAA (USEPA, 2007). Additionally, federal agencies address emissions of GHGs by reporting and meeting reductions mandated in laws, executive orders, and policies. Relevant to GHGs is EO 13834, *Efficient Federal Operations*, of May 17, 2018. The Energy Policy Act of 2005, Energy Independence and Security Act of 2007, and EO
13834 require an installation to adhere to specific energy improvements, which address waste reduction and improvements in efficiency.

### 3.4 WATER RESOURCES

#### 3.4.1 Groundwater

JBA is located in a section of the Inner Coastal Plain where several important and regional aquifers exist. Groundwater underlying the Main Base occurs at or near the ground surface, with shallow groundwater occurring at depths of less than 20 feet below ground surface (bgs), likely under confined conditions. Groundwater recharge occurs primarily through precipitation. Groundwater flow is believed to be down-gradient toward local streams or downward toward deeper underlying aquifers.

#### 3.4.2 Surface Water

The Rivers and Harbors Act of 1899 (33 USC 401) establishes a program to regulate activities affecting navigable waters of the United States. Section 10 of the Act (33 USC 403) directs that proponents must obtain a Section 10 permit administered by USACE for construction, excavation, or deposition of materials in, over, or under navigable waters, or for any work that would affect the course, location, condition, or capacity of those waters. Activities requiring Section 10 permits include structures (e.g., piers, wharves, breakwaters, bulkheads, jetties, weirs, transmission lines) and work such as dredging or disposal of dredged material, or excavation, filling, or other modifications to the navigable waters of the United States.

JBA is located in the watersheds of the Potomac and Patuxent Rivers. The vast majority of the base is within the Potomac River watershed. Tributaries of the Potomac River on JBA are Meetinghouse Branch and Paynes Branch, which both originate in the southwestern quadrant of the base and flow west to the Potomac; Piscataway Creek, which originates in the southeast corner of the base; Tinkers Creek, which originates near the southwest corner of the base and flows to Piscataway Creek; and Henson Creek, in the northwest corner of the base. An area at the northeastern corner of the base is within the Patuxent River watershed. Tributaries of the Patuxent River are Cabin Creek and Charles Branch.

In *Maryland’s 2018 Integrated Report of Surface Water Quality*, 22 percent of first through fourth order streams in the upper Patuxent River, which is partially located in Prince George’s County, are listed as impaired for the designated use of aquatic life and wildlife as a result of chlorides and sulfates attributable to urban runoff and stormwater (Maryland Department of the Environment [MDE], 2019). This is unchanged from the 2014 assessment. The 2018 assessment also made no change to the 2014 assessment of Piscataway Creek, in which first through fourth order streams in the creek in Prince George’s County are listed as impaired for the designated use of aquatic life and wildlife due to total suspended solids (TSS) and chlorides.
Other surface water resources at JBA are Base Lake (Freedom Lake) in the southwest corner, three ponds in the northwest portion, and two other small impoundments at the south golf course. The proposed CDC is located just south of Meetinghouse Branch (Figure 3-1). Meetinghouse Branch is classified as a Use Class I stream by MDE (MDE, 2020). Use class is a grouping or set of designated uses that apply to a water body which individually may or may not be supported now, but should be attainable. Use Class I streams designated uses include Water Contact Recreation, and Protection of Nontidal Warmwater Aquatic Life (MDE, 2020).

3.4.3 Floodplains

EO 11988, *Floodplain Management*, requires that development on Federal lands avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy and modification of floodplains. Section 2 of the EO states that each agency has a responsibility to evaluate the potential impacts of any actions it may take in a floodplain to ensure that its planning programs and budget requests reflect consideration of flood hazards and floodplain management, and to prescribe procedures to implement the policies and requirements of the EO. Before taking an action, each agency shall determine whether the Proposed Action will occur in a floodplain.

This determination shall be made according to a Department of Housing and Urban Development (HUD) floodplain map, Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) or a more detailed map of an area, if available. If such maps are not available, the agency shall make a determination of the location of the floodplain based on the best available information.

In July 2005, JBA completed an analysis to determine the extent of the 100-year floodplain for the entire base. The purpose of this analysis, titled *Andrews Air Force Base, 89th Airlift Wing Floodplain Analysis*, was to produce a 100-year floodplain map and correlated Geographic Information System (GIS) files of the main JBA installation.

The proposed CDC location is located adjacent to, but outside of, the 100-year floodplain associated with Meetinghouse Branch. Floodplains in the vicinity of the proposed CDC are presented on Figure 3-2. Construction for the proposed CDC could occur anywhere from approximately 500 feet to the area directly adjacent to floodplain.

3.4.4 Coastal Zone

JBA is within the designated Maryland coastal zone. When a Federal agency conducts an activity or development project, or has an activity performed by a contractor for the benefit of the Federal agency, the agency must determine whether its activities are reasonably likely to affect any coastal use or resource and to conduct the activities in a manner that is consistent to the maximum extent practicable with the enforceable policies of the applicable state coastal program. The Federal agency must provide a Consistency Determination and supporting materials to the state Coastal Zone Management Program agency at least 90 days before starting the proposed activity, unless a different arrangement has previously been made between the Federal agency and the authorized state agency (Ghigiarelli, 2004).
Figure 3-1: Surface Waters at Proposed CDC
Figure 3-2: Floodplains at Proposed CDC

[Map showing floodplains and project location at Proposed CDC]
3.4.5 Stormwater

JBA is required to manage its stormwater discharges in accordance with the regulations and requirements contained in the COMAR Chapter 26 subsections. Generally, JBA is required to control pre-construction and post-construction stormwater runoff, including erosion, sedimentation, and non-point source pollution. Specific requirements for JBA are described in *Maryland Stormwater Management and Erosion & Sediment Control Guidelines for State and Federal Projects* (MDE, 2015) and in the MDE Stormwater Management Act of 2007 (MDE, 2007). The regulations require that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural best management practices (BMPs) and other site design techniques.

In accordance with the Stormwater Management Act of 2007, Maryland requires construction projects, including stream restoration projects, to provide ESD to the maximum extent practicable in an effort to minimize the adverse impacts of the discharge of stormwater runoff. ESD means using small-scale stormwater management practices, nonstructural techniques, and better site planning to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources. MDE has published guidance on how Federal facilities shall comply with the Stormwater Management Act, and it is enforced during the permit application process.

EISA Section 438 requires Federal agencies to reduce water quality problems from stormwater runoff to the maximum extent technically feasible. Federal agencies can comply with EISA Section 438 by using a variety of stormwater management practices often referred to as green infrastructure or low impact development (LID) practices. The document, *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act*, is used as guidance to ensure compliance with EISA Section 438 (USEPA, 2009).

It is USAF policy to apply sustainable development concepts to the planning, design, construction, environmental management, operation, maintenance, and disposition of infrastructure projects. Sustainable infrastructure achieves optimum resource efficiency and constructability while minimizing adverse impacts to the built and natural environments through all phases of its life cycle. The goal of sustainable infrastructure is to prevent environmental degradation caused by construction, operations, and disposition of facilities and to create built environments that are livable, healthy, maintainable, and productive. The USAF follows UFC 1-200-02, *High Performance and Sustainable Building Requirements*, to meet sustainability criteria with all projects.

Stormwater runoff at JBA is conveyed through oil/water separators and storm drains in industrial areas, and through swales and ditches in other areas. JBA has eight subwatersheds, each of which discharges to a major storm drain outfall at the base boundary. Most stormwater (approximately 90 percent) drains to tributaries that flow to the Potomac River, with the rest draining to the Patuxent River.
3.4.6 Wetlands

The Clean Water Act (CWA) Section 404 (33 USC 1344) establishes a program to regulate all dredging and filling activities related to jurisdictional waters and wetlands of the United States. Actions that might impact wetlands, to include dredging, filling, and activities that could displace soil into a wetland, might require a Section 404 permit from USACE.

CWA Section 401 directs that any proponent of an action that requires a Federal license or permit (such as a Section 404 permit) must obtain a Water Quality Certificate from the state water pollution control agency, certifying that the action complies with state water quality criteria.

In compliance with EO 11990, Protection of Wetlands, the USAF attempts to preserve the natural values of wetlands while carrying out its mission on both USAF lands and non-USAF lands. To the maximum extent practicable, the USAF avoids actions that would either destroy or adversely modify wetlands.

Wetland surveys were conducted at JBA in 1997, 2004, 2010, and 2012. The three main wetland community types identified at JBA are palustrine emergent wetlands (PEM), palustrine scrub-shrub wetlands (PSS), and palustrine forested wetlands (PFO). Freshwater emergent and riverine wetlands occur northwest of the proposed CDC location (Figure 3-3).

3.5 BIOLOGICAL / NATURAL RESOURCES

3.5.1 Vegetation

Nearly 80 percent of JBA is developed or extensively managed. Vegetation occurs largely in association with extensively managed or improved areas such as lawns, gardens, golf course fairways, housing areas, and recreational fields; along major roadways; and in semi-improved areas such as runway borders and clear zones, and the runway infield. Most turf and landscape areas are located in the developed or partially developed portions of JBA (Joint Base Andrews [JBA], 2014).

Remaining patches of original vegetation (unimproved areas) consist of shallow, emergent marshland and forestland. JBA is in the Atlantic Slope section of the Oak-Pine Forest Region. Approximately 720 acres of forested land on JBA are scattered around the perimeter and southern portion of the base (JBA, 2014).

There is a mixed hardwood forest that occurs just north and northwest of the site proposed for the CDC, but the location where the building would be located is maintained lawns or developed areas with some scattered trees. There are no sensitive plant communities near the project site. The project area was previously developed and is currently maintained by periodic mowing (Figure 3-4).
Figure 3-3: Wetlands at Proposed CDC
Figure 3-4: Land Cover at Proposed CDC
3.5.2 Wildlife

Wildlife on JBA is typical of the mid-Atlantic region. More than 80 bird species have been identified at the base, including geese, herons, perching birds, and birds of prey. Migratory birds, especially waterfowl, are common at JBA because of the ponds and wetlands and its proximity to the Chesapeake Bay. Certain birds are protected under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures.

A search of the IPaC system, which is the USFWS online system for searching for species protected as birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in the proposed CDC project site location, returned a list of six migratory bird species of concern (Table 3-3). A full report including breeding season and probability of presence within the CDC project area is included in Appendix C.

Reptiles found on JBA include common species of snakes, lizards, and turtles. Mammals known to occur at JBA also are typical of those in the region, including whitetailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), eastern gray squirrel (*Sciurus carolinensis*), eastern cottontail (*Sylvilagus floridanus*), and several bat species (JBA, 2014).

Table 3-3: Migratory Birds at the Proposed CDC

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Level of Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bald Eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>Non-BCC Vulnerable*</td>
</tr>
<tr>
<td>Bobolink</td>
<td><em>Dolichonyx oryzivorus</em></td>
<td>BCC Rangewide</td>
</tr>
<tr>
<td>Buff-breasted Sandpiper</td>
<td><em>Calidris subru collis</em></td>
<td>BCC Rangewide</td>
</tr>
<tr>
<td>Lesser Yellowlegs</td>
<td><em>Tringa flavipes</em></td>
<td>BCC Rangewide</td>
</tr>
<tr>
<td>Semipalmated Sandpiper</td>
<td><em>Calidris pusilla</em></td>
<td>BCC Rangewide</td>
</tr>
<tr>
<td>Wood Thrush</td>
<td><em>Hylocichla mustelina</em></td>
<td>BCC Rangewide</td>
</tr>
</tbody>
</table>

*This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

3.5.3 Threatened and Endangered Species

The ESA of 1973 (16 U.S.C. 1531-1544) provides a program for the conservation of threatened and endangered plants and animals and their habitats. Under Section 7 of the ESA, federal agencies, in consultation with the USFWS and/or the NMFS, are required to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any special status species of fish, wildlife, plants, and their habitats. Special status species include those that are candidates for, proposed as, or listed as sensitive, threatened, or endangered.

There are eight sensitive species known to have existed at JBA (Table 3-4). The federally listed endangered species – the sandplain gerardia (*Agalinis acuta*) – was identified during a 1994 survey and observed during the annual monitoring for the plant in 2002, but was not observed in a 2006 survey because of its short blooming period. The only known population of the sandplain gerardia
Table 3-4: Threatened and Endangered Species Previously Found at JBA

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sandplain gerardia</td>
<td>Agalinis acuta</td>
<td>Federal</td>
</tr>
<tr>
<td>Blunt-leaved gerardia</td>
<td>Agalinis obtusifolia</td>
<td>State</td>
</tr>
<tr>
<td>Curtiss’ three-awn</td>
<td>Aristida curtissii</td>
<td>State</td>
</tr>
<tr>
<td>Spiral pondweed</td>
<td>Potamogeton spirillus</td>
<td>State</td>
</tr>
<tr>
<td>Swollen bladderwort</td>
<td>Utricularia inflata</td>
<td>State</td>
</tr>
<tr>
<td>Tall nutrush</td>
<td>Scleria triglomerata</td>
<td>State</td>
</tr>
<tr>
<td>Carolina meadow-foxtail</td>
<td>Alopecurus carolinianus</td>
<td>State</td>
</tr>
<tr>
<td>Humped bladderwort</td>
<td>Utricularia inflata</td>
<td>State</td>
</tr>
</tbody>
</table>

Source: USFWS, 2020

on JBA is south of the flight line near the 13th tee of the golf course. On September 8, 2016, the USACE, Baltimore District, Planning Division, performed on-site vegetation surveys to determine the presence or absence of sandplain gerardia within this designated protection area. No sandplain gerardia were observed during the time of the survey. One species of gerardia was observed – blunt-leaved gerardia (Agalinis obtusifolia) – which is listed as S1 or State Endangered. In 2017, the sandplain gerardia was observed by Resource Management Associates. Monitoring at the known population site is ongoing.

The habitats at the proposed CDC location are not suitable for any of the sensitive species that have been found on JBA. However, the IPaC system notes that there is potential for the NLEB (Myotis septentrionalis) to occur at the proposed CDC location (United States Fish and Wildlife Service [USFWS], 2020). The full report can be found in Appendix C.

3.6 GEOLOGY, SOILS, AND TOPOGRAPHY

3.6.1 Geology and Soils

The majority of the surficial geology on JBA is comprised of upland deposits approximately 7 million years old and consists of irregularly bedded cobbles, gravel, and fine sand intermixed with silt or clay varying in thickness from 10 to 20 feet. The underlying Calvert Formation is visible where streams have cut deeply through the upland deposits. This formation was deposited during the Miocene Epoch, approximately 19 million years ago, and consists of a mixture of sands, silts, clays, and shell beds.

Much of the original land area of the base has been disturbed by cut and fill or other construction activities since the base was constructed in 1942. Some areas, especially in and around the runways and taxiways, have been highly disturbed, and some disturbed areas have 20 feet or more of fill material.

The proposed CDC site is comprised of Urban Land soils, with Grosstown-Urban land complex soils making up the majority of the area where the building would be located (Table 3-5, Figure 3-5). Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. Natural Resources
Table 3-5: Soil Classifications and Prime Farmland Soil at Project Site

<table>
<thead>
<tr>
<th>Unit</th>
<th>Soil Name</th>
<th>Acres in AOI</th>
<th>Percent AOI</th>
<th>Prime Farmland Soil Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>BuB</td>
<td>Beltsville-Urban land complex, 0 to 5 percent slopes</td>
<td>0.863</td>
<td>17.4%</td>
<td>Not Prime Farmland</td>
</tr>
<tr>
<td>GuB</td>
<td>Grosstown-Urban land complex, 0 to 5 percent slopes</td>
<td>4.107</td>
<td>82.6%</td>
<td>Not Prime Farmland</td>
</tr>
</tbody>
</table>

Source: United States Department of Agriculture [USDA], 2020

Conservation Service (NRCS) policy and procedures on prime and unique farmlands are published in the Federal Register, Vol. 43, No. 21, January 31, 1978.

There are no prime and unique farmland soils located within the proposed project area.

### 3.6.2 Topography

JBA is located between the Blue Ridge Mountains (60 miles to the west) and the Chesapeake Bay (25 miles to the east). The base is near the western edge of the Middle Atlantic Coastal Plain physiographic province. This fall line occurs between the Piedmont and Coastal Plain, approximately 12 miles west of the base. JBA is located on a plateau, situated between the Anacostia River to the west and the Patuxent River to the east. As shown in Figure 3-6, the topography is level to gently sloping, with elevations averaging 260 feet above mean sea level and local relief being less than 100 feet.

### 3.7 HAZARDOUS AND TOXIC MATERIALS / WASTE

The term “hazardous materials” refers to substances defined as hazardous by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and the term “hazardous waste” refers to wastes defined as hazardous by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act (RCRA). Hazardous materials are substances that, because of their quality, concentration, or physical, chemical, or infectious characteristics, could present substantial danger to public health or the environment when released into the environment.

Under 40 CFR Part 261, hazardous wastes regulated under RCRA are defined as solid, liquid, contained gaseous, semisolid waste, or any combination of wastes that either are listed or exhibit one or more of the hazardous characteristics. Petroleum products – including petroleum-based fuels, oils, and their wastes – are not covered under CERCLA, but might be covered under RCRA.

Issues associated with hazardous and toxic materials/wastes (HTMW) typically center on waste streams; underground storage tanks (USTs); above ground storage tanks (ASTs); and the storage, transport, use, and disposal of pesticides, fuels, lubricants, and other industrial substances. For the purposes of this EA, HTMW include hazardous materials and waste management, Environmental Restoration Program (ERP) sites, Military Munitions Response Program (MMRP) sites, USTs and ASTs, ACM, and LBP.
Figure 3-5: Soils at Proposed CDC

Soil Type:
- Project Area
- Bk
- GuB
- UdbB

Legend:
- 1 in = 150 feet
- N

Legend:
- Soil Type
- Project Area
- 0
- 75
- 150
- 300 Feet

Urban land (Uli)
Grosstown-Urban land complex, 0 to 5 percent slopes (GuB)

Beltsville-Urban land complex, 0 to 5 percent slopes (BuB)

Fallsington sandy loams, 0 to 2 percent slopes, Northern Coastal Plain (FaA)

Udorthents, loamy, 0 to 5 percent slopes (UdbhB)

Project Location

Figure 3-5:
Soils at the Proposed Child Development Center

Joint Base Andrews, Maryland
3.7.1 Hazardous and Petroleum Waste Management

JBA missions and operations require the use and storage of hazardous materials, primarily associated with aircraft operations. The primary types of hazardous waste generated at JBA include batteries, used fuel and oil, solvents, fluorescent bulbs, fuel filters, and solvent-contaminated solids. Most of the hazardous waste is generated as a result of aircraft operations. JBA is considered a large quantity generator of hazardous wastes under RCRA, and as such, reports to USEPA using identification number MD0570024000.

The Toxic Substances Control Act of 1976 (TSCA) addresses the production, import, use, and disposal of chemicals such as polychlorinated biphenyls (PCBs), lead and LBP, asbestos, mercury, formaldehyde, and hexavalent chromium compounds.

3.7.2 Environmental Restoration Program Sites

The JBA ERP identifies, evaluates, remediates, and restores sites contaminated with toxic and hazardous substances, petroleum, oils, lubricants, and other pollutants and contaminants. The ERP has established a process to evaluate past disposal sites, control the migration of contaminants, identify potential hazards to human health and the environment, and remediate the sites.

There are currently 35 active ERP sites on JBA; however, none are on, or in the immediate vicinity of, the proposed CDC site. The closest ERP sites to the proposed CDC site are: ST-20 (Building 1558) and SS-23 (Building 1623), which are both about 0.4 miles away (JBA, 2018a).

3.7.3 Military Munitions Response Program

The MMRP at JBA consists of several sites dating back to 1943. The areas of concern are to the south end of the west runway and include: the Skeet and Trap Club, the Old Skeet Range, a Firing-In Buttress, a Small Arms Range, and two Rifle Ranges (I and II). The Skeet and Trap Club and Old Skeet Range were recreational in use and likely used 12-, 20-, and 28-gauge ammunition. The Firing-In Buttress was built to withstand munitions ranging from .30 caliber to 37mm. The Small Arms Range was an indoor pistol range with five firing positions. The only documented ammunition used was .38 and .45 caliber rounds. Rifle Range I was likely used for an Air Police training program that included training on the M1A1 Carbine and Thompson submachine gun, which means .30 and .45 caliber cartridges were likely used. Rifle Range II was recreational in use, but the site is currently part of the golf course and all traces of debris appear to have been removed. There are no MMRP sites known to occur near the project site (JBA, 2018b).

3.7.4 Above Ground Storage Tanks and Underground Storage Tanks

While there are several USTs in the ERP within about 0.5 mile of the proposed site, there are no existing ASTs or USTs on the proposed project site or in its immediate vicinity.
Figure 3-6: Topography at Proposed CDC
3.7.5 Asbestos and Lead

There are no existing buildings or structures within the proposed project boundary, so there is no potential for ACM or lead to exist on this site. Any buildings or structures previously located on the site have been demolished, and any potential ACMs or lead-containing materials that may have been associated with those buildings have been remediated.

3.8 CULTURAL RESOURCES

Cultural resources are any prehistoric or historic district, site, or building, structure, or object considered important to a culture or community for scientific, traditional, religious, or other purposes. They include archaeological resources, historic architectural resources, and traditional resources.

Cultural resources that meet the criteria for listing on the National Register of Historic Places (NRHP) are also known as historic properties (36 CFR 800.16(l)). If the eligibility of a historic property has not been determined, then it must be treated as if it was listed on the NRHP.

Cultural resources can be divided into three subsections:

- Archaeological (i.e., prehistoric or historic sites where human activity has left physical evidence to that activity but no structures remain standing);
- Architectural (i.e., buildings or other structures or groups of structures, or designed landscapes that are of historic or aesthetic significance); or
- Traditional Cultural Properties (TCPs) (resources of traditional, religious, or cultural significance to Native American tribes)

Cultural resources are “historic properties” as defined by the National Historic Preservation Act (NHPA) of 1966, “cultural items” as defined by the Native American Graves Protection and Repatriation Act of 1979 (NAGPRA), “archaeological resources” as defined by the Archaeological Resource Protection Act of 1979 (ARPA), “sacred sites” as defined by EO 13007, Indian Sacred Sites, to which access is afforded under the American Indian Religious Freedom Act of 1987 (AIRFA), and collections and associated records as defined in 36 CFR 79.

The NHPA, as amended, requires Federal agencies to consider impacts of Federal undertakings on historic properties prior to making a decision or taking an action, and to integrate historic preservation values into their decision making processes. Federal agencies fulfill this requirement by completing the Section 106 consultation process, as set forth in 36 CFR 800.

The construction of the proposed CDC does not have the potential to affect historic properties. The Area of Potential Effect (APE) for this undertaking, as defined in 36 CFR 800.16(d), is the footprint of the project including the anticipated limits of construction and its associated activities, and the geographic areas within which the Proposed Action may directly or indirectly cause alterations, including visual impacts, to the character or use of historic properties.
3.8.1 Archaeological Resources

The physiographic location of JBA between the Potomac and Patuxent Rivers would have been attractive to prehistoric inhabitants of the region. It is known that prehistoric groups utilized the immediate environment of JBA for habitation and/or resource procurement. During the historic period, this region contained plantations associated with the rural agricultural economy of Prince George’s County. However, a 1993 survey conducted by the National Park Service (NPS) concluded that construction and development of JBA has disturbed much of the area’s soils, thus affecting the integrity of many prehistoric and historic deposits within JBA.

The 2017 JBA Integrated Cultural Resources Management Plan (ICRMP) Update includes a synopsis of previous cultural resource surveys and architectural inventories, and outlines and assigns responsibilities for the management and preservation of cultural resources at JBA. The ICRMP indicates that JBA has completed its inventory and identification of archaeological resources and that no new inventory efforts are needed (JBA, 2017b).

While previous investigations have identified six archaeological sites that are eligible for inclusion in the NRHP on properties owned by JBA (Harrell and Montagliani, 1984; Moeller et al., 1995; JBA, 2017b; Tetra Tech, 1999), the only eligible site on JBA’s main base is Belle Chance (site 18PR447) (Figure 3-7). Moeller et al. (1995) identified 62 locations that could contain historic archaeological resources. Although these locations have been subjected to disturbance from base construction, subsurface deposits associated with these sites may remain intact at some localities.

3.8.2 Architectural Resources

One historic property, Belle Chance (PG: 77-14), within JBA’s boundaries has been determined to be eligible for the NRHP. The Belle Chance property includes a 1912 dwelling, two auxiliary buildings, a cemetery, and one historic archaeological site (18PR447) near the northwest boundary of JBA. The Belle Chance buildings were transferred to a housing privatization contractor in 2007, although the land that encompasses Belle Chance remains in the larger JBA boundary and under Federal ownership (Figure 3-7).

In 2009, a base-wide inventory of Cold War era buildings and structures was performed and no additional structures were determined to be eligible for inclusion in the NRHP (JBA, 2017b). No architectural or archaeological historic properties are known to be within the footprint of the proposed CDC.

3.8.3 Traditional Cultural Properties

No TCPs have been identified on JBA or within the footprint of the proposed CDC.

3.9 LAND USE

JBA was originally established during the Civil War era in a relatively undeveloped area in Prince George’s County, Maryland. Additional development has occurred adjacent to JBA in recent years,
Figure 3-7: Location of Belle Chance
but this development has been relatively limited compared to the expansion experienced by suburban counties in nearby northern Virginia.

Existing land uses adjacent to JBA are mostly residential, commercial, or industrial. Just north of JBA is the Suitland Parkway, a limited access scenic roadway that was opened on December 9, 1944, to serve as a rapid transit road between Camp Springs and Bolling Field Air Force Base, the Pentagon, and downtown Washington, D.C. The NPS manages the Parkway, and it is part of the National Executive Route, along which motorcades travel between JBA and Washington, D.C. The Suitland Parkway is also listed on the NRHP.

The main base’s 4,390 acres are divided among 10 land use classifications. The approximate acreage of each land use is provided in Table 3-6 (JBA, 2016).

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>127</td>
</tr>
<tr>
<td>Aircraft Operations and Maintenance</td>
<td>366</td>
</tr>
<tr>
<td>Airfield (Includes Grass Areas inside Runways)</td>
<td>1,525</td>
</tr>
<tr>
<td>Community</td>
<td>136</td>
</tr>
<tr>
<td>Housing (Includes Demolished and Unoccupied Housing)</td>
<td>508</td>
</tr>
<tr>
<td>Industrial</td>
<td>144</td>
</tr>
<tr>
<td>Medical</td>
<td>47</td>
</tr>
<tr>
<td>Open Space</td>
<td>784</td>
</tr>
<tr>
<td>Outdoor Recreation</td>
<td>731</td>
</tr>
<tr>
<td>Water</td>
<td>22</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4,390</strong></td>
</tr>
</tbody>
</table>

Source: JBA, 2016

The existing land use at the proposed project site, as shown in the 2016 Installation Development Plan (IDP), is categorized as Housing Unaccompanied. The site was previously used for housing, but these buildings have since been demolished and the site cleared. The future land use for the proposed CDC site and its surrounding area is designated as Administrative.

**3.10 INFRASTRUCTURE / UTILITIES**

While there are no longer any existing buildings on the proposed project site, this site was previously developed, and there are utilities running through, or in the vicinity of, the proposed site (Figure 3-8).

**3.10.1 Potable Water Distribution System**

The water system infrastructure at JBA was privatized in February 2006, and this infrastructure is now owned and operated by Terrapin Utility Services Inc. under a 50-year contract. Terrapin Utility Services, Inc. purchases water from the Washington Suburban Sanitary Commission (WSSC) to serve the base, and the existing water supply and treatment are adequate for all current
Figure 3-8: Utilities at Proposed CDC
and industrial uses. Terrapin Utility Services addresses issues in the distribution system, particularly on the east side and lower west side of the base, as part of its contractual arrangement and recently replaced water distribution pipes throughout the base (JBA, 2019).

3.10.2 Sanitary Sewer System

The sanitary sewer system at JBA was also privatized in February 2006 and is also owned and operated by Terrapin Utility Services, Inc. The wastewater at JBA is sent off-base to the WSSC wastewater treatment plant. JBA’s wastewater distribution system is divided into two sections – east and west – and each has its own capacity and demand. The combined average daily demand of both sections is less than 600,000 gallons per day, which is well below the system’s capacity (JBA, 2019).

3.10.3 Stormwater Drainage System

The stormwater system at JBA is comprised of catch basins and culverts that guide water through a series of natural drainage channels, underground storm sewer pipes, and man-made ditches. The system ultimately discharges stormwater into Piscataway Creek and tributaries to Tinkers Creek, Henson Creek, Cabin Branch, and Charles Branch. These creeks flow into either the Potomac or the Patuxent Rivers, with the majority of the stormwater from JBA ultimately draining into the Piscataway Creek watershed and eventually into the Potomac River (JBA, 2019).

JBA developed a Stormwater Pollution Prevention Plan (SWPPP) in 2015 that provides drainage descriptions and BMPs for stormwater pollution prevention in accordance with the National Pollutant Discharge Elimination System (NPDES) requirements located in 40 CFR 126.26 (JBA, 2015).

3.10.4 Electrical System

JBA’s electrical power is provided by Potomac Electric Power Company (PEPCO). Two 69-kilovolt electrical feeders from off base tie directly into a main substation on base, which is owned and operated by the USAF. Primary feeder circuits distribute electricity to the rest of the base from the substation, with more than 90 percent of the overhead power lines now located underground. The base owns, operates, and maintains the on-base electric power distribution system, except in the housing area, where it is privatized. The current electrical supply from PEPCO is adequate for all existing on-base needs.

3.10.5 Heating and Cooling System

The JBA heating and cooling system has been decentralized and no longer includes central heating plants. Instead, JBA relies on more than 300 oil-fired and natural gas boilers, with about 95 percent running on natural gas and the remaining approximately 5 percent running on oil. Approximately 60 percent of the buildings on JBA utilize automated heating and cooling systems. Eighty percent of the system is new and in good condition, and the remaining 20 percent of the system is in mediocre-to-poor condition (JBA, 2019).
3.10.6 Natural Gas System

Natural gas is supplied to JBA by Washington Gas through seven connection points. The system, which was installed in 1985, is a looped distribution system approximately 10 miles long. Washington Gas owns and operates all of the natural gas system and is responsible for maintaining and installing all natural gas lines from the connection point to the pressure regulators at each building. The USAF is responsible for maintaining and repairing all lines within each building. The natural gas system is adequate, and the privatization of the distribution system’s maintenance and operation to Washington Gas has improved the efficiency for completing on-site repairs and reduced the likelihood of system failures (JBA, 2019).

3.10.7 Solid Waste Management

The Civil Engineering Operations Flight manages the program for collecting, handling, and disposing of solid waste generated on JBA. The Resources, Recovery, and Recycling Program office and the Maintenance and Engineering office are responsible for the collection, segregation, accumulation, and disposition of domestic waste recyclables from numerous industrial and domestic collection sites. Solid waste generated on JBA that cannot be recycled is collected and disposed of by a contractor at a licensed landfill in Prince George’s County. Debris and materials from construction activities are disposed of at an off-site landfill by the contractor responsible for any renovation or demolition activities (JBA, 2019).

3.11 TRANSPORTATION

JBA is located 5 miles southeast of Washington, D.C. (see Figure 1-1). The primary roadway serving JBA and the surrounding communities is Interstate 95/495 (I-95/495), known as the “Capital Beltway,” which runs along the west side of the base and provides direct access to Allentown Road (Maryland [MD] 337), Suitland Parkway, and Marlboro Pike. Other routes, including MD 4, Pennsylvania Avenue, and MD 5, distribute traffic from I-95/495 onto other local roadways.

Transportation on and near JBA is achieved mainly via road and street networks and pedestrian walkways. Regional access to JBA is provided by Interstate 95 (I-95) and I-495. State routes that provide access to the area include Pennsylvania Avenue, Branch Avenue, Allentown Road, Woodyard Road, and Dower House Road; and the base perimeter roads, Maryland Avenue, North Carolina Avenue, and Arkansas Road provide access to the sites.

3.11.1 On-Base Roadways and Gate Traffic

JBA has approximately 101 miles of paved roads that provide access to administrative, operations, housing, industrial, medical, recreation, and airfield areas. The overall pavement condition for roads and parking lots on JBA is adequate, and the majority are in good condition. The perimeter roads (North, East, South, and West Perimeter roads) are the primary roadways connecting the two sides of JBA. Combined, they form a two-lane, undivided road that makes an 8.2-mile loop around the base in four segments. Traffic during peak flow hours is heaviest at the Alabama Avenue/North
Perimeter Road and Virginia Avenue/South Perimeter Road intersections because of the limited number of egress points on the base (JBA, 2019).

The proposed CDC will be accessed by Arkansas Road and California Avenue.

3.11.2 Off-Base Roadways

I-95/I-495 is adjacent to JBA along the northwest side of the base and parallels Allentown Road/Suitland Parkway MD-337/223 on the northwest portion of the base. Major thoroughfares providing access to JBA are MD-4 and MD-5.

In general, major intersections in the roadway network surrounding JBA are operating over capacity. That situation creates queuing, delays, and potentially unsafe conditions. Notably, each of the following intersections that provides access to the associated gate operates above its capacity during at least one peak traffic period (JBA, 2019).

- Pearl Harbor Drive and Dower House Road (Pearl Harbor Gate*)
- Allentown Road and I-95 Northbound Off-ramp (Main Gate)
- Old Alexandria Ferry Road and Coventry Way (near Virginia Gate)

* Pearl Harbor Gate is the base access point for all construction traffic.

The average annual daily traffic (AADT) is the average number of vehicles traveling along a roadway each day. Level of service (LOS) is a measure of the operational conditions on a roadway or at an intersection. LOS ranges from A to F, with “A” representing the best operating conditions (free flow, little delay) and “F” representing the worst conditions (congestion, long delays). LOS A, B, or C is typically considered a good operating condition. Table 3-7 lists the routes near the proposed sites and in the area, their AADT, and their estimated existing LOS. Note that some the nearby roadways already are congested during peak traffic periods (i.e., LOS D, E, or F).

<table>
<thead>
<tr>
<th>Roadway</th>
<th>AADT (vpd)</th>
<th>One-way Peak Hour Volume (vph)</th>
<th>Volume to Capacity Ratio</th>
<th>Estimated Existing LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allentown Road</td>
<td>31,940</td>
<td>1,725</td>
<td>1.01</td>
<td>F</td>
</tr>
<tr>
<td>Pennsylvania Avenue</td>
<td>70,281</td>
<td>1,150</td>
<td>0.68</td>
<td>E</td>
</tr>
<tr>
<td>Branch Avenue</td>
<td>67,061</td>
<td>2,530</td>
<td>1.49</td>
<td>F</td>
</tr>
<tr>
<td>Capital Beltway</td>
<td>219,571</td>
<td>1,811</td>
<td>1.07</td>
<td>F</td>
</tr>
</tbody>
</table>

Source: DAF, 2017

3.11.3 Air, Rail, and Public Transportation

The closest large public airport is Ronald Reagan Washington National Airport, which is 15 miles away in Arlington, Virginia, and has approximately 816 operations per day (AirNav, 2020). Other nearby airports include Baltimore-Washington Thurgood Marshall International Airport and Washington Dulles International Airport. The closest Amtrak station is 56 miles away at Union Station in Washington, D.C. Three public agencies provide transit service to the area surrounding
JBA: Washington Metropolitan Area Transit Authority via the Metrorail and Metrobus systems, the Maryland Transit Administration, and Prince George’s County via TheBus service. The Branch Avenue Metrorail station (approximately 3 miles from the JBA main gate) provides rail service and transfers. Two bus routes have at least two stops within one-quarter mile of the intersection of Suitland Road and Allentown Road outside the main gate.

3.12 SAFETY AND OCCUPATIONAL HEALTH

Development on JBA is constrained by explosive safety zones, environmental restoration activities, airfield clearance requirements, and airfield noise. Minor safety-related development constraints on JBA are AT/FP requirements and ERP site restrictions. Consideration of noise constraints is discussed in section 3.2, and consideration of ERP sites is discussed in section 3.8. Explosive safety quantity distance (ESQD) arcs, or the areas within a specified distance of explosive materials storage sites, cover a portion of the golf course and the southwest portion of the airfield. Those areas are either limited or restricted for development. Future plans envision all ESQD arcs being on the eastern portion of the base. No areas that would be affected by the Proposed Action considered in this EA are within existing ESQD arcs. Construction site safety and prevention of mishaps is an ongoing activity for any Air Force job site. The Air Force Occupational Safety and Health regulations provide for compliance with confined spaces regulations, minimum personal protection equipment standards, limited access to the jobsite, and other items.

3.13 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND PROTECTION OF CHILDREN

This section describes the economic and sociological environment of the ROI surrounding JBA. A ROI is a geographic area selected as a basis on which social and economic impacts of project alternatives are analyzed. The ROI for the socioeconomic environment is defined as Prince George’s County, Maryland. For comparative purposes, socioeconomic data also are presented for the State of Maryland and the United States.

This section also discusses the potential for disproportionately high and adverse impacts to minority and/or low income populations consistent with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, and environmental health and safety risks to children consistent with EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*.

3.13.1 Population

Population trends are presented in Table 3-8. The ROI’s population increased by about 5 percent (about 46,000 people) between 2010 and 2019. That population growth rate was similar to the rates of the State of Maryland and the nation, where the populations increased by 4 percent and 6 percent, respectively. By 2030, the ROI’s population is projected to increase by 4 percent, Maryland’s population is projected to increase by 14 percent, and the United States population is projected to increase by 10 percent (United States Census Bureau, 2019).
Table 3-8: Population Trends

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI (Prince Georges County)</td>
<td>863,519</td>
<td>909,327</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Maryland</td>
<td>5,773,785</td>
<td>6,045,680</td>
<td>4%</td>
<td>14%</td>
</tr>
<tr>
<td>United States</td>
<td>308,758,105</td>
<td>328,239,523</td>
<td>6%</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: United States Census Bureau, 2019

JBA is about 5 miles southeast of Washington, D.C., and is bordered on the west by a highly urbanized area and on the east by a semi-rural area that is undergoing suburban residential and commercial growth. Communities around JBA include Forestville and Morningside to the north and northwest, Camp Springs to the west, Clinton to the south, and Rosaryville to the southeast and east. Immediately adjacent to the northeast boundary of JBA is a major new town development (Westphalia) to be built-out over a 30-year period with about 10,000 new homes and a town center with offices, retail, and entertainment venues. That development is expected to attract significant residential and commercial activity (DAF, 2017).

3.13.2 Employment, Industry, and Income

The ROI is in the Washington, D.C., Metropolitan Statistical Area. In general, the area enjoys a robust economy and has experienced sustained growth. As shown in Table 3-9, ROI labor force and unemployment trends are about the same as they are for the state and nation. The ROI labor force increased 2.7 percent between 2010 and 2018, which is slightly less than the Maryland labor force growth of 3.9 percent, and about half of the U.S. labor force growth for that time period.

The ROI, state, and national unemployment rates all declined from 2010 to 2018. The ROI and Maryland 2018 annual unemployment rates were 4.8 percent and 3.8 percent, respectively, similar to the national rate of 3.7 percent (Bureau of Labor Statistics [BLS], 2018).

Table 3-9: Labor Force and Unemployment

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>Change in Labor Force 2010-2018</th>
<th>2010 Annual Unemployment Rate</th>
<th>2018 Annual Unemployment Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI (Prince George’s County)</td>
<td>2.7%</td>
<td>7.5%</td>
<td>4.8%</td>
</tr>
<tr>
<td>Maryland</td>
<td>3.9%</td>
<td>7.7%</td>
<td>3.8%</td>
</tr>
<tr>
<td>United States</td>
<td>6.9%</td>
<td>10.6%</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

Source: BLS, 2018

As of 2018, the leading ROI industries on the basis of employment were government and government enterprises (which includes Federal military, civilian, and state and local government); retail trade; construction; health care and social assistance; and professional, scientific, and technical services. Together, those five industry sectors accounted for about 60 percent of regional employment. The government and government enterprises industry sector (which includes JBA)
was the largest employer in the ROI, accounting for 21 percent of total ROI employment (Bureau of Economic Analysis [BEA], 2018).

JBA is a major contributor to the regional economy. The daytime workforce consists of about 17,000 USAF personnel and about 500 Navy personnel. JBA is the largest employer in the ROI and has an estimated economic impact of $1.2 billion on the local economy (JBA, 2019).

Table 3-10 lists 2018 per capita personal income (PCPI) and median household income. The ROI income levels were about the same as for the state, but higher than for the nation. As of 2018, the ROI PCPI was $35,869, which was 89 percent of the Maryland state PCPI of $40,517, but 110 percent of the national PCPI of $32,621 (BLS, 2018). The ROI median household income of $81,969 was just over 100 percent of the Maryland median household income of $81,868, and 136 percent of the national median household income of $60,293 (BLS, 2018).

Table 3-10: PCPI and Median Household Income 2018 Estimates

<table>
<thead>
<tr>
<th>Geographic Area</th>
<th>PCPI</th>
<th>Median Household Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROI (Prince George’s County)</td>
<td>$35,869</td>
<td>$81,969</td>
</tr>
<tr>
<td>Maryland</td>
<td>$40,517</td>
<td>$81,868</td>
</tr>
<tr>
<td>United States</td>
<td>$32,621</td>
<td>$60,293</td>
</tr>
</tbody>
</table>

Source: BLS, 2018

3.13.3 Recreation and Services

JBA has a number of indoor and outdoor recreational and service facilities. Indoor facilities include the Community Activities Center, Youth Center, CDCs, fitness centers, Commissary, and Base Exchange. Outdoor facilities include golf courses; playgrounds; a lake; swimming pool; tennis courts; basketball courts; and fields for softball, baseball, and football/soccer. The majority of the recreational facilities are generally centrally located in the western portion of JBA, but the golf courses and lake recreation area are in the south/southwestern portion of JBA. Future land use plans designate an area in the northeast corner of JBA (east of the airfield) as open space/recreation (JBA, 2019).

3.13.4 Police, Fire, and Medical Services

JBA is a limited access facility with its own force protection, law enforcement, fire protection, and health care services.

The primary mission of the JBA 11th Security Forces Squadron is to provide police services and force protection to the base and to the President of the U.S., U.S. senior leaders, and visiting dignitaries.

The 11th Civil Engineer Squadron is responsible for JBA readiness and emergency management, and fire and emergency services. The base has two fire stations as well as mutual aid agreements with Prince George’s County for fire and emergency services (JBA, 2019).

JBA’s Malcolm Grow Medical Clinic is a multifunctional medical facility offering a full range of primary care services, medical and surgical subspecialties, aerospace medicine, and dental care. It
is part of the NCR enhanced Multi-Service Market along with nine other medical treatment facilities—including Walter Reed National Military Medical Center, Fort Belvoir Community Hospital, and Kimbrough Ambulatory Care Clinic—that provide care to more than 500,000 beneficiaries (JBA, 2019).

### 3.13.5 Environmental Justice

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, encourages Federal facilities to achieve “environmental justice” by identifying and addressing, as appropriate, disproportionally high and adverse human health or environmental impacts of its programs, policies, and activities on minority and low-income populations. Accompanying EO 12898 was a Presidential transmittal memorandum that referenced existing Federal statutes and regulations to be used in conjunction with EO 12898. One of the items in this memorandum was the use of the policies and procedures of NEPA, specifically that, “Each Federal agency shall analyze the environmental effects, including human health, economic, and social effects, of Federal actions, including effects on minority communities and low-income communities, when such analysis is required by the NEPA 42 USC, Section 4321, et seq.”

To determine whether the ROI contains a disproportionately high minority or low-income population, data for Prince George’s County was compared to data for Maryland and the United States.

Within the ROI, approximately 87 percent of the population is considered minority, which is higher than both state (50 percent) and national (40 percent) averages (U.S. Census Bureau, 2019). African Americans accounted for the largest minority populations in Prince George’s County (64.4 percent).

Within the ROI, approximately 8 percent of the population lived at or below the poverty level in 2018, which is lower than Maryland (9 percent) and the national (11.8 percent) average (U.S. Census Bureau, 2019) (Table 3-11).

<table>
<thead>
<tr>
<th>Category</th>
<th>United States</th>
<th>Maryland</th>
<th>Prince George’s County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median household income (in 2018 dollars), 2014-2018</td>
<td>$60,239</td>
<td>$81,868</td>
<td>$81,969</td>
</tr>
<tr>
<td>Per capita income in past 12 months (in 2018 dollars), 2014-2018</td>
<td>$32,621</td>
<td>$40,517</td>
<td>$35,869</td>
</tr>
<tr>
<td>Persons in poverty, percent</td>
<td>11.8%</td>
<td>9.0%</td>
<td>8.3%</td>
</tr>
</tbody>
</table>

Source: United States Census Bureau, 2019
3.13.6 Protection of Children

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, aims to reduce environmental or health safety risks that the USEPA finds may disproportionately affect children. The site for the proposed CDC and the surrounding buildings are primarily administrative and do not house any existing schools, playgrounds, CDCs, or other facilities that would put children at a disproportionate risk for any environmental or health risks during construction or operation of this proposed facility.
4 ENVIRONMENTAL CONSEQUENCES

4.1 INTRODUCTION

This section presents the potential environmental consequences of implementing the Proposed Action and No Action Alternative. The potential impacts to the human and natural environment were evaluated relative to the existing environment described in Section 3.0. For each environmental resource or issue, anticipated direct and indirect impacts were assessed, considering both short- and long-term project impacts.

Potential impacts are described in terms of type (beneficial or adverse); duration (short- or long-term); and intensity (negligible, minor, moderate, or major). Explanations of these terms are as follows:

- **Type**: The impact type refers to whether it is adverse (negative) or beneficial (positive). Adverse impacts would potentially harm resources, while beneficial impacts would improve resource conditions. Within the analysis, impacts are assumed to be adverse unless identified as beneficial.

- **Duration**: Impacts resulting from construction are considered short-term and would occur during construction or site improvements. Long-term impacts would persist during the operation of properties and facilities.

- **Intensity**: The intensity of an impact describes the magnitude of change that the impact generates. The intensity thresholds are as follows:
  - Negligible: There would be no impact, or the impact would not result in a noticeable change in the resource.
  - Minor (not significant): The impact would be slight, but detectable, resulting in a small but measurable change in the resource.
  - Moderate (not significant): The impact would be readily apparent and/or easily detectable but would not substantially alter the resource or exceed regulatory thresholds.
  - Major (significant): The impact would be widespread and would substantially alter the resource or exceed regulatory thresholds. A major, adverse impact would be considered significant under NEPA.

4.2 NOISE / ACOUSTIC ENVIRONMENT

An impact to noise could occur if the Proposed Action or alternative would change the number of acres of real estate exposed to noise levels of 65 DNL or higher.
4.2.1 Proposed Action

Implementation of the Proposed Action would not permanently alter the noise environment in and around the project site. The Proposed Action would have short-term minor adverse impacts. Short-term increases in noise would be the result of construction activities. These short-term impacts would not result in the violation of any applicable Federal, state, or local noise regulations or create appreciable areas of incompatible land use outside the property boundary of JBA. There would be no long-term impacts on noise related to the operation of this proposed facility.

In terms of noise levels, the additional noise generated by construction activities (Table 4-1), specifically the use of heavy equipment such as graders, front-end loaders and dump trucks would be noticeable, but unlikely to cause an increase in noise levels above the current levels that include aircraft overflight on JBA. Noise produced by construction is expected to be lower in magnitude and more spread out during the day than typical flight noise. During construction, the following measures will be taken to minimize noise impacts:

- Construction activities would primarily occur during normal weekday business hours;
- Heavy equipment mufflers would be properly maintained and in good working order; and
- Equipment operators would wear adequate personal hearing protection to limit exposure and ensure compliance with Federal health and safety regulations.

There are no NSAs (residential areas, schools, hospitals, or churches) within a close distance (800 feet) of the project area to be affected by noise related to construction associated with the Proposed Action.

Upon completion of the project, the noise exposure would return to close to existing levels, which are dominated by aircraft overflights. Therefore, no long-term or major impact to the noise environment would occur from implementing the Proposed Action. There are no changes to the existing operational noise levels at JBA expected from the Proposed Action.

<table>
<thead>
<tr>
<th>Table 4-1: Typical Noise Levels of Principal Construction Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction Vehicle Type</td>
</tr>
<tr>
<td>Front End Loader</td>
</tr>
<tr>
<td>Backhoe</td>
</tr>
<tr>
<td>Concrete Truck</td>
</tr>
<tr>
<td>Roof Saw</td>
</tr>
<tr>
<td>Crane</td>
</tr>
<tr>
<td>Pick-Up Truck</td>
</tr>
<tr>
<td>Delivery Truck</td>
</tr>
</tbody>
</table>

Source: USEPA, 1971

4.2.2 No Action Alternative

Under the No Action Alternative, there would be no change to noise or the acoustic environment at JBA. There would be no impact to the noise/acoustic environment from this alternative.
4.3 AIR QUALITY AND GREENHOUSE GASES

The Proposed Action would be considered to have a significant impact on air quality if the impact exceeds the General Conformity de minimis levels for a NAAQS pollutant for which the project area is in non-attainment or maintenance.

4.3.1 Proposed Action

A General Conformity Applicability Analysis was performed for the Proposed Action, which estimated the level of potential air emissions. The ACAM model was used to estimate the steady state emissions for the project. The analysis is only required for nonattainment and maintenance pollutants. Prince George’s County is in attainment for the SO\(_2\), CO, PM\(_{2.5}\), PM\(_{10}\), and lead NAAQS, so these pollutants are not required to be included in the analysis. Table 4-2 below shows the estimated NO\(_x\) and VOC emissions for a 12-month period. As demonstrated in the table below, the estimated emissions are well below the de minimis thresholds. Therefore, the Proposed Action is not anticipated to result in any adverse impacts to air quality. The ACAM final report with the assumptions and inputs used for the calculations is provided in Appendix B.

<table>
<thead>
<tr>
<th>Pollutants</th>
<th>VOC</th>
<th>NO(_x)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Action Emissions (tons/year)</td>
<td>1.44</td>
<td>8.42</td>
</tr>
<tr>
<td>De minimis threshold (tons/year)(^1)</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>Exceeds de minimis thresholds?</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

\(^1\) Prince George’s County is in marginal nonattainment for 8-hour O\(_3\) NAAQS (VOCs and NO\(_x\) are precursors to the formation of O\(_3\)). De minimis thresholds are defined in 40 CFR 93 Section 153. VOC and NO\(_x\) de minimis established for nonattainment areas located in an O\(_3\) transport area.

Routine operation of facilities, mobile assets and equipment are exempt from the General Conformity Rule. Therefore, operational emissions from JBA need not be included in the General Conformity Applicability Analysis.

The Proposed Action would result in temporary, localized changes to air quality as a result of fuel combustion emissions from the construction equipment and fugitive dust generated through the duration of the construction. The Proposed Action would be undertaken in compliance with state, federal, and current Air Force regulations designed to support compliance with CAA. Applicable NEPA considerations would be made and the resulting documentation (if any) would be kept on file.

The CO\(_{2e}\) emissions estimated by ACAM for the Proposed Action are 2,027 metric tpy. It is anticipated that the Proposed Action would not cause a perceivable impact to air quality because the increase in GHG emissions will be temporary and will not contribute long-term to JBA’s overall CO\(_{2e}\) emissions. Mitigation efforts to reduce GHGs generated during the Proposed Action can be implemented by maintaining emission control technology on construction equipment.
4.3.2 No Action Alternative

Under the No Action Alternative, no activities would take place and general emissions would stay at their current rate. There would be no impact to air quality or greenhouse gas emissions from this alternative.

4.4 WATER RESOURCES

Water resources would be impacted if the construction activities resulted in a change to the groundwater or surface water quantity or quality. Changes that exceed the maximum contaminant levels (MCL) or state water quality standards for surface waters would be considered significant. Floodplains would be impacted if the proposed project were to affect the storage or flow of flood waters within the mapped area. Any activities that are reasonably likely to affect any coastal use or resource could impact the coastal zone if they are not conducted in a manner that is consistent to the maximum extent practicable with the enforceable policies of the applicable state coastal program. Stormwater would be impacted if the Proposed Action did not follow state and Federal regulations regarding stormwater discharge and runoff, including erosion, sedimentation, and non-point source pollution. Wetlands would be impacted if the Proposed Action either destroyed or adversely modified wetlands.

4.4.1 Proposed Action

Implementation of the Proposed Action would result in short- and long-term minor adverse impacts to surface water and stormwater.

There would be no expected impacts to groundwater, floodplains, coastal zone, or wetlands.

4.4.1.1 Groundwater

The Proposed Action is not expected to have any adverse or beneficial impacts on groundwater at this site. The municipal groundwater supply provided to JBA would not be used for the construction activities. Additionally, the depth to groundwater – approximately 62 feet – is greater than the depth of excavation for construction purposes for this project (National Ground-Water Monitoring Network, 2018). There are no USTs on the project site to be disturbed or excavated, so impacts to groundwater quality and quantity are not expected.

4.4.1.2 Surface Water

Short-term, minor adverse impacts to surface water resources during construction activities (grading, clearing, excavation) are anticipated, as well as long-term, minor impacts due to increased impervious surface on the site.

Construction activities would result in ground surface disturbance and could lead to soil erosion and sedimentation in streams via stormwater. Impacts would include increased turbidity and the transport and deposition of fine materials downstream of the project area. Such impacts could
affect water quality within the watershed and downstream reaches during construction activities, but would cease once construction activities cease.

Per MDE’s 2 June 2020 letter, the Proposed Action is within the watershed of Piscataway Creek 2, which is classified as a Tier II stream. Maryland requires additional protections for high-quality waters, such as Tier II streams, in order to minimize degradation of water quality. JBA will ensure that appropriate erosion and sediment controls are implemented, and will implement all applicable Enhanced BMPs recommended by MDE to protect high quality waters.

Some of the erosion and sediment control BMPs could include silt fencing, sediment traps, and re-vegetation of disturbed areas. JBA or its contractors would prepare erosion and sediment control plans for the proposed project as necessary, and would have them approved by MDE before construction.

The amount of impervious surface on the proposed site would increase by approximately 1.15 acres, which would lead to potential long-term impacts to surface waters due to increased stormwater runoff. This would potentially impact Meetinghouse Branch, a Use Class I-designated stream just northwest of the proposed site, and Piscataway Creek 2. The minimization measures and potential stormwater impacts will be discussed in more detail in Section 4.4.1.5 below.

### 4.4.1.3 Floodplains

No adverse or beneficial impacts are expected for floodplains as a result of the Proposed Action. Floodplains associated with Meetinghouse Branch occur in the vicinity of the Proposed Action; however, they are located to the north and northwest of the site, and will not be impacted by the Proposed Action. Pursuant to EO 11988, *Floodplain Management*, JBA will ensure that the Proposed Action does not alter the floodplain.

### 4.4.1.4 Coastal Zone

No adverse or beneficial impacts on Maryland’s coastal resources would be expected from implementing the Proposed Action. JBA is within Maryland’s designated coastal zone, and as such is regulated under the Federal Coastal Zone Management Act (CZMA) and Maryland’s federally approved Coastal Zone Management Program. The Proposed Action would be fully consistent with Maryland’s Enforceable Coastal Policies (effective April 11, 2011), implemented by MDE.

The Proposed Action would be conducted in accordance with applicable laws, regulations, and policies governing erosion and sediment control and stormwater management, which would ensure that the actions would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A Coastal Zone Determination is included in Appendix E.

### 4.4.1.5 Stormwater

The Proposed Action would result in short- and long-term, minor adverse impacts to stormwater. As mentioned in the Section 4.4.1.2 above, short-term, minor adverse impacts to stormwater would
be expected during construction, and long-term, minor impacts would be expected as a result of increased impervious areas on the project site.

Construction activities would result in ground surface disturbance and could lead to soil erosion and sedimentation in streams via stormwater. This could result in degraded water quality in Piscataway Creek 2, a Tier II stream, and in Meetinghouse Branch, a Use Class I-designated stream.

In order to minimize construction impacts on stormwater runoff, JBA will implement the necessary BMPs, and will also comply with stormwater- and construction-related permits. An Individual Permit for Stormwater Associated with Construction Activity may be required from MDE for this project. Post-construction stormwater runoff would be controlled and managed in accordance with an MDE-approved stormwater management plan. All projects would comply with the current version of the Maryland Stormwater Management Guidelines for State and Federal Projects and with EISA Section 438. Comprehensive ESD methods would be integrated into stormwater control designs. Emphasis would be on using nonstructural BMPs when designing stormwater management controls, and structural BMPs would be used only after all practical nonstructural options are exhausted.

Stormwater impacts associated with the increase in impervious surface area would be minimized using appropriate stormwater BMPs, and would be managed in accordance with Maryland’s Stormwater Management Act of 2007.

4.4.1.6 Wetlands

The Proposed Action is not expected to have any impacts to wetlands. Wetlands occur along Meetinghouse Branch northwest of the proposed location of the new CDC. In compliance with EO 11990, Protection of Wetlands, the USAF attempts to preserve the natural values of wetlands while carrying out its mission on both USAF lands and non-USAF lands. To the maximum extent practicable, the USAF avoids actions that would either destroy or adversely modify wetlands. The Proposed Action would not destroy or modify wetlands within or adjacent to the proposed CDC location, and appropriate measures would be taken to avoid any direct or indirect impacts to Meetinghouse Branch and its associated wetlands.

4.4.2 No Action Alternative

Under the No Action Alternative, there would be no change in the current conditions of water resources. No construction would take place; therefore, no ground or soil disturbance would occur that could impact water resources.

4.5 BIOLOGICAL / NATURAL RESOURCES

Biological and natural resources would be impacted if implementation of the Proposed Action resulted in a change to wildlife species or their habitats, including threatened or endangered species, in the area. Changes that reduced the viability of native vegetation in the area would be
considered significant. Changes that reduced the viability of wildlife population in the area or eliminated them would be considered significant.

### 4.5.1 Proposed Action

Short- and long-term, minor adverse impacts on vegetation and habitats would be expected from implementing the Proposed Action. Short-term impacts could be expected as a result of construction activities disturbing vegetation or wildlife in the vicinity of the proposed site. Wildlife displaced during construction would likely return once construction is complete. Long-term impacts could be expected as a result of the removal of trees on the proposed site that could provide habitat for various wildlife species.

While much of the project location was previously developed and supports maintained lawns, there is a patch of forested area in the center of the site. This forested area contains some trees and understory growth that could support various species of wildlife. There is also a forested area along Meetinghouse Branch toward the north and northwestern edges of the proposed site.

#### 4.5.1.1 Vegetation

Short-term, minor adverse impacts to vegetation would be expected as a result of construction activities, and long-term, minor adverse impacts would be expected due to the removal of trees on more than one acre of the proposed project site. JBA would disturb as little natural habitat as feasible when implementing the projects and would comply with the provisions of its arbor plan. The arbor plan requires 1:1 tree replacement for projects disturbing less than one acre, and 60 percent canopy replacement for projects disturbing more than one acre. The project area will also be replanted with native grasses and landscape vegetation appropriate to the environmental conditions on the site.

#### 4.5.1.2 Wildlife

Although it is important to try to avoid and minimize impacts to all birds, all attempts should be made, in particular, to avoid impacts to migratory birds. Common migratory birds found on JBA are listed in Section 3.5.2. “Take” of migratory birds is prohibited under DoD policy, and should be avoided at all cost. The USFWS conservation measures are described in JBA’s Integrated Natural Resources Management Plan (INRMP) (JBA, 2014). Based on the measures JBA plans to take to avoid impacts to migratory birds, there are no expected impacts to migratory birds as a result of the Proposed Action.

Based on a USFWS IPaC report for this project, there is only potential for one rare, threatened or endangered species to occur in the project area – the NLEB (Appendix C). While no NLEB sightings have been known to occur in the vicinity of the Proposed Action, JBA will adhere to Section 4(d) of the Endangered Species Act, including time of year restrictions on tree clearing, as necessary. Due to the low probability of NLEB roosts or hibernacula on the proposed project site, and JBA’s adherence to Section 4(d), there are no expected impacts to rare, threatened, or endangered species as a result of the Proposed Action.
4.5.2 No Action Alternative

No adverse impacts to biological or natural resources would be expected from implementing the No Action Alternative as no vegetation would be removed, or wildlife displaced. No vegetation, wildlife, or protected species would be affected under the No Action Alternative.

4.6 GEOLOGY, SOILS, AND TOPOGRAPHY

The soils and topography would be impacted if implementation of the Proposed Action changed the geologic features or resulted in severe soil loss such that the area could no longer maintain the existing land use.

4.6.1 Proposed Action

Implementation of the Proposed Action would result in short- and long-term, minor adverse impacts to soils and topography within the project area. Short-term impacts would be expected due to temporary ground disturbances during construction of the proposed CDC. Long-term impacts to soils and topography would be expected due to the conversion of pervious surfaces to impervious, and the re-grading of more than half of the site.

Construction on the proposed site is expected to take about 18 months to complete. Contractors would be required to comply with JBA’s environmental standards, which would include submitting an erosion and sediment control plan to MDE for each project that would disturb more than 5,000 square feet and obtaining coverage under the NPDES General Construction Permit, as applicable to each project. Implementing erosion and sediment control BMPs during construction, as specified in those plans, would minimize the impacts to soils. Staging areas for the equipment and construction materials would be in already paved areas on the southern side of California Avenue; therefore, there would be no expected impacts to soils in that area.

Accidental release of contaminants such as hydraulic and lubricating oils or cooling fluids could occur during construction, along with accidental releases of pollutants into soils during routine maintenance activities. Any accidental release of contaminants or liquid fuels would be addressed in accordance with the base’s Spill Prevention, Control, and Countermeasure Plan (SPCCP). The likelihood of an accidental release would be low because of implementation of spill prevention and containment measures, as provided in the SPCCP.

It is estimated that a total of approximately 1.15 acres of the approximately 5-acre proposed project site will be converted from primarily mowed, maintained surfaces to impervious surfaces. This would lead to long-term, minor impacts to soils. Impervious surfaces planned for this site include pavements (roads, sidewalks, and parking lots) and the CDC building itself. Additionally, approximately 3.2 acres of the 5-acre site are expected to be re-graded, which would produce long-term, minor impacts to topography. These surface disturbances would not impact the geology of the area.
4.6.2 No Action Alternative

No impacts to geology, soils, or topography would be expected under the No Action Alternative. The Proposed Action would not be undertaken and no soil disturbance would take place.

4.7 HAZARDOUS AND TOXIC MATERIALS / WASTE

HTMW would be impacted if the operations at the CDC activities resulted in a release of these materials into the environment. Potential releases could occur to the air, water, and soil. Releases that exceed Federal and state guidance would be considered significant.

4.7.1 Proposed Action

Implementation of the Proposed Action would not require the use of hazardous materials to sustain daily operations. However, hazardous materials would be used and wastes generated due to the fueling of emergency generators during construction. All contractors involved with implementing the Proposed Action would be required to comply with JBA’s Environmental Standards for Contractors, which includes managing, storing, transporting, and disposing of HTMW, and taking all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with all applicable Federal, state, and local laws and regulations. Furthermore, contractors would remove HTMW generated by fueling, and would dispose of it at their own facilities. The excavation of asphalt would not generate HTMW, and any construction waste would be removed and disposed of at approved landfills.

There are also no ERP or MMRP sites on, or in the immediate vicinity of, the proposed CDC site. Additionally, there are no ASTs or USTs on the project site, and because there are no existing buildings, there is no ACM or LBP on the site; therefore, there are no expected impacts due to HTMW under the Proposed Action.

4.7.2 No Action Alternative

Under the No Action Alternative, there would be no change to hazardous materials and wastes management. No hazardous materials and wastes would be used, stored, or disposed of under the No Action Alternative.

4.8 CULTURAL RESOURCES

Cultural resources would be impacted if the construction of the CDC resulted in adverse effects on historic properties through the disturbance of buried archaeological deposits or through disturbance of the integrity of an existing historic building, district, or landscape.

4.8.1 Proposed Action

There are no historic buildings, districts, or landscapes within the proposed project area, and the project area is not within the viewshed of any historic properties. Additionally, no archaeological
sites or resources have been identified within the Proposed Action site location (JBA, 2017b); therefore, no impacts to cultural resources are anticipated.

While the project site is within roughly a mile of the NRHP-eligible Belle Chance property, there are numerous buildings and vegetative barriers between Belle Chance and the project area which keep the project site from being within the Belle Chance viewshed (Figure 3.8-1).

JBA initiated consultation with the MHT for the construction of the new CDC building, and on June 2, 2020, the MHT concurred with the finding of “no effect” to historic properties as a result of the Proposed Action (Appendix A). JBA also initiated consultation with federally-recognized Tribes on April 28, 2020. The one Tribal government response received on June 12, 2020, was acknowledged and responded to. Any Tribal governments that requested to review the draft EA were afforded that opportunity during the public review period.

4.8.2 No Action Alternative

Implementation of the No Action Alternative would not be expected to have any impact on cultural resources as no construction would occur.

4.9 LAND USE

Land use would be impacted if the Proposed Action would alter acreage for a land use category in either the existing or surrounding project site.

4.9.1 Proposed Action

No adverse impacts on land use would be expected from the Proposed Action. The most recent JBA IDP has the proposed site listed as Administrative, which is compatible with the parcel’s proposed use as the site of the new CDC.

4.9.2 No Action Alternative

Under the No Action Alternative, there would be no impacts to land use at JBA as the site would remain in its current condition.

4.10 INFRASTRUCTURE / UTILITIES

Infrastructure and utilities would be impacted if the Proposed Action resulted in increased utility usage or altered infrastructure at the project site. Stormwater drainage systems would be impacted should the project result in a change in the amount of stormwater or in the collection and handling of stormwater. Solid waste management would be impacted should the project result in a change in the amount of solid waste generated, collected, or handled.
4.10.1 Proposed Action

There would be short-term, minor adverse impacts to potable water, sanitary sewer, electrical, natural gas, and solid waste as a result of implementing the Proposed Action. There would be long-term, minor adverse impacts to the stormwater drainage system.

While there are existing lines for potable water, sanitary sewer, electrical, and natural gas on the proposed project site from the previous development on the site, these lines will need to be rerouted to meet the configuration of the new CDC building. This could lead to temporary disruptions in service to surrounding buildings, but would only lead to impacts during construction. All of these systems have adequate capacity to support the new CDC, and because this new CDC would be more water- and energy-efficient than the existing CDC #1, the new facility would likely put less strain on these utility systems than the current facility.

During construction of the proposed CDC, there would be an increase in the amount of waste generated. However, any debris and materials from construction activities would be disposed of at an off-site landfill by the contractor, and this increase in solid waste would cease once construction is complete. During operation of the facility, solid waste would be collected by the Civil Engineering Operations Flight, and any items that cannot be recycled would be collected and disposed of by a contractor at a licensed landfill in Prince George’s County. There is not expected to be an increase in daily solid waste generation at the new CDC, so there would be no long-term impacts expected.

Long-term, minor adverse impacts to the stormwater drainage system would be expected as a result of the increase in impervious surface on the site. This additional impervious surface, about 1.15 acres in size, would require additional stormwater management measures. These measures would tie into JBA’s existing stormwater drainage system; and while it would increase the overall stormwater flows at JBA, the impacts are expected to be minimal. JBA would implement additional BMPs for stormwater pollution prevention in accordance with its SWPPP, as well as the NPDES requirements located in 40 CFR 126.26.

4.10.2 No Action Alternative

Long-term, minor adverse impacts on utility systems would result from implementing the No Action Alternative. The aging CDC #1 with old utility systems would be expected to become even less efficient over time, increasing its demand on the utility systems.

4.11 TRANSPORTATION

Transportation would be impacted if the Proposed Action resulted in increased traffic congestion, additional vehicles entering the installation, or restricted movement throughout JBA.

4.11.1 Proposed Action

Short- and long-term, minor adverse impacts on transportation would be expected as a result of the Proposed Action. Short-term impacts would be the result of additional vehicles and day-labor
traffic during construction, and long-term impacts would be the result of minor increases in daily traffic in the vicinity of the proposed CDC. The Proposed Action would have no appreciable impacts on air, rail, or public transportation.

Construction activities would have short-term, minor adverse impacts on traffic due to the worker commutes and delivery of equipment and materials to and from the proposed project site. Congestion could increase in the immediate area from additional vehicles and traffic delays near the site, but positioning the laydown area just south of the Proposed Action site would help alleviate construction traffic. In addition, road closures or detours may be required to accommodate utility system work along California Avenue. These impacts would be temporary and would end upon completion of construction. The existing transportation infrastructure would be sufficient to support the increase in vehicle traffic. Although the impacts would be minor, contractors would route and schedule construction vehicles to minimize conflicts with other traffic and strategically locate staging areas to minimize traffic impacts. All construction vehicles would comply with local safety regulations for construction vehicles.

While there would be no change in the number of personnel at JBA as a result of the Proposed Action, long-term, minor adverse impacts to traffic could be expected due to small changes in vehicle traffic on nearby roadways.

There would be no change in the number of personnel at JBA due to the proposed CDC. Operation of the proposed CDC, however, would introduce small changes in vehicle traffic on nearby roadways. The current CDC #1 is located on the southern edge of JBA, close to the Virginia Avenue gate, but the proposed CDC is located in the northwestern area of JBA, which is closer to the main gate. The increase in families dropping off and picking up children in this area of the base would slightly increase daily and peak-period traffic volumes on roadways and at intersections adjacent to the proposed CDC. While this would lead to minor changes in both on-base traffic and the routes used to access JBA from off-base, it would not appreciably affect any nearby roadways or intersections. The traffic in this area would be offset by reductions in traffic in the vicinity of the existing CDC #1, which would no longer be used.

4.11.2 No Action Alternative

Under the No Action Alternative, there would be no changes to traffic and transportation on JBA or in the surrounding area. As a result, no impacts to transportation would be associated with this alternative.

4.12 SAFETY AND OCCUPATIONAL HEALTH

An impact would occur if construction of the proposed CDC at the project site resulted in the likelihood that human health and safety would be endangered. Changes that result in unacceptable or unnecessary health and safety risks would be considered significant.

4.12.1 Proposed Action

Neither construction nor operation of the proposed CDC would be expected to result in impacts to safety and occupational health.
Contract specifications for the Proposed Action would be implemented to protect those working on-site during construction. All construction contractors would be required to strictly adhere to safety procedures, including complying with USAF safety and Occupational Safety and Health Administration regulations and conducting construction activities in a manner that poses no undue risk to workers or other personnel.

No impacts on the safety and occupational health of personnel at JBA or the public would be expected from implementing the Proposed Action. No new facilities would be constructed within ESQD arcs, and all new facilities would adhere to airfield clearance requirements. The Proposed Action would pose no unacceptable or unnecessary safety risk to JBA personnel, construction workers, or the public.

4.12.2 No Action Alternative

Long-term, minor adverse impacts on safety and occupational health would be expected if the No Action Alternative was implemented. The existing CDC #1 is generally in poor condition and exposes personnel in the buildings to poor environmental working conditions, including sewage backups, a leaking roof, and mold and pest management concerns. Therefore, under the No Action Alternative, there would be ongoing health and safety concerns related to the degraded facility.

4.13 SOCIOECONOMICS, ENVIRONMENTAL JUSTICE, AND PROTECTION OF CHILDREN

Socioeconomics would be impacted if there were a change in income, population, or demographics. Environmental justice would be impacted if the project was determined to have disproportionately high and adverse human health or environmental impacts on minority and low-income populations. Protection of children would be impacted if the project had a disproportionately high impact on the health and safety of children.

4.13.1 Proposed Action

Implementing the Proposed Action would result in no expected impacts to socioeconomics, environmental justice, or protection of children.

Constructing a new CDC would not alter the demographics, employment, or income potential of JBA’s ROI. Contractors would perform construction projects with employees from within the ROI. The economic benefits would be local and short-term since this alternative would not create any new employment positions within the Air Force. Since this alternative would not create any new employment opportunities, reduce the current number of employment opportunities, or change the population growth rate, there would be no anticipated impacts to the social or economic characteristics of the ROI.

While Prince George’s County does have a larger minority population (by percentage) than the state and nation, the Proposed Action is not expected to have any impacts on human health and safety or on socioeconomics within the ROI, so this minority population is not expected to be
disproportionately impacted. Additionally, this Proposed Action would take place on JBA in an administrative area that does not have a disproportionate minority or low-income population.

The Proposed Action is also not expected to have any disproportionate impacts on children. The proposed project site is not located near any schools, playgrounds, CDCs, or other locations where children may be more likely to be impacted by the construction. The operation of the proposed CDC would provide a safer facility for childcare than the existing CDC #1.

4.13.2 No Action Alternative

Implementing the No Action Alternative would result in no change to socioeconomics, environmental justice, or protection of children.

4.14 OTHER NEPA CONSIDERATIONS

4.14.1 Unavoidable Adverse Impacts

Unavoidable adverse impacts are those impacts JBA would experience if construction of the proposed CDC were implemented under the Proposed Action. The Proposed Action is required, however, to meet health and safety standards and to provide childcare for JBA personnel so that they can complete their missions. Potential minor temporary impacts that would occur from implementation of the Proposed Action include: 1) minor adverse impacts to noise from construction equipment use; 2) minor adverse impacts to air quality from construction equipment use; 3) minor adverse impacts to surface water and stormwater runoff from equipment and machinery during construction activities, which could cause erosion that would be minimized or avoided through the use of temporary erosion and sediment control measures, and due to the conversion of pervious to impervious surfaces; 4) minor adverse impacts to vegetation, wildlife, and wildlife habitat during construction activities; 5) minor adverse impacts to soils and topography due to construction activities and re-grading of the site; 6) minor adverse impacts to utilities due to the relocation and update of utility lines; and 7) minor adverse impacts to transportation due to construction traffic and small changes in traffic volume in the project area. The Proposed Action would result in no or negligible impacts to: groundwater, floodplains, coastal zone, and wetlands; threatened or endangered species; HTMW; cultural resources; land use; safety and occupational health; or socioeconomics, environmental justice, and protection of children. No significant cumulative impacts are expected to result from the Proposed Action.

Under the No Action Alternative, the current CDC #1 would continue to fall into disrepair, and would be non-compliant with health and safety standards and AT/FP requirements, which would impact the mission at JBA.

4.14.2 Relationship of Short-Term Uses and Long-Term Productivity

CEQ NEPA regulations (40 CFR 1502.16) require consideration of “the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity.” This consideration involves using all practicable means and measures, including financial and technical assistance, in a manner calculated to foster and promote the general welfare,
to create and maintain conditions under which humans and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations of Americans. This section of the EA recognizes that short-term uses and long-term productivity of the environment are linked, and that opportunities that are acted upon have consequences that could have continuing impacts well into the future.

The Proposed Action would involve construction and operation activities. The construction would include site work, fire detection and suppression systems, environmental controls, pavement, a parking area, exterior lighting, security systems, landscaping, emergency generators, and all other support.

The expected impacts on environmental resources as a result of constructing, operating, and maintaining the proposed CDC are presented in Chapter 4. The conclusions presented in those chapters were the basis for developing Table 4-3, which summarizes the anticipated short- and long-term impacts of implementing the Proposed Action and No Action Alternative.

Table 4-3 lists the potentially significant short- and long-term impacts and significant unavoidable adverse impacts associated with each environmental resource. In the table, “short-term impacts” relate to the short-term uses of environmental resources during the construction of the Proposed Action, and “long-term impacts” relate to the maintenance and enhancement of long-term productivity – in particular, the consistency of the Proposed Action with long-term economic, social, regional, and local planning objectives.

<table>
<thead>
<tr>
<th>Resource</th>
<th>Proposed Action</th>
<th>No Action Alternative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise/Acoustic Environment</td>
<td>Short-term minor adverse impacts</td>
<td>No impacts</td>
</tr>
<tr>
<td>Air Quality and Greenhouse Gases</td>
<td>Short-term minor adverse impacts</td>
<td>No impacts</td>
</tr>
<tr>
<td>Water Resources</td>
<td>Short- and long-term minor adverse impacts to surface water and stormwater runoff; No impacts to groundwater, floodplains, coastal zone, or wetlands</td>
<td>No impacts</td>
</tr>
<tr>
<td>Biological/Natural Resources</td>
<td>Short- and long-term minor adverse impacts to vegetation and wildlife; No impacts to threatened or endangered species</td>
<td>No impacts</td>
</tr>
<tr>
<td>Geology, Soils, and Topography</td>
<td>Short- and long-term minor adverse impacts</td>
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<tr>
<td>Hazardous and Toxic Materials/Waste</td>
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<td>No impacts</td>
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<tr>
<td>Cultural Resources</td>
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<tr>
<td>Land Use</td>
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<td>No impacts</td>
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<tr>
<td>Resource</td>
<td>Proposed Action</td>
<td>No Action Alternative</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>------------------------------------------------</td>
</tr>
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<td>Infrastructure/Utilities</td>
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<td>Long-term minor adverse impacts</td>
</tr>
<tr>
<td></td>
<td>natural gas, and solid waste; Long-term minor adverse impacts to stormwater</td>
<td></td>
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<tr>
<td></td>
<td>drainage systems</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>Short- and long-term minor adverse impacts</td>
<td>No impacts</td>
</tr>
<tr>
<td>Safety and Occupational Health</td>
<td>No impacts</td>
<td>Long-term minor adverse impacts</td>
</tr>
<tr>
<td>Socioeconomics, Environmental Justice, and</td>
<td>No impacts</td>
<td>No impacts</td>
</tr>
<tr>
<td>Protection of Children</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The long-term adverse impacts as a result of not implementing the Proposed Action would outweigh the short-term adverse impacts on the individual resources evaluated in this EA.

4.14.3 Irreversible and Irretrievable Commitments of Resources

NEPA requires that environmental analysis include identification of “…any irreversible and irretrievable commitments of resources which would be involved in the Proposed Action should it be implemented.” Irreversible and irretrievable resource commitments are related to the use of nonrenewable resource and the impacts that the uses of these resources have on future generations. Irreversible impacts primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable timeframe. Irretrievable resource commitments involve the loss in value of an affected resource that cannot be restored as a result of the action (e.g., extinction of a threatened or endangered species or the disturbance of a cultural site).

For the Proposed Action, most resource commitments are neither irreversible nor irretrievable. Most impacts are short-term and temporary. Those limited resources that may involve a possible irreversible or irretrievable commitment under the Proposed Action are discussed below. Construction and maintenance of the proposed CDC would require consumption of limited quantities of aggregate, steel, and concrete. Construction would occur primarily on previously disturbed areas; however, there would be some loss of forested areas and their associated wildlife habitat. These would be replaced in accordance with JBA’s arbor plan. The Proposed Action would avoid impacts to water resources such as wetlands and floodplains, and would take all recommended measures to reduce runoff impacts to streams. Construction would avoid significant natural resources and result in no adverse effects to cultural resources. While construction of the new CDC would incur some soil disturbance and loss, measures to localize and minimize soil loss would be implemented.
4.15 CUMULATIVE IMPACTS

Cumulative impacts are the change to “the environment that results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” (40 CFR 1508.7). Cumulative impacts can result from individually minor, but collectively substantial, actions taken over a period of time. In accordance with NEPA, a discussion is required of cumulative impacts that could result from actions proposed or anticipated in the foreseeable future.

As an active military installation, JBA and its tenant organizations undergo changes in mission and training requirements in response to changing defense policies, current threats, and tactical and technological advances and, as a result, require new construction, facility improvements, infrastructure upgrades, and ongoing maintenance and repairs on a continual basis. Previous, known, or proposed construction and upgrade projects are listed in Table 4-4 and are included in this analysis, although future requirements could change and alter the reality of cumulative impacts. NEPA analysis will be conducted for future Proposed Actions as necessary.

<table>
<thead>
<tr>
<th>Horizon</th>
<th>Project #</th>
<th>Description</th>
<th>Planning District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed</td>
<td>AJXF151516</td>
<td>Repair Deluge System</td>
<td>West Operations</td>
</tr>
<tr>
<td></td>
<td>AJXF161655</td>
<td>Repair MSA Dehumidification</td>
<td>Industrial</td>
</tr>
<tr>
<td></td>
<td>AJXF171532</td>
<td>Renovate West Fitness Center Floor Building 1444</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>AJXF161500</td>
<td>Repair SFC HQ Building 1845</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>AJXF171606</td>
<td>Repair Restrooms Building 1240</td>
<td>West Operations</td>
</tr>
<tr>
<td></td>
<td>AJXF171564</td>
<td>Repair Navy Warfare Concrete Pad Building 3094</td>
<td>Industrial</td>
</tr>
<tr>
<td></td>
<td>AJXF171570</td>
<td>Repair Parking Lot Building 1206</td>
<td>West Operations</td>
</tr>
<tr>
<td></td>
<td>AJXF171580</td>
<td>Repair West Perimeter Road – Near Medical Facility</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>AJXF161631</td>
<td>Repair RV Parking Lot Virginia Avenue</td>
<td>West Operations</td>
</tr>
<tr>
<td></td>
<td>AJXF171531</td>
<td>Repair Dormitory Lighting</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>AJXF111517</td>
<td>Replace Taxiway Sierra</td>
<td>Airfield</td>
</tr>
<tr>
<td></td>
<td>AJXF106000</td>
<td>Construct Taxiway North of ACA Facility B - 2489</td>
<td>East Operations</td>
</tr>
<tr>
<td></td>
<td>TBD</td>
<td>Construct Consolidated Communications Center</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>TBD</td>
<td>6,000 SF Building for Terrapin</td>
<td>Industrial</td>
</tr>
<tr>
<td>Short Range (1-5 Years)</td>
<td>AJXF111516</td>
<td>Replace/Upgrade Taxiway Whiskey, Demolish Pad 14</td>
<td>Airfield</td>
</tr>
<tr>
<td></td>
<td>TBD</td>
<td>Construct Large Aircraft Engine Run-up Pad</td>
<td>Airfield</td>
</tr>
<tr>
<td></td>
<td>AJXF103010</td>
<td>Design and Build Helicopter Operations Facility</td>
<td>West Operations</td>
</tr>
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<td></td>
<td>TBD</td>
<td>Consolidated Maintenance Facility</td>
<td>West Operations</td>
</tr>
<tr>
<td></td>
<td>AJXF092300</td>
<td>Construct New Hydrant Fuel System</td>
<td>East Operations</td>
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<td></td>
<td>AJXF093000</td>
<td>Construct 21 Point Enclosed Firing Range</td>
<td>Industrial</td>
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<td></td>
<td>AJXF088000 / 088001</td>
<td>Construct New Health Care Facility/Dental Clinic</td>
<td>Administrative and Support</td>
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<tr>
<td></td>
<td>AJXF151508</td>
<td>Demo 1522, 1524, 1527, 1526, and 1531</td>
<td>Administrative and Support</td>
</tr>
<tr>
<td></td>
<td>AJXF15153801</td>
<td>Mill/Overlay North Perimeter Road</td>
<td>Base-wide</td>
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<td>AJXF115002A</td>
<td>Construct Addition Main Exchange Building 1811</td>
<td>Administrative and Support</td>
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<tr>
<td>Horizon</td>
<td>Project #</td>
<td>Description</td>
<td>Planning District</td>
</tr>
<tr>
<td>------------------------------</td>
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<td>-----------------------------------------------------------------------------</td>
<td>----------------------------------------------------</td>
</tr>
<tr>
<td>TBD</td>
<td>Move 1 C-37A and 2 C-40 Aircraft to JBA</td>
<td>West Operations</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Construction Associated With Presidential Aircraft Recapitalization EIS</td>
<td>West Operations (Hangar) / Industrial (JADOC) / Airfield (Haz Cargo Pad)</td>
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</tr>
<tr>
<td>N/A</td>
<td>I-495 and I-275 Improvements - Maryland Department of Transportation</td>
<td>Off-base</td>
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<tr>
<td>N/A</td>
<td>Improve Dower House and Woodyard Road Intersection</td>
<td>Off-base</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Relocate East Runway</td>
<td>Airfield / District 1</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Build New East Taxiway for Relocated East Runway</td>
<td>Airfield / District 1</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Relocate FAA VORTAC</td>
<td>Airfield / District 1</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Relocate FAA Airport Surveillance Radar</td>
<td>Airfield / District 1</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Construct New West Fitness Center</td>
<td>Administrative and Support / District 7</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Develop Security Forces Complex</td>
<td>Administrative and Support / District 7</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>USAPAT Battalion Headquarters</td>
<td>Administrative and Support / District 7</td>
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<tr>
<td>TBD</td>
<td>UH1-N Helicopter Recapitalization</td>
<td>West Operations</td>
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<tr>
<td>TBD</td>
<td>Construct Consolidated Security Forces Group Complex</td>
<td>Administrative and Support</td>
<td></td>
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<tr>
<td>TBD</td>
<td>Construct Entry Control Measures North Gate</td>
<td>Airfield</td>
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<td>N/A</td>
<td>MSA Easement Expansion</td>
<td>Off-base</td>
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<tr>
<td>N/A</td>
<td>Maryland Route 4 and Suitland Interchange and NuStar Pipe Relocation</td>
<td>Off-base</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Two Big Box Hangars - 89 AW</td>
<td>West Operations</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>2-Bay Large Aircraft Fuel Cell Hangar</td>
<td>West Operations</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Replace Legacy Aircraft Hangars for LEAR Aircraft Program (as required)</td>
<td>West Operations</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>East Fitness Center</td>
<td>East Operations, Industrial</td>
<td></td>
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<tr>
<td>TBD</td>
<td>2 X Parking Structure</td>
<td>Administrative and Support</td>
<td></td>
</tr>
<tr>
<td>TBD</td>
<td>Navy Operational Support Center</td>
<td>Administrative and Support</td>
<td></td>
</tr>
</tbody>
</table>

Source: JBA, 2019

Resource areas of concern (AOCs) with respect to cumulative impacts are areas on which the Proposed Actions would have an adverse impact. The resource AOCs for the Proposed Actions at JBA are noise, air quality, water resources, soils, biological resources, utilities, and transportation. Table 4-3 summarizes the anticipated impacts of the Proposed Action. Only those resources with adverse impacts resulting from the Proposed Action were analyzed for long-term cumulative impacts. These impacts are discussed below:

**Noise.** No significant adverse cumulative impacts on the noise environment would be expected. Impacts on the noise environment are cumulative when the projects co-occur and are in close enough proximity to one another to contribute to the same noise environment. In general, construction projects are expected to have impacts on the noise environment within 800 feet from the project site. The airfield is the primary source of noise on JBA. The proposed site for the CDC is located in an administrative area that generates little noise. Any other construction projects in...
the vicinity of the proposed CDC would have been completed by the start of construction on the Proposed Action. Cumulative noise impacts at this location would be expected to be minor.

**Air Quality.** The cumulative impacts on air quality from implementation of the Proposed Action would be minor. In accordance with the CAA, a General Conformity Analysis has been prepared concurrently with this EA and demonstrates that implementation of the Proposed Action will not result in emissions above the thresholds for NOx and VOCs. Short-term emissions from construction activities would impact air quality temporarily and the impact would cease after construction is completed.

**Water Resources.** The Proposed Action is anticipated to have minor adverse impacts on water resources. The proposed project would not impact groundwater, floodplains, or wetlands, and would only indirectly impact surface waters and stormwater runoff. These indirect impacts from construction activities would be minimized and mitigated through use of erosion and sediment control measures. The indirect impacts from increased impervious surface area would be minimized and mitigated through the use of stormwater BMPs in accordance with JBA’s SWPPP. Due to the implementation of necessary erosion and sediment control and stormwater management measures at this project site and all others on JBA, cumulative impacts to surface water and stormwater runoff would be expected to be minor.

**Water Resources - Coastal Zone.** The Proposed Action takes place within the coastal zone, along with the rest of JBA. The overall cumulative impact from the Proposed Action is not considered significant because JBA would follow applicable laws, regulations, and policies governing erosion and sediment control and stormwater management. This would ensure that the project would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A full list of Coastal Zone enforceable policies as well as a description of the compliance of the Proposed Action with the Maryland CZMA is provided in Appendix E.

**Biological Resources.** Construction and operation of the proposed CDC would occur primarily in built and previously disturbed environments. However, some forested and vegetative areas will need to be removed as part of the Proposed Action, and this could disturb or displace wildlife habitat. Species that currently occupy the potential project site are most likely highly adaptable and are expected to return to the site or its surrounding areas upon completion of work. In accordance with JBA’s arbor plan, projects on-base that disturb forested areas are required to compensate by planting trees elsewhere, which results in a long-term stability in forest resources on JBA. No substantial habitats would be disturbed or protected species impacted by the Proposed Action. If trees and native vegetation are replaced according to JBA’s arbor plan, and all other nearby projects adhere to this plan as well, cumulative impacts to biological resources are expected to be minor.

**Geology, Soils, and Topography.** No adverse cumulative impacts on geology, soils, or topography would be expected. These impacts are site-specific, and no other projects are planned to occur in the same location as the Proposed Action.

**Infrastructure / Utilities.** The Proposed Action is anticipated to have minor adverse impacts on utilities during construction, and on stormwater drainage systems in the long-term. The proposed project would only impact potable water, sanitary sewer, electrical, natural gas, and solid waste
during construction. The utility systems have adequate capacity in the area of the proposed project and any others in the vicinity of the proposed project. The stormwater drainage system would also need to be altered during construction, and would require increased capacity due to the increase in impervious surface on the proposed project site. Any improvements to the stormwater management system would be made in accordance with the appropriate Federal, state, and local regulations for stormwater management. Because these measures would be expected for all future projects, and there are minimal projects in the same vicinity as the Proposed Action, the cumulative impacts to infrastructure and utilities is expected to be minor.

Transportation. The Proposed Action is anticipated to have minor adverse impacts on transportation due to construction traffic and small changes to daily traffic flow. The proposed project would not impact air, rail, or public transportation. The construction traffic impacts would be temporary, and would abate once construction is complete. There are also minimal other projects in the vicinity of the proposed CDC, so daily vehicle traffic would not be compounded by these projects and cumulative impacts to transportation would be expected to be minor.

4.16 POTENTIAL MITIGATION MEASURES

Mitigation measures are used to reduce the adverse impacts of implementing projects to below the level of significance. Because no significant adverse impacts would result from implementing the Proposed Action, no mitigation measures would be required. BMPs such as those used to control erosion and stormwater runoff, to minimize air pollutant emissions, and to reduce energy consumption from facilities would be implemented as described in this EA.
5 REFERENCES


United States Fish and Wildlife Service. 2020. Information, Planning, and Consultation (IPaC) System Resources for JBA CDC.
APPENDIX A: AGENCY CORRESPONDENCE AND TRIBAL COORDINATION
MEMORANDUM FOR SEE DISTRIBUTION

FROM: 11 CES/CEI
       3466 North Carolina Avenue
       Joint Base Andrews, Maryland 20762-4803

SUBJECT: Description of Proposed Action and Site Maps for Construction of a new Child Development Center at Joint Base Andrews, Maryland


2. In accordance with Executive Order 12372, Intergovernmental Review of Federal Programs, we invite your agency to comment on the Proposed Action described below and provide relevant information about resources under your jurisdiction that may be present in the project area as indicated in Enclosures 1-3.

3. Also enclosed is a copy of the distribution list for those federal, state, and local agencies to be contacted regarding this CDC EA (Enclosure 3). If you consider any additional agencies should review and comment on this proposal, please feel free to include them in a re-distribution of this letter and the attached materials.

4. The Proposed Action for the construction of a new CDC would involve the construction of an approximately 29,200 square foot building, associated parking, and outdoor playground area.

5. If undertaken, this project will be completed in accordance with applicable Executive Orders with the goal of being equivalent to U.S. Green Building Council’s Leadership in Energy and Environmental Design Silver level.

6. Your assistance in providing information is greatly appreciated. Please provide written comments within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If you need further information, please contact Mr. Soens at 240-857-0444.

Lynn Hancsak
Chief of Installation Management

3 Enclosures
Enclosure 1: Location of Joint Base Andrews
Enclosure 2: Proposed Project Location for Child Development Center on JBA

Proposed Project Location

Map location
Enclosure 3: Agency Mailing List

Ms. Lori Byrne
Maryland Department of Natural Resources
Tawes State Office Building B-3
580 Taylor Avenue
Annapolis, MD 21401

Ms. Barbara Rudnick
Environmental Protection Agency,
Region III, Office of Environmental Programs (3EA30)
1650 Arch Street
Philadelphia, PA 19103-2029

Mrs. Linda C. Janey, J.D.
Director, Maryland State Clearinghouse
Maryland Office of Planning,
Room 1104
301 West Preston Street
Baltimore, MD 21201-2365

Ms. Brigid E. Kenney
Planning Director
Maryland Department of the Environment
Office of the Secretary
1800 Washington Blvd
Baltimore, MD 21230

Elizabeth Cole
Maryland Historical Trust
100 Community Place, 3rd Floor
Crownsville, MD 21032-2023

Ms. Katharine Kerr Advisory Counsel of
On Historic Preservation 401
F Street NW, Suite 308
Washington DC 20001-2637

Ms. Genevieve Larouche U.S.
Dept. of the Interior Fish & Wildlife Services Chesapeake
Bay Field Office 177 Admiral Cochrane Drive Annapolis,
MD 21401

Ms. Andree Checkley
Director of Planning
Prince George's County
Department of Planning
14741 Governor Oden Bowie Drive, Room 4150
Upper Marlboro MD 20772

Mr. Carlton Hart
National Capital Planning Commission
401 9th Street, NW
North Lobby, Suite 500
Washington, DC 20004

America's Airmen
20 Apr 2020

Mrs. Nancy Adams, DAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews Maryland 20762-4803

Mr. Kerry Holton, Chief
Delaware Nation
P.O. Box 825
Anadarko Oklahoma 73005

Dear Mr. Holton

I hope my correspondence finds you and your tribal members well. The Delaware Nation was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.

With this in mind, I have enclosed information on a current undertaking: the Child Development Center (CDC) project. This project has new construction and demolition activities to include the construction of a new CDC with associated parking, and demolition of the existing CDC building. The area being developed has no current structures, but it was previously developed. We want to ensure the Delaware Nation has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Delaware Nation would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Delaware Nation’s decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Delaware Nation. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.

America’s Airmen
I look forward to having future correspondence with you to enhance the relationship between the base and the Delaware Nation. Thank you for your assistance.

Sincerely

\[Signature\]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

3 Attachments:
Location of Joint Base Andrews
Proposed Project Location for Child Development Center on JBA
Tribal Mailing List
Enclosure 1: Location of Joint Base Andrews

America's Airmen
Enclosure 3: Tribal Mailing List

Mr. Kerry Holton, Chief
Delaware Nation
P.O. Box 825
Anadarko, OK 73005

Mr. Chester L. Brooks, Chief
Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville, OK 73006-2838

Mr. Ray Halbritter, Chief
Oneida Indian Nation
5218 Patrick Road
Verona, NY 13421

Ms. Cristina Danforth, Chairwoman
Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida, WI 54115-0365

Mr. Robert Gray, Chief
Pamunkey Indian Tribe
191 Lay Landing Road
King William, VA 23086

Mr. Leo R. Henry, Chief
Tuscarora Nation
2006 Mount Hope Road
Lewiston, NY 14092

America's Airmen
20 Apr 2020

Mrs. Nancy Adams, DAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews Maryland 20762-4803

Mr. Chester L. Brooks, Chief
Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville Oklahoma 74006-2838

Dear Mr. Brooks

I hope my correspondence finds you and your tribal members well. The Delaware Tribe of Indians was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.

With this in mind, I have enclosed information on a current undertaking: the Child Development Center (CDC) project. This project has new construction and demolition activities to include the construction of a new CDC with associated parking, and demolition of the existing CDC building. The area being developed has no current structures, but it was previously developed. We want to ensure the Delaware Tribe of Indians has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Delaware Tribe of Indians would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Delaware Tribe of Indians' decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Delaware Tribe of Indians. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If

*America's Airmen*
nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.

I look forward to having future correspondence with you to enhance the relationship between the base and the Delaware Tribe of Indians. Thank you for your assistance.

Sincerely

[Signature]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

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Tribal Mailing List
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Enclosure 2: Proposed Project Location for Child Development Center on JBA

America's Airmen
Enclosure 3: Tribal Mailing List

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P.O. Box 825
Anadarko, OK 73005

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Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville, OK 73006-2838

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Oneida Indian Nation
5218 Patrick Road
Verona, NY 13421

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Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida, WI 54115-0365

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191 Lay Landing Road
King William, VA 23086

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Tuscarora Nation
2006 Mount Hope Road
Lewiston, NY 14092

America’s Airmen
20 Apr 2020

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Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews Maryland 20762-4803

Mr. Ray Halbritter, Chief
Oneida Indian Nation
5218 Patrick Road
Verona New York 13421

Dear Mr. Halbritter

I hope my correspondence finds you and your tribal members well. The Oneida Indian Nation was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.

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We would appreciate a response as to whether the Oneida Indian Nation would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Oneida Indian Nation's decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Oneida Indian Nation. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.

America's Airmen
I look forward to having future correspondence with you to enhance the relationship between the base and the Oneida Indian Nation. Thank you for your assistance.

Sincerely

[Signature]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

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P.O. Box 825
Anadarko, OK 73005

Mr. Chester L. Brooks, Chief
Delaware Tribe of Indians
5100 Tuxedo Boulevard
Bartlesville, OK 73006-2838

Mr. Ray Halbritter, Chief
Oneida Indian Nation
5218 Patrick Road
Verona, NY 13421

Ms. Cristina Danforth, Chairwoman
Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida, WI 54115-0365

Mr. Robert Gray, Chief
Pamunkey Indian Tribe
191 Lay Landing Road
King William, VA 23086

Mr. Leo R. Henry, Chief
Tuscarora Nation
2006 Mount Hope Road
Lewiston, NY 14092

America's Airmen
20 Apr 2020

Mrs. Nancy Adams, DAF
Installation Tribal Liaison Officer
1500 West Perimeter Road
Joint Base Andrews Maryland 20762-4803

Ms. Christina Danforth, Chairwoman
Oneida Tribe of Indians of Wisconsin
P.O. Box 365
Oneida Wisconsin 54115-0365

Dear Ms. Danforth

I hope my correspondence finds you and your tribal members well. The Oneida Tribe of Indians of Wisconsin was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.

With this in mind, I have enclosed information on a current undertaking: the Child Development Center (CDC) project. This project has new construction and demolition activities to include the construction of a new CDC with associated parking, and demolition of the existing CDC building. The area being developed has no current structures, but it was previously developed. We want to ensure the Oneida Tribe of Indians of Wisconsin has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Oneida Tribe of Indians of Wisconsin would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Oneida Tribe of Indians of Wisconsin’s decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Oneida Tribe of Indians of Wisconsin. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to

America’s Airmen
ryan.a.soens.civ@mail.mil. If nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.

I look forward to having future correspondence with you to enhance the relationship between the base and the Oneida Tribe of Indians of Wisconsin. Thank you for your assistance.

Sincerely

[Signature]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

3 Attachments
Location of Joint Base Andrews
Proposed Project Location for Child Development Center on JBA
Tribal Mailing List
Enclosure 1: Location of Joint Base Andrews

America’s Airmen
Enclosure 2: Proposed Project Location for Child Development Center on JBA

America's Airmen
Enclosure 3: Tribal Mailing List

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America's Airmen
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Installation Tribal Liaison Officer  
1500 West Perimeter Road  
Joint Base Andrews Maryland 20762-4803  

Mr. Robert Gray, Chief  
Pamunkey Indian Tribe  
191 Lay Landing Road  
King William Virginia 23086  

Dear Mr. Gray  

I hope my correspondence finds you and your tribal members well. The Pamunkey Indian Tribe was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.  

With this in mind, I have enclosed information on a current undertaking: the Child Development Center (CDC) project. This project has new construction and demolition activities to include the construction of a new CDC with associated parking, and demolition of the existing CDC building. The area being developed has no current structures, but it was previously developed. We want to ensure the Pamunkey Indian Tribe has the opportunity to engage in consultation with the Air Force on this project.  

We would appreciate a response as to whether the Pamunkey Indian Tribe would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Pamunkey Indian Tribe’s decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.  

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Pamunkey Indian Tribe. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.  

America’s Airmen
I look forward to having future correspondence with you to enhance the relationship between the base and the Pamunkey Indian Tribe. Thank you for your assistance.

Sincerely

[Signature]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

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America's Airmen
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Mrs. Nancy Adams, DAF  
Installation Tribal Liaison Officer  
1500 West Perimeter Road  
Joint Base Andrews Maryland 20762-4803

Mr. Leo R. Henry, Chief  
Tuscarora Nation  
2006 Mount Hope Road  
Lewiston New York 14092

Dear Mr. Henry

I hope my correspondence finds you and your tribal members well. The Tuscarora Nation was identified as a tribe that might have a connection to the area of Joint Base Andrews and is interested in understanding large construction projects on base. It is our understanding that you will review our 106 evaluation, Area of Potential Effect, and look at site/construction maps to help determine if the area might have cultural significance or possible remains.

With this in mind, I have enclosed information on a current undertaking: the Child Development Center (CDC) project. This project has new construction and demolition activities to include the construction of a new CDC with associated parking, and demolition of the existing CDC building. The area being developed has no current structures, but it was previously developed. We want to ensure the Tuscarora Nation has the opportunity to engage in consultation with the Air Force on this project.

We would appreciate a response as to whether the Tuscarora Nation would like to engage in consultation on the CDC so that we may have documentation for our records, and to help facilitate a way forward. Please be assured that regardless of the Tuscarora Nation’s decision regarding consultation on the CDC, the Air Force will fully comply with all applicable laws and regulations in the event of an inadvertent discovery of archaeological or funerary objects and/or human remains.

The Air Force is dedicated to fulfilling its legal and regulatory obligations to engage in government-to-government consultation with the Tuscarora Nation. We will continue to provide pre-construction information and requests for future assistance identifying any historic properties of religious and cultural significance related to construction projects or addressing remains which may be encountered during construction. Please provide a response within 30 days from the date of this letter to Mr. Ryan Soens, 11 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762 or send via e-mail to ryan.a.soens.civ@mail.mil. If nothing is heard by this date, it will be taken as agreement with this action. If you need further information, please contact Mr. Soens at 240-857-0444.

America’s Airmen
I look forward to having future correspondence with you to enhance the relationship between the base and the Tuscarora Nation. Thank you for your assistance.

Sincerely

[Signature]

NANCY A. ADAMS, DAF
Installation Tribal Liaison Officer
Deputy Director, 11th Mission Support Group

3 Attachments
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Proposed Project Location for Child Development Center on JBA
Tribal Mailing List
Enclosure 1: Location of Joint Base Andrews

America's Airmen
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</tbody>
</table>
April 30, 2020

Ms. Marisa Wetmore, Biologist  
U.S. Army Corps of Engineers, Baltimore District  
Planning Division  
2 Hopkins Plaza, 10-B-01  
Baltimore, MD  21201

Mr. Ryan Soens  
Department of the Air Force  
11 CES/CEIE  
3466 North Carolina Avenue  
Joint Base Andrews, MD  20762

STATE CLEARINGHOUSE REVIEW PROCESS  
State Application Identifier:  MD20200428-0317  
Reviewer Comments Due By:  May 27, 2020  
Project Description:  Pre-Environmental Assessment (EA) Scoping and Coordination: Construction of an Approximately 29,200-Square-Foot Building for a New Child Development Center, Associated Parking, and Outdoor Playground Area at Joint Base Andrews  
Project Address:  Arkansas Road and California Avenue, Joint Base Andrews, MD 20762  
Project Location:  Prince George's County  
Clearinghouse Contact:  Sylvia Mosser

Dear Ms. Wetmore and Mr. Soens:

Thank you for submitting your project for intergovernmental review. Participation in the Maryland Intergovernmental Review and Coordination (MIRC) process helps ensure project consistency with plans, programs, and objectives of State agencies and local governments. MIRC enhances opportunities for approval and/or funding and minimizes delays by resolving issues before project implementation.

Maryland Gubernatorial Executive Order 01.01.1998.04, Smart Growth and Neighborhood Conservation Policy, encourages federal agencies to adopt flexible standards that support "Smart Growth." In addition, Federal Executive Order 12072, Federal Space Management, directs federal agencies to locate facilities in urban areas. Consideration of these two Orders should be taken prior to making final site selections. A copy of Maryland Gubernatorial Executive Order 01.01.1998.04, Smart Growth and Neighborhood Conservation Policy is available upon request.
We have forwarded your project to the following agencies and/or jurisdictions for their review and comments: the Maryland Departments of Transportation, the Environment, Natural Resources, and General Services; the Maryland Military Department; Prince George's County; the Maryland-National Capital Park and Planning Commission in Prince George's County; and the Maryland Department of Planning; including the Maryland Historical Trust. A composite review and recommendation letter will be sent to you by the reply due date. Your project has been assigned a unique State Application Identifier that you should use on all documents and correspondence. Please be assured that we will expeditiously process your project.

If you need assistance or have questions, contact the State Clearinghouse staff noted above at 410-767-4490 or through e-mail at sylvia.mosser@maryland.gov. Thank you for your cooperation with the MIRC process.

Sincerely,

Jason Dubow, Manager
Resource Conservation and Management

JD:SM
U.S. Army Corps of Engineers, Baltimore District and Department of the Air Force Pre-Environmental Assessment (EA) Scoping and Coordination: Construction of an Approx. 29,200 Sq. Ft. Building for a New Child Development Center, Associated Parking, and Outdoor Playground Area at Joint Base Andrews
May 8, 2020

Ryan Soens
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, MD 20762

Ref: Proposed Construction of a Child Development Center
Joint Base Andrews, Prince George’s County, Maryland
ACHP Project Number: 015353

Dear Mr. Soens:

On April 28, 2020, the Advisory Council on Historic Preservation (ACHP) received your notification for the proposed development of an Environmental Assessment for the referenced undertaking. Our comments were requested regarding the National Environmental Policy Act (NEPA) review. We have no comments pursuant to NEPA at this time.

In order to ensure compliance with Section 106 of the National Historic Preservation Act, the ACHP encourages Joint Base Andrews-Naval Air Facility (JBA) to initiate the Section 106 process by notifying, at your earliest convenience, the Maryland State Historic Preservation Officer (SHPO), Indian tribes, and other consulting parties pursuant to 36 CFR § 800.3 of our regulations, “Protection of Historic Properties” (36 CFR Part 800). Through early consultation, your agency will be able to determine the appropriate strategy to ensure Section 106 compliance for this undertaking. The ACHP’s regulations (at 36 CFR § 800.3(b)) specifically encourage federal agencies to coordinate their Section 106 review with other required environmental reviews, such as NEPA, in order to reduce duplicative analyses and overlapping review periods.

JBA should continue consultation with the Maryland SHPO, Indian tribes, and other consulting parties to identify and evaluate historic properties and to assess any potential adverse effects on those historic properties. If you determine, through consultation with the consulting parties, that the undertaking will adversely affect historic properties, or that the development of a Section 106 agreement document (Agreement) is necessary, JBA must notify the ACHP and provide the documentation detailed at 36 CFR § 800.11(e). In the event that this undertaking is covered under the terms of an existing Agreement, you should follow the process set forth in the applicable Agreement.

Should you have any questions or require additional assistance, please contact Ms. Alexis Clark
at (202) 517-0208 or by e-mail at aclark@achp.gov and reference the ACHP Project Number above.

Sincerely,

Tom McCulloch PhD, RPA
Assistant Director
Office of Federal Agency Programs
IN REPLY REFER TO:
NCPC File No. 8179

May 19, 2020

Mr. Ryan Soens
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, Maryland 20762

Re: Child Development Center – Environmental Assessment Scoping Comments

Dear Mr. Soens:

Thank you for the opportunity to comment on the Environmental Assessment (EA) for the new Child Development Center (CDC) at Joint Base Andrews-Naval Air Facility (JBA) on behalf of the National Capital Planning Commission (NCPC). As the federal government’s planning agency in the National Capital Region, NCPC has advisory review authority over projects at JBA under the National Capital Planning Act (40 USC § 8722 (b) (1))1. The following staff comments, which reflect policies from the Comprehensive Plan for the National Capital and review of the current 2016 JBA Installation Development Plan (JBA IDP), are intended as guidance for project development and future submissions to NCPC.

Based on the information in the JBA IDP, we recognize the need for a new child development center on the installation to provide early care and education services to children from the nearby community. A new CDC will help reduce the current capacity and demand in existing child development centers at the installation and serve as an opportunity to strengthen ties between the installation and local community. We understand that the EA will consider the effects of implementing the Proposed Action and the No Action Alternative. The Proposed Action for the construction of a new CDC would involve the construction of an approximately 29,200 square foot building, associated parking, and outdoor playground area.

Joint Base Andrews Installation Development Plan Review

During the Commission’s review of the JBA IDP, NCPC found that additional information is needed for review of future individual projects. The Commission requested JBA prepare an Area Development Plan (ADP) for each new project with information related to circulation, including roadways, bus transit stops, and bicycle and pedestrian facility improvements; current and future parking facilities with opportunities for shared parking; landscaping; stormwater management; and

1 The Planning Act requires federal agencies to advise and consult with NCPC in the preparation of agency plans prior to preparation of construction plans.
tree preservation and replacement plans. Without this information, it is difficult to understand how individual JBA projects will support the installation’s planning goals and objectives. The additional detail would cumulatively benefit the project’s review if included in the EA process by providing a better understanding of the potential on- and off-base impacts of the Proposed Action and No Action Alternative. Therefore, we urge Joint Base Andrews to study cumulative impacts of master plan projects through the Environmental Assessment. Additionally, we request that JBA prioritize an ADP for Planning District 7 to provide our Commission with a broader understanding of how the CDC will support various installation planning goals. The complete Commission Action from our previous review of the Installation Development Plan is included with this letter for your reference.

Proposed Project Location

The 2016 IDP indicates the location of the proposed project is in District 7: Administration and Support. A CDC is a permitted land use in District 7 and the IDP identifies this site as a 4.47-acre developable parcel. However, the IDP does not indicate a development project is planned on this parcel and the IDP would require updating in the next master plan to reflect a CDC at this location. The site is currently undeveloped and large enough to accommodate a CDC building. It is located within close proximity to existing and future on-base housing and other community uses. The IDP indicates the site is not located within the 100-year floodplain and does not contain wetlands or other sensitive water bodies. An underground storage tank and underground utilities are located on the site and will require coordination with implementation of the Proposed Action. It appears that development of the CDC on this site would require tree removal.

Federal Interest

New development at JBA should integrate the urban design principles for federal facilities and property included in the Comprehensive Plan. NCPC’s policies related to urban design encourage compact development, compatibility with nearby buildings (including height, massing, setback, materials, fenestration, and scale), and enhancing the pedestrian experience in and around federal buildings and campuses wherever possible. For more information on NCPC’s urban design principles for federal facilities and property, refer to the Urban Design Element of the Comprehensive Plan at www.ncpc.gov/plans/compplan.

NCPC encourages sustainable travel behavior (using transit, biking, walking, carpool/vanpool rather than driving alone). The Comprehensive Plan employs a system of parking ratio goals for federal installations based on future projected accessibility levels. NCPC’s goal for JBA is a phased approach linked to planned improvements over time to achieve a ratio of one parking space for every 1.5 – 2 employees (1:1.5 - 1:2). The Commission’s policy applies to only employee parking, and does not apply specifically to visitor, government vehicle, service, and/or other types of special parking. The 1:1.5 – 1:2 phased ratio appears to be appropriate with JBA’s suburban location which is more than 2,000 feet of a Metrorail station. It is the intent of NCPC’s transportation-related policies and goals to encourage more sustainable travel amongst military and other federal employees in the Region. For more information, consult our Transportation Element in the Comprehensive Plan.
The new CDC should be supported with a detailed Travel Demand Management plan to encourage non-Single Occupant Vehicle travel by staff. Developing strategies to encourage carpools/vanpools, walking, and biking will help the CDC to attain NCPC’s 1:1.5 – 1:2 parking ratio goal for the project. Consult NCPC’s Comprehensive Plan for more information about Commission policies related to Travel Demand Management and Transportation Management Plans.

Comprehensive Plan policies also encourage sustainable building and site development to reduce impacts to the environment. To achieve this, NCPC recommends a holistic approach to the site and building design coordinated during early stages of the design process. The new CDC building should be designed to optimize energy efficiency (LED lighting, on-site renewable energy generation, passive solar design, efficient heating and cooling systems, etc.) and reduce waste and potable water use. The site design should minimize land disturbance and meet stormwater requirements through low impact development strategies (bioswales, permeable paving, green roofs, cisterns, rain barrels, etc.) rather than use of manufactured treatment devices or detention/retention ponds. Particularly, project proponents should consider porous materials for paved areas (such as parking lots) to reduce the development’s volume of stormwater runoff. Parking areas should also be designed to support electric vehicle charging stations, with consideration for electricity sources from renewable resources. Consult NCPC Comprehensive Plan Federal Environment Element policies for guidance.

New development on JBA is required to comply with Maryland Department of the Environment’s (MDE) stormwater regulations (https://mde.maryland.gov/) and should strive to meet federal requirements under Section 438 of the Energy Independence Security Act requirements under (www.epa.gov/sites/production/files/2015-09/documents/ eisa-438.pdf).

NCPC’s Comprehensive Plan tree mitigation policies encourage preservation of trees to the extent possible and replacement of trees when removal is necessary due to development. We recognize the importance of preserving and replacing large individual trees, tree stands, and forests for their role is providing wildlife habitat, improving soil and water quality, reducing erosion, improving air quality, and sequestering carbon dioxide. Projects should follow Federal Environment Element policies as closely as possible and develop landscape designs using native vegetation, based on the latest design strategies. During concept development, maximize opportunities to preserve existing trees and identify areas to plant replacement trees and other vegetation, especially in parking lots to shade parked vehicles and paved surfaces, and integrate low impact development techniques such as planted bioswales and raingardens as part of stormwater management.

Finally, we request the EA evaluate the following topic areas to capture short and long-term impacts between the Proposed Action and No Action Alternative:

- Change in total vegetation, tree canopy area, and number of on-site trees;
- Change in total impervious surface area;
- Change in stormwater runoff volumes;
• Change in energy and potable water use;
• Change in travel characteristics and parking;
• Change in views/visual quality; and
• Changes in land use/zoning areas.

We appreciate the opportunity to provide these scoping comments as part of the project’s EA study and look forward to future submission of the draft EA document for review and comment. If you have any questions, please contact Stephanie Free at (202) 482-7209 / stephanie.free@ncpc.gov, or consult our Agency website (www.ncpc.gov/) for information regarding our Comprehensive Plan policies, review process, and/or submission guidelines.

Sincerely,

Diane Sullivan

Diane Sullivan
Director, Urban Design and Plan Review Division
May 20, 2020

Mr. Ryan Soens
11 CES/CEIE
3466 North Carolina Avenue
Joint Base Andrews, MD 20762

RE: Environmental Review for Joint Base Andrews Child Development Center, Prince George’s County, Maryland.

Dear Mr. Soens:

The Wildlife and Heritage Service has determined that there are no official State or Federal records for listed plant or animal species within the delineated area shown on the map provided. As a result, we have no specific concerns regarding potential impacts or recommendations for protection measures at this time. Please let us know however if the limits of proposed disturbance or overall site boundaries change and we will provide you with an updated evaluation.

Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

Lori A. Byrne,
Environmental Review Coordinator
Wildlife and Heritage Service
MD Dept. of Natural Resources

ER# 2020.0742.pg
June 2, 2020

Ms. Marisa Wetmore, Biologist, Planning  
U.S. Army Corps of Engineers, Baltimore District  
2 Hopkins Plaza, 10-B-01  
Baltimore, MD   21201

Mr. Ryan Soens  
Department of the Air Force  
11 CES/CEIE  
3466 North Carolina Avenue  
Joint Base Andrews, MD   20762

STATE CLEARINGHOUSE RECOMMENDATION

State Application Identifier:   MD20200428-0317
Applicant:   U.S. Army Corps of Engineers, Baltimore District and Department of the Air Force
Project Description:   Pre-Environmental Assessment (EA) Scoping and Coordination: Construction of an Approximate 29,200-Square-Foot Building for a New Child Development Center, Associated Parking, and Outdoor Playground Area at Joint Base Andrews
Project Address:   Arkansas Road and California Avenue, Joint Base Andrews, MD 20762
Project Location:   Prince George's County
Recommendation:   Consistent with Qualifying Comments and Contingent Upon Certain Actions

Dear Ms. Wetmore:

In accordance with Presidential Executive Order 12372 and Code of Maryland Regulation 34.02.02.04-.07, the State Clearinghouse has coordinated the intergovernmental review of the referenced project. This letter constitutes the State process review and recommendation.

Review comments were requested from the Maryland Departments of General Services, Natural Resources, Transportation, and the Environment; the Maryland Military Department; Prince George's County; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Department of Planning, including the Maryland Historical Trust.

The Maryland Departments of General Services, Natural Resources, and Transportation; the Maryland Military Department; the Maryland National Capital Parks and Planning Commission - Prince George's County; and the Maryland Historical Trust found this project to be consistent with their plans, programs, and objectives.

The Maryland Historical Trust has determined that the project will have “no effect” on historic properties and that the federal and/or State historic preservation requirements have been met.
Prince George's County found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments, as follows: “[The] [p]roposed new Child Development Center site should control impervious surfaces for peak discharges as well as water quality through the installation [of] stormwater management practices.”

The Maryland Department of Planning found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments, as follows: “Joint Base Andrews is conducting an Environmental Assessment (EA) for a new child care center at the facility. The EA should consider the crash zones and site the facility outside of these areas. Noise impacts of the interior space and outdoor playground should be considered and mitigating options should be determined.”

The Maryland National Capital Parks and Planning Commission - Prince George's County found this project to be generally consistent with their plans, programs, and objectives, but included certain qualifying comments, as follows:

“The property is zoned I-1 (Light Industrial) within the Military Installation Overlay Zone (MIOZ), Inner Horizontal Surface - Left Runway, Area D, which limits heights. Refer to Sec. 27-548.54.(e)(2)(C) - Requirements for Height. Surface D (Inner Horizontal Surface): Structures shall not exceed a height (in feet) equivalent to 150 feet.

The subject property is located within the northwest portion of Joint Base Andrews – Naval Air Facility (JBA) at the intersection of Arkansas Road and California Avenue. The proposed use is a child development center. Arkansas Road and California Avenue are internal roads within the JBA road network and do not fall under the purview of Prince George’s County or the Maryland State Highway Administration. Therefore, the roads within JBA do not have Master Plan of Transportation (MPOT) designations. A sidewalk network appears to be in place along both Arkansas Road and California Avenue, providing frontage to the subject property. Transportation Planning Staff recommend that sidewalks remain in place for pedestrian connectivity upon completion of the new child development center. Any future transportation-oriented development of this site will require coordination with JBA Planning Staff.

The off-base area surrounding the northwest portion of the base is a blend of residential and commercial uses on Allentown Road. Additionally, Allentown Road provides access to I-495 and I 95 along the northern edge of the base. The portions of Allentown Road and Old Branch Avenue which border the western edge of JBA are MPOT planned bicycle lanes. Should any development impact these roads, coordination with Maryland State Highway Administration and Prince George’s County is recommended.”

The Maryland Department of the Environment (MDE) stated that their finding of consistency is contingent upon the applicant taking the actions summarized below.

1. “Any above ground or underground petroleum storage tanks, which may be utilized, must be installed and maintained in accordance with applicable State and federal laws and regulations. Underground storage tanks must be registered and the installation must be conducted and performed by a contractor certified to install underground storage tanks by the Land and Materials Administration in accordance with COMAR 26.10. Contact the Oil Control Program at (410) 537-3442 for additional information.

2. Any solid waste including construction, demolition and land clearing debris, generated from the subject project, must be properly disposed of at a permitted solid waste acceptance facility, or recycled if possible. Contact the
Solid Waste Program at (410) 537-3315 for additional information regarding solid waste activities and contact the Resource Management Program at (410) 537-3314 for additional information regarding recycling activities.

3. The Resource Management Program should be contacted directly at (410) 537-3314 by those facilities which generate or propose to generate or handle hazardous wastes to ensure these activities are being conducted in compliance with applicable State and federal laws and regulations. The Program should also be contacted prior to construction activities to ensure that the treatment, storage or disposal of hazardous wastes and low-level radioactive wastes at the facility will be conducted in compliance with applicable State and federal laws and regulations.

4. The proposed project may involve rehabilitation, redevelopment, revitalization, or property acquisition of commercial, industrial property. Accordingly, MDE's Brownfields Site Assessment and Voluntary Cleanup Programs (VCP) may provide valuable assistance to you in this project. These programs involve environmental site assessment in accordance with accepted industry and financial institution standards for property transfer. For specific information about these programs and eligibility, please Land Restoration Program at (410) 537-3437.

5. Borrow areas used to provide clean earth back fill material may require a surface mine permit. Disposal of excess cut material at a surface mine may require site approval. Contact the Mining Program at (410) 537-3557 for further details.

6. Construction, renovation and/or demolition of buildings and roadways must be performed in conformance with State regulations pertaining to "Particulate Matter from Materials Handling and Construction" (COMAR 26.11.06.03D), requiring that during any construction and/or demolition work, reasonable precaution must be taken to prevent particulate matter, such as fugitive dust, from becoming airborne.

7. During the duration of the project, soil excavation/grading/site work will be performed; there is a potential for encountering soil contamination. If soil contamination is present, a permit for soil remediation is required from MDE's Air and Radiation Management Administration. Please contact the New Source Permits Division, Air and Radiation Management Administration at (410) 537-3230 to learn about the State's requirements for these permits.

8. Additional comments from the Water and Science Administration were emailed to Sylvia Mosser [enclosed].”

The State Application Identifier Number must be placed on any correspondence pertaining to this project.

Please remember, you must comply with all applicable state and local laws and regulations. If you need assistance or have questions, contact the State Clearinghouse staff person noted above at 410-767-4490 or through e-mail at sylvia.mosser@maryland.gov.
Thank you for your cooperation with the MIRC process.

Sincerely,

Myra Barnes, Lead Clearinghouse Coordinator

MB:SM
Enclosures
cc:
Ian Beam - MDOT
Amanda Redmiles - MDE
Tony Redman - DNR
Wendy Scott-Napier - DGS
Daniel Pyle - MILT
Kathleen Herbert - PGEO
Jay Mangalvedhe - MNCPPCP
Beth Cole - MHT
Joseph Griffiths - MDPL

20-0317_CRR.CLS.docx
Pre-Environmental Assessment (EA) Scoping and Coordination: Construction of an Approx. 29,200 Sq. Ft. Building for a New Child Development Center

Maryland Department of the Environment – WSA/IWPP

REVIEW FINDING: R2 Contingent Upon Certain Actions

(MD2020 0428-0317)

Special protections for high-quality waters in the local vicinity, which are identified pursuant to Maryland’s anti-degradation policy.

Anti-degradation of Water Quality: Maryland requires special protections for waters of very high quality (Tier II waters). The policies and procedures that govern these special waters are commonly called “anti-degradation policies.” This policy states that “proposed amendments to county plans or discharge permits for discharge to Tier II waters that will result in a new, or an increased, permitted annual discharge of pollutants and a potential impact to water quality, shall evaluate alternatives to eliminate or reduce discharges or impacts.” These permitted annual discharges are not just traditional Point Sources, but can include all discharges such as Stormwater.

Piscataway Creek 2, which is located within the vicinity of the Project, has been designated as a Tier II stream. The Project is within the Catchment (watershed) of the segment. (See attached map)

During and post construction enhanced BMPs or additional controls, potentially above those minimally required, should be utilized to protect high quality Tier II stream resources. (See attached High Quality Waters Enhanced Best Management Practices checklist) All items shall be considered, if applicable to the project. For more information regarding any disturbances (i.e. Construction) within a Tier II Catchment, contact Angel Valdez at 410-537-3606.

Planners should be aware of legal obligations related to Tier II waters described in the Code of Maryland Regulations (COMAR) 26.08.02.04 with respect to current and future land use plans. Information on Tier II waters can be obtained online at: http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04.htm and policy implementation procedures are located at http://www.dsd.state.md.us/comar/comarhtml/26/26.08.02.04-1.htm

Planners should also note as described in the Code of Maryland Regulations (COMAR) 26.08.02.04-1(C), "Compilation and Maintenance of the List of High Quality Waters", states that "When the water quality of a water body is better than that required by water quality standards to support the existing and
designated uses, the Department shall list the water body as a Tier II water body. All readily available information may be considered to determine a listing. The Department shall compile and maintain a public list of the waters identified as Tier II waters.”

The public list is available in PDF from the following MDE website: [http://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf](http://mde.maryland.gov/programs/Water/TMDL/WaterQualityStandards/Documents/Tier_II_Updates/Antidegradation-Tier-II-Data-Table.pdf).

The interactive Tier II webmap is located at the following website: [https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html](https://mdewin64.mde.state.md.us/WSA/TierIIWQ/index.html).
Maryland Department of the Environment

Antidegradation Applicant Review Checklist
Enhanced Best Management Practices for Tier II Waters

Clearinghouse # : _____________________________________

Person Completing Form: ____________________________      Date Complete: ____________________________

Background

This form summarizes information generally provided by the applicant during an antidegradation review during a Nontidal Wetlands and Waterway authorization or permit review. Applicants must utilize enhanced BMPs or additional controls, potentially above those minimally required in the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control, to protect high quality Tier II stream resources.

Incorporate applicable items, check off practices incorporated, and identify the practice locations in plans. Some practices may be marked N/A (e.g. no sediment traps are used). The list below is not exhaustive. As applicable, address sections A, B, and C.

A. Erosion and Sediment Plan

☐ To the maximum extent practicable activities should take place during times when sediment transport are likely to be lower as predicted by National Oceanic and Atmospheric Administration 1 or 3 clear day weather forecast
☐ Conduct inspections on a daily basis. Log books may be reviewed.

<table>
<thead>
<tr>
<th>Grading and Stabilization</th>
<th>Plan Sheet Locations</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ If limit of disturbance allows, locate stockpiles &gt; 100 ft from stream resources</td>
<td></td>
</tr>
<tr>
<td>☐ Permanent mulch application depth shall not exceed 6&quot;. Temporary mulch spreading and matting to minimize compaction is allowable.</td>
<td></td>
</tr>
</tbody>
</table>
A. Erosion and Sediment Plan, continued

Filtering

☐ Near streams upgrade silt fencing to super silt fencing or an equivalent measure (for example large compostable filter logs)

Sediment Trapping (traps/basins)- implement 1 or more of the following:

☐ For road adjacent work include: Trash rack, oil/water separator, and/or skimmers

☐ Forebays or designs to maximize detention time (for example includes baffle boards)

☐ Flocculants or other chemical additives (may require additional approvals or conditions for use)

Dewatering

☐ Discharges take place beyond the existing stable vegetated buffer of 100 ft

☐ Discharges within the buffer occur through Agency approved secondary or redundant control (for example sediment bag treated with sediment filtration aid)

Miscellaneous Practices

☐ Signage and flagging within buffer zone. Text: Tier II Waters: High Quality Waters Erosion & Sediment Control Measures Strictly Enforced & Monitored

☐ Temporary access bridges shall be utilized over fords

☐ Vehicles operating within the stream buffer must carry oil/gas/grease clean up kits for spill accidents

B. Stormwater Management Plan, if required for activity

☐ ESD to the MEP, and all other practices required by the Maryland Stormwater Design Manual, Volumes I & II (Effective October 2000, Revised May 2009), and

☐ On Plans - Delineate Tier II riparian environmental buffers: 100 foot minimum, based on slopes and soils, according to Table 1. Provide documentation of protection.

Table 1: Expanded Tier II Riparian Buffer

<table>
<thead>
<tr>
<th>Soils</th>
<th>Slopes (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-5%</td>
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<tr>
<td>ab</td>
<td>100</td>
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<td>c</td>
<td>120</td>
</tr>
<tr>
<td>d</td>
<td>140</td>
</tr>
</tbody>
</table>
**C. Summary Project Land Use/Land Cover Change**

MDE will use the following information to document **permanent** impacts to other watershed resources, primarily riparian buffers, and land use conversion of forest cover, agricultural cover, or fallow field to impervious surface.

For each Tier II watershed the proposed project may impact, complete the following. Some items may be marked N/A depending upon the proposed activity as not all activities involve clearing or new impervious cover.

Please attach additional sheets if the project overlaps with more than 2 Tier II watersheds.

### Name of Tier II Watershed #1

#### Riparian Buffer Within Tier II Watershed #1 (in linear feet)
1. Combined length of on-site stream segments:
2. Combined length of on-site streams with an average of 100’ wide buffers:

#### Forest Cover Within Tier II Watershed #1 (in acres)
1. Total on-site forest cover (existing):
2. Total on-site forest cover (post-project) including on-site forest creation:
3. Total off-site mitigation (for example Conservation Act requirements):

#### Impervious Cover Within Tier II Watershed #1 (in acres)
1. Total on-site impervious cover (existing):
2. Total on-site impervious cover (post-project):
3. Total on-site impervious cover treated with ESD practices (post-project):

### Name of Tier II Watershed #2

#### Riparian Buffer Within Tier II Watershed #2 (in linear feet)
1. Combined length of on-site stream segments:
2. Combined length of on-site streams with an average of 100’ wide buffers:

#### Forest Cover Within Tier II Watershed #2 (in acres)
1. Total on-site forest cover (existing):
2. Total on-site forest cover (post-project) including on-site forest creation:
3. Total off-site mitigation (for example Conservation Act requirements):

#### Impervious Cover Within Tier II Watershed #2 (in acres)
1. Total on-site impervious cover (existing):
2. Total on-site impervious cover (post-project):
3. Total on-site impervious cover treated with ESD practices (post-project):

Direct any questions regarding this form to Angel Valdez at angel.valdez@maryland.gov, or by phone at 410-537-3606.
THPO File Number: 2020 – 236

Nancy A. Adams, DAF
Installation Tribal Liaison
Deputy Director, 11th Mission Support Group
Department of the Air Force
Headquarters 11th Wing (AFDW)
1500 West Perimeter Road
Joint Base Andrews, Maryland 20762

RE: Joint Base Andrews – Child Development Center Project

Dear Ms. Adams,

Thank you for contacting the Pamunkey Indian Tribe regarding the proposed undertaking to construct a new Child Development Center at Joint Base Andrews, Maryland. My office offers the following comments regarding the undertaking.

My office wishes to participate as a consulting party for this undertaking.

My office recommends that an archaeological survey be undertaken prior to any construction and for the results to addressed within the Environmental Assessment (EA). Once an archaeological survey has been conducted on the subject property, we respectfully request to review it. If no archaeological survey will be conducted, my office requests justification for the decision in order to concur with such decisions.

Additionally, my office would like to review the draft EA in order to provide appropriate comments.

Thank you for considering our cultural heritage in your decision-making process.

If you have any questions feel free to email me at terry.clouthier@pamunkey.org.

Sincerely,
August 10, 2020

Mr. Terry Clouthier  
Cultural Resource Director  
Pamunkey Indian Tribe  
1054 Pocahontas Trail  
King William, Virginia 23086

Dear Mr. Clouthier,

Thank you for your response to our initial scoping letter regarding the proposed construction of a new Child Development Center (CDC) at Joint Base Andrews (JBA), Maryland. At this time, I would like to respond to the Pamunkey Indian Tribe’s request that an archaeological survey be conducted as part of this evaluation, and that Tribe’s request to review the Draft Environmental Assessment (EA).

1. As part of the EA for this project a variety of resources were analyzed, including archaeological resources, to determine the potential for impacts as a result of this proposed undertaking. The vicinity of this proposed project was previously analyzed as part of a 1994 Phase I baseline survey of Andrews Air Force Base (AFB) conducted by Argonne National Laboratory (Moeller, K.L., D.A. Walitschek, M. Greby, and J.F. Hoffecker. 1995. An Archaeological and Historic Resources Inventory of Andrews Air Force Base, Maryland.). The contractor selected areas for surface and subsurface survey based on the extent of ground disturbance that has occurred following the establishment of Andrews AFB. They determined the extent of disturbance through examination of maps, aerial photographs, and ground reconnaissance. Argonne National Laboratory tested a total of 140 acres within the contiguous portion of Andrews AFB, and found that five archaeological sites were potentially eligible for listing in the National Register of Historic Places (NRHP).

None of the NRHP-eligible sites, as determined by this Phase I survey, were within 0.5 miles of the proposed project site. Additionally, at the time of this survey, the proposed project site was the location of a housing development, and had been extensively disturbed.

Based on the results of the above referenced Phase I survey and the extent of ground disturbance, Maryland Historical Trust (MHT) has concurred that there will be no anticipated impacts to archaeological resources, and that no further investigations are needed. While we have received this concurrence from MHT, we acknowledge that there may be other resources that the Pamunkey Indian Tribe may have knowledge of. Please let us know if you are aware of any other cultural resources that may be in the proposed project area.

America’s Airfield
2. I would like to invite the Pamunkey Indian Tribe to review the draft EA for the Construction of a New Child Development Center at Joint Base Andrews, Maryland, along with the associated draft Finding of No Significant Impact (FNSI).

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500-1508), and 32 CFR 989, et. seq.

The draft EA and draft FNSI are available for review at https://www.jba.af.mil/About-Us/Environmental-Mission/. For those who do not have ready access to a computer or the internet, the materials posted to the website will be made available upon request by contacting Mr. Ryan Soens by mail at 316 CES/CEIE, 3466 North Carolina Avenue, Joint Base Andrews, Maryland 20762, or by email at Ryan.Soens.1@us.af.mil.

Please provide any written comments to by close of the public comment period to Mr. Ryan Soens at the addresses provided above. Public comments will be received from 14 August 2020 to 13 September 2020. If you need further information, please contact Mr. Soens at 240-857-0444.

I look forward to having future correspondence with you to enhance the relationship between the base and the Pamunkey Indian Tribe. Thank you for your assistance.

Sincerely,

[Signature]

Steven Richards
Chief of Environmental Management
Joint Base Andrews

*America's Airfield*
MEMORANDUM FOR SEE DISTRIBUTION

FROM: 316 CES/CEI
3466 North Carolina Avenue
Joint Base Andrews, MD 20762-4803

SUBJECT: Invitation to Review the Draft Environmental Assessment for the Construction of a New Child Development Center at Joint Base Andrews, Maryland

Dear Sir/Madam,

Joint Base Andrews-Naval Air Facility (JBA) has prepared a draft Environmental Assessment (EA) to evaluate the potential environmental, cultural, transportation, and socioeconomic impacts of constructing a new Child Development Center (CDC) on JBA. The Proposed Action includes the construction of an approximately 29,200-square-foot building, associated parking, and an outdoor playground area.

This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [USC] 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Sections 1500-1508), and 32 CFR 989, et. seq.

The draft EA and draft Finding of No Significant Impact (FNSI) are available for review at https://www.jba.af.mil/About-Us/Environmental-Mission/. For those who do not have ready access to a computer or the internet, the materials posted to the website will be made available upon request by contacting Mr. Ryan Soens by mail at 316 CES/CEI, 3466 North Carolina Avenue, Joint Base Andrews, MD 20762, or by email at Ryan.Soens.1@us.af.mil.

Your assistance in providing information is greatly appreciated. Please provide written comments by close of the public comment period to Mr. Ryan Soens, at the addresses provided above. If you need further information, please contact Mr. Soens at 240-857-0444. Public comments will be received from August 14, 2020 to September 13, 2020.

Sincerely,

Steven Richards
Chief of Environmental Management
Joint Base Andrews

Encl
Enclosure 1: Agency & Tribal Government Mailing List

Ms. Lori Byrne
Maryland Department of Natural Resources
Tawes State Office Building
580 Taylor Avenue
Annapolis, MD 21401

Ms. Amanda Redmiles
Maryland Department of the Environment
Interdepartmental Information Liaison
Office of Communications
1800 Washington Boulevard
Baltimore, MD 21230

Ms. Linda C. Janey
Maryland State Clearinghouse
Maryland Office of Planning, Suite 1101
301 West Preston Street
Baltimore, MD 21201-2365

Ms. Barbara Rudnick
U.S. Environmental Protection Agency, Region 3
Office of Environmental Programs (3EA30)
1650 Arch Street
Philadelphia, PA 19103-2029

Ms. Genevieve LaRouche
U.S. Department of the Interior
Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401

Ms. Beth Cole
Maryland Historical Trust
Project Review and Compliance
100 Community Place
Crownsville, MD 21032

America's Airfield
Mr. Carlton Hart  
National Capital Planning Commission  
North Lobby, Suite 500  
401 9th Street, NW  
Washington, DC 20576

Ms. Crystal Hancock  
Maryland-National Capital Park & Planning Commission  
14741 Governor Oden Bowie Drive  
Upper Marlboro, MD 20772

Ms. Katharine Karr  
Advisory Council on Historic Preservation  
401 F Street NW, Suite 308  
Washington, DC 20001-2637

Ms. Andree Checkley  
Director of Planning  
Prince George's County  
Department of Planning  
14741 Governor Oden Bowie Drive, Room 4150  
Upper Marlboro, MD 20772

Mr. Terry Clouthier  
Cultural Resource Director  
Pamunkey Indian Tribe  
1054 Pocahontas Trail  
King William, VA 23086
APPENDIX B: DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT AND RECORD OF CONFORMITY ANALYSIS (ROCA)
1. General Information

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

- **Action Title:** Construct and operate an approximately 29,200-square-foot Child Development Center

- **Projected Action Start Date:** 6 / 2020

- **Action Purpose and Need:**
  The purpose of the proposed construction of the Child Development Center (CDC) facility is to provide an adequately sized and functionally configured childcare facility at JBA to support the need for reliable and affordable childcare for military and DoD families. A new CDC facility would provide a centrally located, safe, and up-to-date space for children to play and learn.

  The need for the proposed construction of the CDC facility is driven by the current utility, structural, and public health issues that have plagued the current facility in recent years. The existing CDC #1 (Building 4575) was originally built in 1943 as a medical clinic, and has been renovated multiple times to serve different purposes in the last 76 years. The current CDC has suffered from sewage backups and kitchen drainage issues; a leaking roof; heating, ventilation, and air conditioning (HVAC) system failures; and mold and pest management issues. These issues have resulted in frequent work orders that maintenance staff cannot address in a timely manner, and have made it more difficult to maintain accreditation each year. There are also compliance concerns related to Anti-Terrorism/Force Protection (AT/FP) regulations for this building. The project would reduce life-cycle costs; provide systems and facilities that meet current health and safety standards for childcare facilities, including Unified Facilities Criteria (UFC) 4-740-14, Design: Child Development Centers; and provide more space to accommodate the children of military and DoD families.

- **Action Description:**
  The Proposed Action is to construct and operate an approximately 29,200-square-foot (SF) Child Development Center (CDC) at the corner of Arkansas Road and California Avenue, adjacent to the existing Honor Guard building. The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support. Staff parking for the facility would be located across California Avenue at the site of the former dental clinic parking lot.

  The proposed location for the new CDC was previously developed, but there are currently no buildings on site. It is also within about 1/3 mile of the Jones Building (Building 1500) and the Malcolm Grow Medical Clinics and Surgery Center, which encompass a large portion of JBA’s workforce. All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The proposed area would also preserve the area designated for the potential future relocations of Alabama and California Avenues as designated in the JBA Installation Development Plan (IDP).

  Building 4575 – the existing CDC on Windsor Road – would remain operational throughout the construction of the new CDC. Once the new CDC is completed and certified for use, childcare functions would be relocated to the new CDC.

- **Point of Contact**

2. Construction / Demolition

2.1 General Information & Timeline Assumptions

- Activity Location
  County: Prince George's
  Regulatory Area(s): Washington, DC-MD-VA

- Activity Title: Construction of 29,200-square-foot CDC building

- Activity Description:
  The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support.

- Activity Start Date
  Start Month: 6
  Start Month: 2020

- Activity End Date
  Indefinite: False
  End Month: 11
  End Month: 2021

- Activity Emissions:

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<tr>
<th>Pollutant</th>
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<th>Total Emissions (TONs)</th>
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<tr>
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</tr>
</tbody>
</table>

2.1.1 Site Grading Phase Timeline Assumptions

- Phase Start Date
DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

Start Month: 6  
Start Quarter: 1  
Start Year: 2020

- Phase Duration  
  Number of Month: 18  
  Number of Days: 0

2.1.2 Site Grading Phase Assumptions

- General Site Grading Information  
  Area of Site to be Graded (ft\(^2\)): 139392  
  Amount of Material to be Hauled On-Site (yd\(^3\)): 8150  
  Amount of Material to be Hauled Off-Site (yd\(^3\)): 1250

- Site Grading Default Settings  
  Default Settings Used: Yes  
  Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

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<thead>
<tr>
<th>Equipment Name</th>
<th>Number Of Equipment</th>
<th>Hours Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graders Composite</td>
<td>1</td>
<td>8</td>
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<tr>
<td>Other Construction Equipment Composite</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Rubber Tired Dozers Composite</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Tractors/Loaders/Backhoes Composite</td>
<td>2</td>
<td>7</td>
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</tbody>
</table>

- Vehicle Exhaust
  Average Hauling Truck Capacity (yd\(^3\)): 20 (default)
  Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

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<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
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- Worker Trips
  Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

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<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
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2.1.3 Site Grading Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

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- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

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2.1.4 Site Grading Phase Formula(s)

- **Fugitive Dust Emissions per Phase**

\[ PM_{10,FD} = \frac{(20 \times ACRE \times WD)}{2000} \]

- **Construction Exhaust Emissions per Phase**

\[ CEE_{POL} = \frac{(NE \times WD \times H \times EF_{POL})}{2000} \]

- **Vehicle Exhaust Emissions per Phase**

\[ VMT_{VE} = \frac{(HA_{OnSite} + HA_{OffSite}) \times (1 / HC) \times HT}{VM} \]

\[ V_{POL} = \frac{(VMT_{VE} \times 0.002205 \times EF_{POL} \times VM)}{2000} \]

- **Worker Trips Emissions per Phase**
DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

\[ \text{VMT}_\text{WT} = \text{WD} \times \text{WT} \times 1.25 \times \text{NE} \]

- \( \text{VMT}_\text{WT} \): Worker Trips Vehicle Miles Travel (miles)
- \( \text{WD} \): Number of Total Work Days (days)
- \( \text{WT} \): Average Worker Round Trip Commute (mile)
- 1.25: Conversion Factor Number of Construction Equipment to Number of Works
- \( \text{NE} \): Number of Construction Equipment

\[ \text{V}_{\text{POL}} = \left( \text{VMT}_\text{WT} \times 0.002205 \times \text{EF}_{\text{POL}} \times \text{VM} \right) / 2000 \]

- \( \text{V}_{\text{POL}} \): Vehicle Emissions (TONs)
- \( \text{VMT}_\text{WT} \): Worker Trips Vehicle Miles Travel (miles)
- 0.002205: Conversion Factor grams to pounds
- \( \text{EF}_{\text{POL}} \): Emission Factor for Pollutant (grams/mile)
- \( \text{VM} \): Worker Trips On Road Vehicle Mixture (%)
- 2000: Conversion Factor pounds to tons

2.2 Trenching/Excavating Phase

2.2.1 Trenching / Excavating Phase Timeline Assumptions

- Phase Start Date
  - Start Month: 6
  - Start Quarter: 1
  - Start Year: 2020

- Phase Duration
  - Number of Month: 18
  - Number of Days: 0

2.2.2 Trenching / Excavating Phase Assumptions

- General Trenching/Excavating Information
  - Area of Site to be Trenched/Excavated (ft\(^2\)): 5000
  - Amount of Material to be Hauled On-Site (yd\(^3\)): 0
  - Amount of Material to be Hauled Off-Site (yd\(^3\)): 0

- Trenching Default Settings
  - Default Settings Used: Yes
  - Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

<table>
<thead>
<tr>
<th>Equipment Name</th>
<th>Number Of Equipment</th>
<th>Hours Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavators Composite</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Other General Industrial Equipmen Composite</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Tractors/Loaders/Backhoes Composite</td>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

- Vehicle Exhaust
  - Average Hauling Truck Capacity (yd\(^3\)): 20 (default)
  - Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

<table>
<thead>
<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>POVs</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100.00</td>
<td>0</td>
</tr>
</tbody>
</table>
- Worker Trips
  Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

<table>
<thead>
<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>POVs</td>
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<td>50.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

2.2.3 Trenching / Excavating Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

**Graders Composite**

<table>
<thead>
<tr>
<th>Emission Factors</th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0919</td>
<td>0.0014</td>
<td>0.5823</td>
<td>0.5765</td>
<td>0.0280</td>
<td>0.0280</td>
<td>0.0082</td>
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</table>

**Other Construction Equipment Composite**

<table>
<thead>
<tr>
<th>Emission Factors</th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0562</td>
<td>0.0012</td>
<td>0.3519</td>
<td>0.3508</td>
<td>0.0138</td>
<td>0.0138</td>
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</table>

**Rubber Tired Dozers Composite**

<table>
<thead>
<tr>
<th>Emission Factors</th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.2117</td>
<td>0.0024</td>
<td>1.5772</td>
<td>0.8005</td>
<td>0.0630</td>
<td>0.0630</td>
<td>0.0191</td>
<td>239.56</td>
</tr>
</tbody>
</table>

**Tractors/Loaders/Backhoes Composite**

<table>
<thead>
<tr>
<th>Emission Factors</th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.0436</td>
<td>0.0007</td>
<td>0.2744</td>
<td>0.3616</td>
<td>0.0134</td>
<td>0.0134</td>
<td>0.0039</td>
<td>66.897</td>
</tr>
</tbody>
</table>

- Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)

<table>
<thead>
<tr>
<th></th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>Pb</th>
<th>NH₃</th>
<th>CO₂e</th>
</tr>
</thead>
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<td>000.206</td>
<td>003.056</td>
<td>000.008</td>
<td>000.007</td>
<td>000.023</td>
<td>00322.647</td>
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</tr>
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<td>LDGT</td>
<td>000.331</td>
<td>000.003</td>
<td>000.365</td>
<td>004.228</td>
<td>000.010</td>
<td>000.009</td>
<td>000.024</td>
<td>00417.424</td>
<td></td>
</tr>
<tr>
<td>HDGV</td>
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<td>000.005</td>
<td>001.039</td>
<td>015.448</td>
<td>000.023</td>
<td>000.021</td>
<td>000.045</td>
<td>00771.061</td>
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<td>000.133</td>
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<td>000.004</td>
<td>000.004</td>
<td>000.008</td>
<td>00312.748</td>
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</tr>
<tr>
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<td>004.376</td>
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<td>000.007</td>
<td>000.008</td>
<td>00445.124</td>
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<tr>
<td>HDDV</td>
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<td>004.435</td>
<td>001.537</td>
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<td>000.027</td>
<td>01470.947</td>
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</tr>
<tr>
<td>MC</td>
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<td>000.003</td>
<td>000.759</td>
<td>012.806</td>
<td>000.027</td>
<td>000.024</td>
<td>000.054</td>
<td>00398.739</td>
<td></td>
</tr>
</tbody>
</table>

2.2.4 Trenching / Excavating Phase Formula(s)

- Fugitive Dust Emissions per Phase
  PM₁₀₀₀₀ = (20 * ACRE * WD) / 2000
  PM₁₀₀₀₀: Fugitive Dust PM 10 Emissions (TONs)
  20: Conversion Factor Acre Day to pounds (20 lb / 1 Acre Day)
  ACRE: Total acres (acres)
  WD: Number of Total Work Days (days)
  2000: Conversion Factor pounds to tons

- Construction Exhaust Emissions per Phase
  CEE₁₀₀₀₀ = (NE * WD * H * EF₉₀) / 2000
  CEE₁₀₀₀₀: Construction Exhaust Emissions (TONs)
  NE: Number of Equipment
  WD: Number of Total Work Days (days)
  H: Hours Worked per Day (hours)
  EF₉₀: Emission Factor for Pollutant (lb/hour)
  2000: Conversion Factor pounds to tons
- **Vehicle Exhaust Emissions per Phase**

\[ \text{VMT}_{VE} = (\text{HA}_{OnSite} + \text{HA}_{OffSite}) \times (1 / HC) \times \text{HT} \]

- **VMT}_{VE**: Vehicle Exhaust Vehicle Miles Travel (miles)
- **HA}_{OnSite**: Amount of Material to be Hauled On-Site (yd\(^3\))
- **HA}_{OffSite**: Amount of Material to be Hauled Off-Site (yd\(^3\))
- **HC**: Average Hauling Truck Capacity (yd\(^3\))
- **(1 / HC)**: Conversion Factor cubic yards to trips (1 trip / HC yd\(^3\))
- **HT**: Average Hauling Truck Round Trip Commute (mile/trip)

\[ \text{V}_{POL} = (\text{VMT}_{VE} \times 0.002205 \times \text{EF}_{POL} \times \text{VM}) / 2000 \]

- **V}_{POL**: Vehicle Emissions (TONs)
- **VMT}_{VE**: Vehicle Exhaust Vehicle Miles Travel (miles)
- **0.002205**: Conversion Factor grams to pounds
- **EF}_{POL**: Emission Factor for Pollutant (grams/mile)
- **VM**: Vehicle Exhaust On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

- **Worker Trips Emissions per Phase**

\[ \text{VMT}_{WT} = \text{WD} \times \text{WT} \times 1.25 \times \text{NE} \]

- **VMT}_{WT**: Worker Trips Vehicle Miles Travel (miles)
- **WD**: Number of Total Work Days (days)
- **WT**: Average Worker Round Trip Commute (mile)
- **1.25**: Conversion Factor Number of Construction Equipment to Number of Works
- **NE**: Number of Construction Equipment

\[ \text{V}_{POL} = (\text{VMT}_{WT} \times 0.002205 \times \text{EF}_{POL} \times \text{VM}) / 2000 \]

- **V}_{POL**: Vehicle Emissions (TONs)
- **VMT}_{WT**: Worker Trips Vehicle Miles Travel (miles)
- **0.002205**: Conversion Factor grams to pounds
- **EF}_{POL**: Emission Factor for Pollutant (grams/mile)
- **VM**: Worker Trips On Road Vehicle Mixture (%)

2000: Conversion Factor pounds to tons

2.3 **Building Construction Phase**

2.3.1 **Building Construction Phase Timeline Assumptions**

- **Phase Start Date**
  - **Start Month**: 6
  - **Start Quarter**: 1
  - **Start Year**: 2020

- **Phase Duration**
  - **Number of Month**: 18
  - **Number of Days**: 0

2.3.2 **Building Construction Phase Assumptions**

- **General Building Construction Information**
  - **Building Category**: Office or Industrial
DETAIL AIR CONFORMITY APPLICABILITY MODEL REPORT

Area of Building (ft²): 29200
Height of Building (ft): 17
Number of Units: N/A

- Building Construction Default Settings
  Default Settings Used: Yes
  Average Day(s) worked per week: 5 (default)

- Construction Exhaust (default)

<table>
<thead>
<tr>
<th>Equipment Name</th>
<th>Number Of Equipment</th>
<th>Hours Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cranes Composite</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>Forklifts Composite</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Generator Sets Composite</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Tractors/Loaders/Backhoes Composite</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Welders Composite</td>
<td>3</td>
<td>8</td>
</tr>
</tbody>
</table>

- Vehicle Exhaust
  Average Hauling Truck Round Trip Commute (mile): 20 (default)

- Vehicle Exhaust Vehicle Mixture (%)

<table>
<thead>
<tr>
<th>POVs</th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100.00</td>
<td>0</td>
</tr>
</tbody>
</table>

- Worker Trips
  Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

<table>
<thead>
<tr>
<th>POVs</th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50.00</td>
<td>50.00</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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</table>

- Vendor Trips
  Average Vendor Round Trip Commute (mile): 40 (default)

- Vendor Trips Vehicle Mixture (%)

<table>
<thead>
<tr>
<th>POVs</th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>100.00</td>
<td>0</td>
</tr>
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</table>

2.3.3 Building Construction Phase Emission Factor(s)

- Construction Exhaust Emission Factors (lb/hour) (default)

<table>
<thead>
<tr>
<th>Cranes Composite</th>
<th>VOC</th>
<th>SOx</th>
<th>NOx</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factors</td>
<td>0.0898</td>
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</table>

<table>
<thead>
<tr>
<th>Forklifts Composite</th>
<th>VOC</th>
<th>SOx</th>
<th>NOx</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factors</td>
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<table>
<thead>
<tr>
<th>Generator Sets Composite</th>
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<th>NOx</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Tractors/Loaders/Backhoes Composite</th>
<th>VOC</th>
<th>SOx</th>
<th>NOx</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
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<tbody>
<tr>
<td>Emission Factors</td>
<td>0.0436</td>
<td>0.0007</td>
<td>0.2744</td>
<td>0.3616</td>
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<td>0.0039</td>
<td>66.897</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welders Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factors</td>
</tr>
</tbody>
</table>
### 2.3.4 Building Construction Phase Formula(s)

#### - Construction Exhaust Emissions per Phase

\[
\text{CEE}_{\text{POL}} = (\text{NE} \times \text{WD} \times \text{H} \times \text{EF}_{\text{POL}}) / 2000
\]

- \(\text{CEE}_{\text{POL}}\): Construction Exhaust Emissions (TONs)
- \(\text{NE}\): Number of Equipment
- \(\text{WD}\): Number of Total Work Days (days)
- \(\text{H}\): Hours Worked per Day (hours)
- \(\text{EF}_{\text{POL}}\): Emission Factor for Pollutant (lb/hour)
- \(2000\): Conversion Factor pounds to tons

#### - Vehicle Exhaust Emissions per Phase

\[
\text{VMT}_{\text{VE}} = \text{BA} \times \text{BH} \times (0.42 / 1000) \times \text{HT}
\]

- \(\text{VMT}_{\text{VE}}\): Vehicle Exhaust Vehicle Miles Travel (miles)
- \(\text{BA}\): Area of Building (ft\(^2\))
- \(\text{BH}\): Height of Building (ft)
- \(0.42 / 1000\): Conversion Factor ft\(^3\) to trips (0.42 trip / 1000 ft\(^3\))
- \(\text{HT}\): Average Hauling Truck Round Trip Commute (mile/trip)

\[
\text{V}_{\text{POL}} = (\text{VMT}_{\text{VE}} \times 0.002205 \times \text{EF}_{\text{POL}} \times \text{VM}) / 2000
\]

- \(\text{V}_{\text{POL}}\): Vehicle Emissions (TONs)
- \(\text{VMT}_{\text{VE}}\): Vehicle Exhaust Vehicle Miles Travel (miles)
- 0.002205: Conversion Factor grams to pounds
- \(\text{EF}_{\text{POL}}\): Emission Factor for Pollutant (grams/mile)
- \(\text{VM}\): Worker Trips On Road Vehicle Mixture (%)
- \(2000\): Conversion Factor pounds to tons

#### - Worker Trips Emissions per Phase

\[
\text{VMT}_{\text{WT}} = \text{WD} \times \text{WT} \times 1.25 \times \text{NE}
\]

- \(\text{VMT}_{\text{WT}}\): Worker Trips Vehicle Miles Travel (miles)
- \(\text{WD}\): Number of Total Work Days (days)
- \(\text{WT}\): Average Worker Round Trip Commute (mile)
- 1.25: Conversion Factor Number of Construction Equipment to Number of Works
- \(\text{NE}\): Number of Construction Equipment

\[
\text{V}_{\text{POL}} = (\text{VMT}_{\text{WT}} \times 0.002205 \times \text{EF}_{\text{POL}} \times \text{VM}) / 2000
\]

- \(\text{V}_{\text{POL}}\): Vehicle Emissions (TONs)
VMT\textsubscript{WT}: Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF\textsubscript{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

- Vender Trips Emissions per Phase
VMT\textsubscript{VT} = BA \times BH \times (0.38 / 1000) \times HT

VMT\textsubscript{VT}: Vender Trips Vehicle Miles Travel (miles)
BA: Area of Building (ft\textsuperscript{2})
BH: Height of Building (ft)
(0.38 / 1000): Conversion Factor ft\textsuperscript{3} to trips (0.38 trip / 1000 ft\textsuperscript{3})
HT: Average Hauling Truck Round Trip Commute (mile/trip)

V\textsubscript{POL} = (VMT\textsubscript{VT} \times 0.002205 \times EF\textsubscript{POL} \times VM) / 2000

V\textsubscript{POL}: Vehicle Emissions (TONs)
VMT\textsubscript{VT}: Vender Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
EF\textsubscript{POL}: Emission Factor for Pollutant (grams/mile)
VM: Worker Trips On Road Vehicle Mixture (%)
2000: Conversion Factor pounds to tons

2.4 Architectural Coatings Phase

2.4.1 Architectural Coatings Phase Timeline Assumptions

- Phase Start Date
  Start Month: 6
  Start Quarter: 1
  Start Year: 2020

- Phase Duration
  Number of Month: 18
  Number of Days: 0

2.4.2 Architectural Coatings Phase Assumptions

- General Architectural Coatings Information
  Building Category: Non-Residential
  Total Square Footage (ft\textsuperscript{2}): 29200
  Number of Units: N/A

- Architectural Coatings Default Settings
  Default Settings Used: Yes
  Average Day(s) worked per week: 5 (default)

- Worker Trips
  Average Worker Round Trip Commute (mile): 20 (default)

- Worker Trips Vehicle Mixture (%)

<table>
<thead>
<tr>
<th>POVs</th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>50.00</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
</tbody>
</table>
2.4.3 Architectural Coatings Phase Emission Factor(s)

- Worker Trips Emission Factors (grams/mile)

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>Pb</th>
<th>NH₃</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDGV</td>
<td>0.264</td>
<td>0.002</td>
<td>0.206</td>
<td>0.056</td>
<td>0.008</td>
<td>0.007</td>
<td>0.023</td>
<td>0.007</td>
<td>3.647</td>
</tr>
<tr>
<td>LDGT</td>
<td>0.331</td>
<td>0.003</td>
<td>0.365</td>
<td>0.228</td>
<td>0.010</td>
<td>0.009</td>
<td>0.024</td>
<td>0.017</td>
<td>4.424</td>
</tr>
<tr>
<td>HDGV</td>
<td>0.705</td>
<td>0.005</td>
<td>0.039</td>
<td>0.448</td>
<td>0.023</td>
<td>0.021</td>
<td>0.045</td>
<td>0.716</td>
<td>1.161</td>
</tr>
<tr>
<td>LDDV</td>
<td>0.113</td>
<td>0.003</td>
<td>0.133</td>
<td>0.541</td>
<td>0.004</td>
<td>0.004</td>
<td>0.008</td>
<td>0.009</td>
<td>0.748</td>
</tr>
<tr>
<td>LDDT</td>
<td>0.257</td>
<td>0.004</td>
<td>0.384</td>
<td>0.376</td>
<td>0.007</td>
<td>0.007</td>
<td>0.008</td>
<td>0.012</td>
<td>4.524</td>
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<tr>
<td>HDDV</td>
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<td>0.435</td>
<td>0.537</td>
<td>0.164</td>
<td>0.151</td>
<td>0.027</td>
<td>0.947</td>
<td>1.747</td>
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<tr>
<td>MC</td>
<td>0.236</td>
<td>0.003</td>
<td>0.759</td>
<td>1.206</td>
<td>0.027</td>
<td>0.024</td>
<td>0.054</td>
<td>3.739</td>
<td>0.036</td>
</tr>
</tbody>
</table>

2.4.4 Architectural Coatings Phase Formula(s)

- Worker Trips Emissions per Phase

\[
V_{MTW} = \left( 1 \times WT \times PA \right) / 800
\]

\[
V_{POL} = \left( V_{MTW} \times 0.002205 \times EF_{POL} \times VM \right) / 2000
\]

- Off-Gassing Emissions per Phase

\[
V_{VOC} = (AB \times 2.0 \times 0.0116) / 2000.0
\]

2.5 Paving Phase

2.5.1 Paving Phase Timeline Assumptions

- Phase Start Date
  - Start Month: 6
  - Start Quarter: 1
  - Start Year: 2020

- Phase Duration
  - Number of Month: 18
  - Number of Days: 0
### 2.5.2 Paving Phase Assumptions

- **General Paving Information**
  - **Paving Area (ft²):** 20000

- **Paving Default Settings**
  - **Default Settings Used:** Yes
  - **Average Day(s) worked per week:** 5 (default)

<table>
<thead>
<tr>
<th>Equipment Name</th>
<th>Number Of Equipment</th>
<th>Hours Per Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement and Mortar Mixers Composite</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Pavers Composite</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Rollers Composite</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>Tractors/Loaders/Backhoes Composite</td>
<td>1</td>
<td>7</td>
</tr>
</tbody>
</table>

- **Construction Exhaust (default)**

- **Vehicle Exhaust**
  - **Average Hauling Truck Round Trip Commute (mile):** 20 (default)

- **Vehicle Exhaust Vehicle Mixture (%)**

<table>
<thead>
<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
</tr>
</thead>
<tbody>
<tr>
<td>POVs</td>
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<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>100.00</td>
<td>0.00</td>
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</tbody>
</table>

- **Worker Trips**
  - **Average Worker Round Trip Commute (mile):** 20 (default)

- **Worker Trips Vehicle Mixture (%)**

<table>
<thead>
<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>HDDV</th>
<th>MC</th>
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</thead>
<tbody>
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<td>50.00</td>
<td>0.00</td>
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<td>0.00</td>
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### 2.5.3 Paving Phase Emission Factor(s)

- **Construction Exhaust Emission Factors (lb/hour) (default)**

<table>
<thead>
<tr>
<th>Graders Composite</th>
<th>VOC</th>
<th>SO₂</th>
<th>NO₂</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factors</td>
<td>0.0919</td>
<td>0.0014</td>
<td>0.5823</td>
<td>0.5765</td>
<td>0.0280</td>
<td>0.0280</td>
<td>0.0082</td>
<td>132.95</td>
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</table>

<table>
<thead>
<tr>
<th>Other Construction Equipment Composite</th>
<th>VOC</th>
<th>SO₂</th>
<th>NO₂</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
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</thead>
<tbody>
<tr>
<td>Emission Factors</td>
<td>0.0562</td>
<td>0.0012</td>
<td>0.3519</td>
<td>0.3508</td>
<td>0.0138</td>
<td>0.0138</td>
<td>0.0050</td>
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</table>

<table>
<thead>
<tr>
<th>Rubber Tired Dozers Composite</th>
<th>VOC</th>
<th>SO₂</th>
<th>NO₂</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emission Factors</td>
<td>0.2117</td>
<td>0.0024</td>
<td>1.5772</td>
<td>0.8005</td>
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<td>0.0630</td>
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<table>
<thead>
<tr>
<th>Tractors/Loaders/Backhoes Composite</th>
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<th>SO₂</th>
<th>NO₂</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>CH₄</th>
<th>CO₂e</th>
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</thead>
<tbody>
<tr>
<td>Emission Factors</td>
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<td>0.0134</td>
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</table>

- **Vehicle Exhaust & Worker Trips Emission Factors (grams/mile)**

<table>
<thead>
<tr>
<th></th>
<th>LDGV</th>
<th>LDGT</th>
<th>HDGV</th>
<th>LDDV</th>
<th>LDDT</th>
<th>Pb</th>
<th>NH₃</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
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<td>0.0002</td>
<td>0.00266</td>
<td>0.00356</td>
<td>0.00008</td>
<td>0.00007</td>
<td>0.00023</td>
<td>0.0322647</td>
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<td>LDGT</td>
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<td>0.00365</td>
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<td>0.00010</td>
<td>0.00009</td>
<td>0.00024</td>
<td>0.0417424</td>
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<td>HDGV</td>
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<td>0.00008</td>
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<tr>
<td>LDDT</td>
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<td>0.03840</td>
<td>0.43760</td>
<td>0.00007</td>
<td>0.00007</td>
<td>0.00008</td>
<td>0.0445124</td>
</tr>
</tbody>
</table>
2.5.4 Paving Phase Formula(s)

- Construction Exhaust Emissions per Phase

\[ \text{CEE}_{\text{POL}} = \frac{(\text{NE} \times \text{WD} \times H \times \text{EF}_{\text{POL}})}{2000} \]

\( \text{CEE}_{\text{POL}} \): Construction Exhaust Emissions (TONs)
\( \text{NE} \): Number of Equipment
\( \text{WD} \): Number of Total Work Days (days)
\( H \): Hours Worked per Day (hours)
\( \text{EF}_{\text{POL}} \): Emission Factor for Pollutant (lb/hour)
\( 2000 \): Conversion Factor pounds to tons

- Vehicle Exhaust Emissions per Phase

\[ \text{VMT}_{\text{VE}} = \text{PA} \times 0.25 \times \frac{1}{30} \times \frac{1}{\text{HC}} \times \text{HT} \]

\( \text{VMT}_{\text{VE}} \): Vehicle Exhaust Vehicle Miles Travel (miles)
\( \text{PA} \): Paving Area (ft\(^2\))
0.25: Thickness of Paving Area (ft)
\( \frac{1}{30} \): Conversion Factor cubic feet to cubic yards (1 yd\(^3\) / 27 ft\(^3\))
\( \text{HC} \): Average Hauling Truck Capacity (yd\(^3\))
\( \frac{1}{\text{HC}} \): Conversion Factor cubic yards to trips (1 trip / HC yd\(^3\))
\( \text{HT} \): Average Hauling Truck Round Trip Commute (mile/trip)

\[ \text{V}_{\text{POL}} = \frac{(\text{VMT}_{\text{VE}} \times 0.002205 \times \text{EF}_{\text{POL}} \times \text{VM})}{2000} \]

\( \text{V}_{\text{POL}} \): Vehicle Emissions (TONs)
\( \text{VMT}_{\text{VE}} \): Vehicle Exhaust Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
\( \text{EF}_{\text{POL}} \): Emission Factor for Pollutant (grams/mile)
\( \text{VM} \): Vehicle Exhaust On Road Vehicle Mixture (%)
\( 2000 \): Conversion Factor pounds to tons

- Worker Trips Emissions per Phase

\[ \text{VMT}_{\text{WT}} = \text{WD} \times \text{WT} \times 1.25 \times \text{NE} \]

\( \text{VMT}_{\text{WT}} \): Worker Trips Vehicle Miles Travel (miles)
\( \text{WD} \): Number of Total Work Days (days)
\( \text{WT} \): Average Worker Round Trip Commute (mile)
1.25: Conversion Factor Number of Construction Equipment to Number of Works
\( \text{NE} \): Number of Construction Equipment

\[ \text{V}_{\text{POL}} = \frac{(\text{VMT}_{\text{WT}} \times 0.002205 \times \text{EF}_{\text{POL}} \times \text{VM})}{2000} \]

\( \text{V}_{\text{POL}} \): Vehicle Emissions (TONs)
\( \text{VMT}_{\text{WT}} \): Worker Trips Vehicle Miles Travel (miles)
0.002205: Conversion Factor grams to pounds
\( \text{EF}_{\text{POL}} \): Emission Factor for Pollutant (grams/mile)
\( \text{VM} \): Worker Trips On Road Vehicle Mixture (%)
\( 2000 \): Conversion Factor pounds to tons

- Off-Gassing Emissions per Phase

\[ \text{VOC}_P = \frac{(2.62 \times \text{PA})}{43560} \]
VOC$_P$: Paving VOC Emissions (TONs)
2.62: Emission Factor (lb/acre)
PA: Paving Area (ft$^2$)
43560: Conversion Factor square feet to acre (43560 ft$^2$ / acre)$^2$ / acre

3. Emergency Generator

3.1 General Information & Timeline Assumptions

- **Add or Remove Activity from Baseline?** Add

- **Activity Location**
  - **County:** Prince George's
  - **Regulatory Area(s):** Washington, DC-MD-VA

- **Activity Title:** Emergency Generators

- **Activity Description:**
  Emergency generators and all necessary support for an uninterrupted power system would be required. In order to provide improved redundancy and availability, standby power would be supplied by two – 1 megawatt (MW) generators, plus one additional 1MW generator. The switchgear will also be configured to include a provision for a 1 MW roll-up generator.

- **Activity Start Date**
  - **Start Month:** 6
  - **Start Year:** 2020

- **Activity End Date**
  - **Indefinite:** Yes
  - **End Month:** N/A
  - **End Year:** N/A

- **Activity Emissions:**

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions Per Year (TONs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOC</td>
<td>0.024004</td>
</tr>
<tr>
<td>SO$_x$</td>
<td>0.000419</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>0.868298</td>
</tr>
<tr>
<td>CO</td>
<td>0.230652</td>
</tr>
<tr>
<td>PM 10</td>
<td>0.027122</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions Per Year (TONs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM 2.5</td>
<td>0.027122</td>
</tr>
<tr>
<td>Pb</td>
<td>0.000000</td>
</tr>
<tr>
<td>NH$_3$</td>
<td>0.000000</td>
</tr>
<tr>
<td>CO$_2$e</td>
<td>44.6</td>
</tr>
</tbody>
</table>

3.2 Emergency Generator Assumptions

- **Emergency Generator**
  - **Type of Fuel used in Emergency Generator:** Diesel
  - **Number of Emergency Generators:** 1

- **Default Settings Used:** No

- **Emergency Generators Consumption**
  - **Emergency Generator's Horsepower:** 670.5
  - **Average Operating Hours Per Year (hours):** 100
3.3 Emergency Generator Emission Factor(s)

- Emergency Generators Emission Factor (lb/hp-hr)

<table>
<thead>
<tr>
<th></th>
<th>VOC</th>
<th>SO₂</th>
<th>NOₓ</th>
<th>CO</th>
<th>PM 10</th>
<th>PM 2.5</th>
<th>Pb</th>
<th>NH₃</th>
<th>CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
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<td>0.000809</td>
<td></td>
<td></td>
<td>1.33</td>
</tr>
</tbody>
</table>

3.4 Emergency Generator Formula(s)

- Emergency Generator Emissions per Year

\[ AE_{POL} = \left( NGEN \times HP \times OT \times EF_{POL} \right) / 2000 \]

AEₚₒₙₑ: Activity Emissions (TONs per Year)
NGEN: Number of Emergency Generators
HP: Emergency Generator's Horsepower (hp)
OT: Average Operating Hours Per Year (hours)
EFₚₒₙₑ: Emission Factor for Pollutant (lb/hp-hr)
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 Instruction 32-7040, Air Quality Compliance And Resource Management; 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: Construct and operate an approximately 29,200-square-foot Child Development Center

c. Project Number/s (if applicable):

d. Projected Action Start Date: 6 / 2020

e. Action Description:
   The Proposed Action is to construct and operate an approximately 29,200-square-foot (SF) Child Development Center (CDC) at the corner of Arkansas Road and California Avenue, adjacent to the existing Honor Guard building. The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support. Staff parking for the facility would be located across California Avenue at the site of the former dental clinic parking lot.

   The proposed location for the new CDC was previously developed, but there are currently no buildings on site. It is also within about 1/3 mile of the Jones Building (Building 1500) and the Malcolm Grow Medical Clinics and Surgery Center, which encompass a large portion of JBA’s workforce. All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The proposed area would also preserve the area designated for the potential future relocations of Alabama and California Avenues as designated in the JBA Installation Development Plan (IDP).

   Building 4575 – the existing CDC on Windsor Road – would remain operational throughout the construction of the new CDC. Once the new CDC is completed and certified for use, childcare functions would be relocated to the new CDC.

f. Point of Contact:
   Name: Raga Kalapati
   Title: Senior Engineer
   Organization: Arcadis U.S, Inc.
   Email: raga.kalapati@arcadis.com
   Phone Number: 858-699-4487

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:

### 2020

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Action Emissions (ton/yr)</th>
<th>GENERAL CONFORMITY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Threshold (ton/yr)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exceedance (Yes or No)</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
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### 2021

<table>
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<th>Action Emissions (ton/yr)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Threshold (ton/yr)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exceedance (Yes or No)</td>
</tr>
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<td>Washington, DC-MD-VA</td>
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<td></td>
</tr>
<tr>
<td>VOC</td>
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### 2022 - (Steady State)

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<tbody>
<tr>
<td></td>
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<td>Threshold (ton/yr)</td>
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<tr>
<td></td>
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<td>Exceedance (Yes or No)</td>
</tr>
<tr>
<td>Washington, DC-MD-VA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VOC</td>
<td>0.024</td>
<td>50</td>
</tr>
<tr>
<td>NOx</td>
<td>0.868</td>
<td>100</td>
</tr>
<tr>
<td>CO</td>
<td>0.231</td>
<td></td>
</tr>
<tr>
<td>SOx</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PM 10</td>
<td>0.027</td>
<td></td>
</tr>
<tr>
<td>PM 2.5</td>
<td>0.027</td>
<td></td>
</tr>
<tr>
<td>Pb</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>NH3</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>CO2e</td>
<td>44.6</td>
<td></td>
</tr>
</tbody>
</table>

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.

Raga Kalapati, Senior Engineer  
DATE
APPENDIX C: USFWS INFORMATION PLANNING AND CONSERVATION (IPAC) AND MIGRATORY BIRD REPORTS
In Reply Refer To:
Consultation Code: 05E2CB00-2020-SLI-1178
Event Code: 05E2CB00-2020-E-03238
Project Name: JBA CDC

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

To Whom It May Concern:

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

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

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 et seq.), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.
A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

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

http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (http://www.fws.gov/windenergy/) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm; http://www.towerkill.com; and http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html.

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

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands
Official Species List

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

This species list is provided by:

Chesapeake Bay Ecological Services Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401-7307
(410) 573-4599
Project Summary

Consultation Code: 05E2CB00-2020-SLI-1178

Event Code: 05E2CB00-2020-E-03238

Project Name: JBA CDC

Project Type: DEVELOPMENT

Project Description: JBA is looking to put a child care center in the defined area.

Project Location:
Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.80994809553191N76.888554156556099W

Counties: Prince George's, MD
**Endangered Species Act Species**

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries\(^1\), as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

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

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

**Mammals**

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northern Long-eared Bat <em>Myotis septentrionalis</em></td>
<td>Threatened</td>
</tr>
</tbody>
</table>

No critical habitat has been designated for this species.

This species only needs to be considered under the following conditions:

- Projects with a federal nexus that have tree clearing = to or > 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key

Species profile: [https://ecos.fws.gov/ecp/species/9045](https://ecos.fws.gov/ecp/species/9045)

**Critical habitats**

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.
USFWS National Wildlife Refuge Lands And Fish Hatcheries

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

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

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

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

THERE ARE NO WETLANDS WITHIN YOUR PROJECT AREA.
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as trust resources) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Project information

NAME
JBA CDC

LOCATION
Prince George’s County, Maryland

DESCRIPTION
JBA is looking to put a child care center in the defined area.

Local office

Chesapeake Bay Ecological Services Field Office
(410) 573-4599
(410) 266-9127

177 Admiral Cochrane Drive
Annapolis, MD 21401-7307

http://www.fws.gov/chesapeakebay/
http://www.fws.gov/chesapeakebay/endspweb/ProjectReview/Index.html
Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act requires Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Log in to IPaC.
2. Go to your My Projects list.
3. Click PROJECT HOME for this project.
4. Click REQUEST SPECIES LIST.

Listed species\(^1\) and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries\(^2\)).

Species and critical habitats under the sole responsibility of NOAA Fisheries are not shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

**Mammals**

<table>
<thead>
<tr>
<th>NAME</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Northern Long-eared Bat  Myotis septentrionalis
This species only needs to be considered if the following condition applies:

- Projects with a federal nexus that have tree clearing $\geq$ 15 acres: 1. REQUEST A SPECIES LIST 2. NEXT STEP: EVALUATE DETERMINATION KEYS 3. SELECT EVALUATE under the Northern Long-Eared Bat (NLEB) Consultation and 4(d) Rule Consistency key

No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/9045

Critical habitats
Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds
Certain birds are protected under the Migratory Bird Treaty Act\(^1\) and the Bald and Golden Eagle Protection Act\(^2\).

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:


The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below.
This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](https://ebird.org) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

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

<table>
<thead>
<tr>
<th>NAME</th>
<th>BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. &quot;BREEDS ELSEWHERE&quot; INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bald Eagle</td>
<td>breeds Oct 15 to Aug 31</td>
</tr>
<tr>
<td>Haliaeetus leucocephalus</td>
<td>This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. <a href="https://ecos.fws.gov/ecp/species/1626">https://ecos.fws.gov/ecp/species/1626</a></td>
</tr>
<tr>
<td>Bobolink</td>
<td>breeds May 20 to Jul 31</td>
</tr>
<tr>
<td>Dolichonyx oryzivorus</td>
<td>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.</td>
</tr>
<tr>
<td>Buff-breasted Sandpiper</td>
<td>breeds elsewhere</td>
</tr>
<tr>
<td>Calidris subrubricollis</td>
<td>This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9488">https://ecos.fws.gov/ecp/species/9488</a></td>
</tr>
</tbody>
</table>
**Probability of Presence Summary**

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence**

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

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**Lesser Yellowlegs** *Tringa flavipes*

- This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
- [https://ecos.fws.gov/ecp/species/9679](https://ecos.fws.gov/ecp/species/9679)

- Breeds elsewhere

**Semipalmated Sandpiper** *Calidris pusilla*

- This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

- Breeds elsewhere

**Wood Thrush** *Hylocichla mustelina*

- This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

- Breeds May 10 to Aug 31
Breeding Season (a)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (!)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar’s survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.
Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

_Nationwide Conservation Measures_ describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. _Additional measures_ and/or _permits_ may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS _Birds of Conservation Concern (BCC)_ and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the _Avian Knowledge Network (AKN)_ . The AKN data is based on a growing collection of _survey, banding, and citizen science datasets_ and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (_Eagle Act_ requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the _AKN Phenology Tool_.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the _Avian Knowledge Network (AKN)_ . This data is derived from a growing collection of _survey, banding, and citizen science datasets_.
Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report
The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ “What does IPaC use to generate the migratory birds potentially occurring in my specified location”. Please be aware this report provides the “probability of presence” of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the “no data” indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ “Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds” at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

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

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

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

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

THERE ARE NO KNOWN WETLANDS AT THIS LOCATION.
Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubeworm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.
APPENDIX D: NOTICE OF AVAILABILITY
Public Notice
Notice of Availability
Draft Environmental Assessment and Finding of No Significant Impact for
Joint Base Andrews-Naval Air Facility Washington, Maryland

Joint Base Andrews announces the availability of a Draft Environmental Assessment (EA) to evaluate potential environmental, cultural, transportation, and socioeconomic impacts associated with the proposed construction and operation of a new Child Development Center (CDC) facility. A Draft Finding of No Significant Impact (FNSI) has also been prepared for this proposed project.

The Draft EA and Draft FNSI are available for a review on the Joint Base Andrews environmental website at https://www.jba.af.mil/About-Us/Environmental-Mission/. For those who do not have ready access to a computer or the internet, the materials posted to the website will be made available upon request by contacting Mr. Ryan Soens, Environmental Engineer, Joint Base Andrews, by phone at 240-857-0444, by mail at 3466 North Carolina Ave, Joint Base Andrews, MD 20762, or by email at ryan.soens.1@us.af.mil.

Written comments on the Draft EA must be received within 30 days of publication of this notice. Please submit any comment to Mr. Ryan Soens at the mailing address or email address listed above.
APPENDIX E: COASTAL ZONE CONSISTENCY DETERMINATION
Coastal Zone Management Act (CZMA) Consistency Determination

This document provides Maryland with the Joint Base Andrews-Naval Air Facility (JBA) Consistency Determination under CZMA Section 307(c)(1) and (2) and 15 CFR Part 930, Subpart C, for the proposed construction and operation of a new Child Development Center (CDC). The information in this Consistency Determination is provided pursuant to 15 CFR §930.39.

This Consistency Determination represents an analysis of the Proposed Action in light of established Maryland Coastal Resources Management (CRM) Program Enforceable Policies and Programs. Submission of this Consistency Determination reflects the commitment of JBA to comply with the maximum extent practicable with those Enforceable Policies and Programs. The Proposed Action would be operated and implemented in a manner consistent with the CRM. JBA has determined that the impacts of the Proposed Action would be less than significant on land and water uses and natural resources of Maryland’s Coastal Zone and is consistent to the maximum extent practicable with the enforceable policies of the CRM.

PROPOSED PROJECT DESCRIPTION

Project Location

JBA is located five miles southeast of Washington, D.C., in southern Prince George’s County, Maryland, and occupies 4,390 acres of land. The proposed site for the CDC is located in the northwest quadrant of JBA, at the intersection of Arkansas Road and California Avenue.

Project Description

The Proposed Action is to construct and operate an approximately 29,200-square-foot (SF) CDC at the corner of Arkansas Road and California Avenue, adjacent to the existing Honor Guard building (Figure 2-1). The construction would include a pick-up/drop-off area, reception area, lobby area, multi-purpose rooms, administrative space, an access road, parking, outdoor fenced playground areas, restrooms, storage rooms, kitchen equipment, fire detection and suppression systems, environmental controls, exterior lighting, security systems, landscaping, and all other support. Staff parking for the facility would be located across California Avenue at the site of the former dental clinic parking lot. No additional construction is expected to be needed for staff parking.

The proposed location for the new CDC was previously developed, but there are currently no buildings on site. It is also approximately 1/3 mile from the Jones Building (Building 1500) and the Malcolm Grow Medical Clinic and Surgery Center, which encompass a large portion of JBA’s workforce. All major utility services are available in the proposed area, including water, sanitary sewer, natural gas, and electricity. The proposed site would also preserve the area designated for the potential future relocations of Arkansas Road and California Avenue as designated in the JBA Installation Development Plan (IDP).
Building 4575 – the existing CDC on Windsor Road – would remain operational throughout the construction of the new CDC. Once the new CDC is completed and certified for use, childcare functions would be relocated to the new CDC.

The total acreage of limit of disturbance (LOD) for construction of the new CDC would be approximately 5 acres. Facility design would be compatible with applicable DoD, USAF, and base design standards. Local materials and construction techniques would be used when cost effective. The facility would be designed as permanent construction in accordance with DoD UFC 1-200-01, General Building Requirements, and UFC 1-200-02, High Performance and Sustainable Building Requirements.

Public Participation

A Notice of Availability (NOA) of the Draft Environmental Assessment (EA) and Finding of No Significant Impact (FNSI) will be published in The Enquirer-Gazette and The Washington Post. The NOA will announce the availability of the Draft EA for public and agency review.

Hard copies of the Draft EA and FNSI were made available for review at the following locations: Upper Marlboro Branch of the Prince George’s County Memorial Library System, 14730 Main Street, Upper Marlboro, Maryland; and the JBA Library, 1442 Concord Avenue, Joint Base Andrews, Maryland.

Electronic copies of the EA and Draft FNSI were also made available for review on the JBA website, www.andrews.af.mil.

Other Consultations

Per the requirements of Section 106 of the National Historic Preservation Act and implementing regulations (36 CFR Part 800), Section 7 of the Endangered Species Act (ESA) and implementing regulations, including the Migratory Bird Treaty Act, findings of effect and request for concurrence were transmitted to the Maryland Historic Trust (MHT) and the U.S. Fish and Wildlife Service (USFWS).

JBA also initiated consultation with the following agencies for the proposed project: Maryland Department of Natural Resources (MDNR), Maryland State Clearinghouse Office of Planning, Maryland Department of the Environment (MDE), Prince George’s County Department of Planning, National Capital Parks-East, and National Capital Planning Commission (NCPC). JBA did not coordinate with the National Marine Fisheries Service (NMFS) because no marine resources will be impacted from this project.

Concurrence indicating a finding of no effect for the construction of the new CDC was sent by the MHT on 2 June 2020. On 15 May 2020, a report was generated through the Information for Planning and Conservation system, the USFWS online system for searching for species protected under the ESA, which notes that one protected species – the Northern Long-eared Bat – has the potential to occur on the proposed CDC site.
SITE LOCATION

Site Location Map

The proposed location for the proposed new CDC is shown in Figures 1-2 and 2-1 of the EA.

Photographs

Current site conditions are shown in Appendix A of the Consistency Determination.

BASIS OF DETERMINATION

The Proposed Action in the EA would be fully consistent with Maryland’s Enforceable Coastal Policies (effective April 11, 2011), implemented by the Maryland Department of the Environment (MDE). No adverse or beneficial effects on Maryland’s coastal resources would be expected from implementing the Proposed Action in the EA. The Proposed Action would be conducted in accordance with applicable laws, regulations, and policies governing erosion and sediment control and stormwater management, which would ensure that the actions would be undertaken in a manner consistent with the applicable Maryland Coastal Program enforceable policies. A synopsis of how the Proposed Action would be consistent with the enforceable coastal policies is provided below.

Maryland’s Enforceable Coastal Policies are divided into three general sections: general policies, coastal resources, and coastal uses. The general policies are further divided into core, water quality, and flood hazards policies. Compliance of the Proposed Action in the EA with each of the applicable enforceable policies is discussed below. Policies not applicable to the Proposed Action are noted.

GENERAL POLICIES

Core Policies

Policy: *It is State policy to maintain that degree of purity of air resources which will protect the health, general welfare, and property of the people of the State. MDE (C9) Md. Code Ann., Envir. §§ 2-102 to -103.*

As noted in Section 4.3 of the EA, the Air Force would comply with all applicable air pollution control regulations when implementing the Proposed Action, and JBA’s Environmental Protection Standards require that contractors do the same. Section 4.3 of the EA contains a detailed discussion of the projected air emissions associated with the Proposed Action. Routine operation of facilities, mobile assets and equipment are exempt from the General Conformity Rule; therefore, operational emissions from JBA were not included in the General Conformity Applicability Analysis. The Proposed Action would result in temporary, localized changes to air quality as a result of fuel combustion emissions from the construction equipment and fugitive dust generated through the duration of the construction.
All construction activities would be required to comply with Federal, State, and current JBA versions of regulations designed to support compliance with the Clean Air Act (CAA), OSHA, and Toxic Substance and Control Act. Construction activities will use best management practices (BMPs) in order to reduce emissions and, if necessary, will utilize emission control technologies and other required mitigation technologies.

The Proposed Action is expected to comply with all air emission requirements and will follow the National Emissions Standards for Hazardous Air Pollutants (NESHAP). While unlikely, since there are no existing buildings on the proposed site, if regulated material such as lead or asbestos is found within the work area, best management practices outlined in JBA’s Environmental Protection Standards for Contractors would be followed. This includes standards for managing, storing, transporting, and disposing of hazardous materials and wastes.

**Policy:** The environment shall be free from noise which may jeopardize health, general welfare, or property, or which degrades the quality of life. MDE (C9) COMAR 26.02.03.02.

Section 4.2 of the EA provides a discussion of the noise environment and a discussion of the expected noise-related impacts associated with the implementation of the Proposed Action in the EA. Noise associated with the actions would be associated with the construction and repair work only and would occur in developed areas on the base that are not near residential areas. All noise would cease upon completion of the Proposed Action and no new sources of environmental noise would be introduced.

**Policy:** Soil erosion shall be prevented to preserve natural resources and wildlife; control floods; prevent impairment of dams and reservoirs; maintain the navigability of rivers and harbors; protect the tax base, the public lands, and the health, safety and general welfare of the people of the State, and to enhance their living environment. MDA (C4) Md. Code Ann., Agric. § 8-102(d).

Soil disturbance would occur during the construction phase of the Proposed Action.

All disturbed areas would be graded to match surrounding areas and re-vegetated with native grasses and landscape plants upon completion of the work. JBA would comply with the requirements described in the MDE (2010) document Maryland Stormwater Management Guidelines for State and Federal Projects and Maryland’s Stormwater Management Act of 2007. Contractors would be required to comply with JBA’s environmental standards, which would include submitting an erosion and sediment control plan to MDE for each project that would disturb more than 5,000 square feet, and obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Permit, as applicable to each project. Implementing erosion and sediment control BMPs during construction, as specified in those plans, would minimize the effects on soils.

**Policy:** Controlled hazardous substances may not be stored, treated, dumped, discharged, abandoned, or otherwise disposed anywhere other than a permitted controlled hazardous substance facility or a facility that provides an equivalent level of environmental protection. MDE (D4) Md. Code Ann., Envir. § 7-265(a).
All contractors involved with implementing the Proposed Action would be required to comply with JBA’s *Environmental Protection Standards for Contractors*, which includes managing, storing, transporting, and disposing of hazardous materials and wastes, and taking all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with all applicable federal, state, and local laws and regulations.

**Water Quality**

*Policy: No one may add, introduce, leak, spill, or emit any liquid, gaseous, solid, or other substance that will pollute any waters of the State without State authorization.* MDE (A5) Md. Code Ann., Envir. §§ 4- 402, 9-101, 9-322.

The EA discusses compliance with laws, regulations, and policies related to the use, storage, and disposal of hazardous wastes and materials in Section 4.7. All contractors involved with implementing the Proposed Action would be required to manage, store, transport, and dispose of any hazardous wastes; and take all necessary precautions to prevent spills of hazardous materials (including oils and hazardous wastes) in accordance with JBA’s *Environmental Protection Standards for Contractors* and Federal, State, and local laws and regulations.

*Policy: All waters of the State shall be protected for water contact recreation, fish, and other aquatic life and wildlife. Shellfish harvesting and recreational trout waters and waters worthy of protection because of their unspoiled character shall receive additional protection.* MDE (A1) COMAR 26.08.02.02.

JBA would protect the water quality of State waters by implementing erosion and sediment control measures at the Proposed Action location and would control stormwater runoff, including erosion, sedimentation, and nonpoint source pollution in accordance with Maryland *Stormwater Management Guidelines for State and Federal Projects* (MDE, 2010) and Maryland’s Stormwater Management Act of 2007. Additionally, Meetinghouse Branch is classified as a Use I stream (i.e., Water Contact Recreation and Protection of Aquatic Life). Generally, no in-stream work is permitted in Use I streams from March 1 through June 15. While no in-stream work is projected as part of this proposed project, JBA would avoid work in Meetinghouse Branch between those dates to the extent practicable, and would consult with the Maryland Department of Natural Resources (MDNR) before commencing any in-stream work if it was scheduled between March 1 and June 15.

*Policy: Before constructing, installing, modifying, extending, or altering an outlet or establishment that could cause or increase the discharge of pollutants into the waters of the State, the proponent must hold a discharge permit issued by the Department of the Environment or provide an equivalent level of water quality protection.* MDE (D6) Md. Code Ann., Envir. § 9-323(a).

JBA is required to manage its stormwater discharges in accordance with the regulations and requirements contained in the COMAR Chapter 26 subsections. Generally, JBA is required to control pre-construction and post-construction stormwater runoff, including erosion,
sedimentation, and nonpoint source pollution. Specific requirements for JBA are described in *Maryland Stormwater Management Guidelines for State and Federal Projects* (MDE, 2010) and in the MDE Stormwater Management Act of 2007. The regulations require that environmental site design (ESD) be implemented to the maximum extent practicable through the use of nonstructural BMPs and other site design techniques. An Individual Permit for Stormwater Associated with Construction Activity may be required from MDE for this project.

*Policy:* The use of best available technology is required for all permitted discharges into State waters, but if this is insufficient to comply with the established water quality standards, additional treatment shall be required and based on waste load allocation. *MDE (D4) COMAR 26.08.03.01C.*

JBA holds a NPDES permit, which requires JBA to control and improve the water quality of discharges of stormwater and local streams. The proposed construction of the CDC would increase the amount of impervious surface on the proposed site, so JBA would implement the appropriate BMPs and other measures to ensure that established water quality standards are met.

**Flood Hazards**

The Flood Hazards Policies are not relevant to the Proposed Action. The Proposed Action would not create additional flooding upstream or downstream or have an adverse impact upon water quality or other environmental factors.

**COASTAL RESOURCES**

**Chesapeake and Atlantic Coastal Bays Critical Area**

The Chesapeake and Atlantic Coastal Bays Critical Area Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a Chesapeake and Atlantic Coastal Bays Critical Area.

**Tidal Wetlands**

The Tidal Wetlands Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a tidal wetland.

**Nontidal Wetlands**

The Nontidal Wetlands Policies are not relevant to the Proposed Action. The Proposed Action would not occur in a nontidal wetland.

**Forests**

*The Forest Conservation Act and its implementing regulations, as approved by NOAA, are enforceable policies. Generally, before developing an area greater than 40,000 square feet, foreasted and environmentally sensitive areas must be identified and preserved whenever possible. If these areas cannot be preserved, reforestation or other mitigation is required to replace the*
values associated with them. This policy does not apply in the Critical Area. DNR (C5) Md. Code Ann., Nat. Res. §§ 5-1601 to -1613; COMAR 08.19.01-.06.

There is a mixed hardwood forest that occurs north of the site proposed for the CDC, and there are some mature trees present on the proposed site. However, the site was previously developed, and is largely mowed and maintained lawns. There are no sensitive plant communities near the project site. During construction activities, JBA would disturb as little natural habitat as feasible and would comply with the provisions of its arbor plan. The arbor plan requires 1:1 tree replacement for projects disturbing less than one acre, and 60 percent canopy replacement for projects disturbing more than one acre.

**Historic and Archaeological Sites**

The Historic and Archaeological Sites Policies are not relevant to the Proposed Action. The Proposed Action would not involve any archaeological or architectural historic sites or properties, nor would it involve any traditional cultural properties.

**Living Aquatic Resources**

The Living Aquatic Resources Policies are not relevant to the Proposed Action. On 15 May 2020, a report was generated through the IPaC system, the USFWS online system for searching for species protected under the Endangered Species Act, which notes that there is only potential for one protected species – the NLEB – to occur on the proposed CDC construction site. If a Federal or State protected species was found in a proposed construction area, the installation would consult with the USFWS or the responsible state agency (as appropriate) and appropriate steps would be taken to ensure the species was not harmed.

Further, the Proposed Action is not anticipated to cause or contribute to an individual or cumulative impact that degrades: aquatic diversity, productivity, and stability; plankton, fish, shellfish, and wildlife; recreation, economic values, and public welfare; or surface water quality or groundwater quality.

**COASTAL USES**

**Mineral Extraction**

The Mineral Extraction Policies are not relevant to the Proposed Action. The Proposed Action does not require mineral extraction.

**Electrical Generation and Transmission**

The Electrical Generation and Transmission Policies are not relevant to the Proposed Action. The Proposed Action does not include the development of power plants, transmission lines, or cooling water intake structures.
Tidal Shore Erosion Control

The Tidal Shore Erosion Control Policies are not relevant to the Proposed Action. The Proposed Action would not occur in tidal shores.

Oil and Natural Gas Facilities

The Oil and Natural Gas Facilities Policies are not relevant to the Proposed Action. The Proposed Action does not include any oil or natural gas facilities.

Dredging and Disposal of Dredged Material

The Dredging and Disposal of Dredged Material Policies are not relevant to the Proposed Action. The Proposed Action does not require any dredging.

Navigation

The Navigation Policies are not relevant to the Proposed Action. The Proposed Action would not occur in proximity to navigable waters.

Transportation

The Transportation Policies are not relevant. The Proposed Action is a non-transportation project.

Agriculture

The Agriculture Policies are not relevant to the Proposed Action. The Proposed Action would not occur on agricultural lands.

Development

Any development shall be designed to minimize erosion and keep sediment onsite. MDE (C4) COMAR 26.17.01.08.

The Proposed Action would include controls to minimize erosion and keep sediment on site, described above in Core Policies-Soil Erosion.

Development must avoid and then minimize the alteration or impairment of tidal and nontidal wetlands; minimize damage to water quality and natural habitats; minimize the cutting or clearing of trees and other woody plants; and preserve sites and structures of historical, archeological, and architectural significance and their appurtenances and environmental settings. MDE/DNR/CAC (D6) Md. Code Ann., Envir. §§ 4-402, 5-907(a), 16-102(b); Md. Code Ann., Nat. Res. §§ 5-1606(c), 8-1801(a); Md. Code Ann., Art. 66B § 8.01(b); COMAR 26.24.01.01(A).
Disturbances associated with the Proposed Action would mostly occur on previously disturbed areas. The proposed site already has a road and clearance areas already constructed and would need to be maintained.

Any proposed development may only be located where the water supply system, sewerage system, or solid waste acceptance facility is adequate to serve the proposed construction, taking into account all existing and approved developments in the service area and any water supply system, sewerage system, or solid waste acceptance facility described in the application and will not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste. MDE (C9) Md. Code Ann., Envir. § 9-512.

All required utility systems are available at, or in the immediate vicinity of, the proposed CDC site. These utility systems are expected to be adequate to service the proposed CDC. The new facility would be water and energy efficient and would not overload any present facility for conveying, pumping, storing, or treating water, sewage, or solid waste.

Local citizens shall be active partners in planning and implementation of development. MDP (D6) Md. Code Ann., St. Fin. & Proc. §§ 5-7A-01 to -02.

Public participation opportunities with respect to this EA and decision making on the Proposed Action are guided by Air Force Environmental Impact Analysis Process (EIAP) Regulations at 32 CFR Part 989, and Air Force Instruction (AFI) 32-7061. The EA will be made available to the public for 30 days in order to receive public comments.

**Sewage Treatment**

The Sewage Treatment Policies are not relevant to the Proposed Action. The Proposed Action does not require special water treatment.

**SUMMARY OF FINDINGS**

Based upon the following information, data, and analysis, JBA finds that the proposed operation and construction of the CCC is consistent to the maximum extent practicable with the enforceable policies of the Maryland Coastal Zone Management Program. The table below summarizes how the Proposed Action would affect each of the enforceable policies outlined within the CZMA Consistency Determination.

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<th>Enforceable Policy</th>
<th>Consistent to the Maximum Extent Practicable?</th>
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<td>Critical Areas</td>
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Pursuant to 15 CFR Section 930.41, the Maryland Coastal Zone Management Program has 60 days from the receipt of this letter in which to concur with or object to this Consistency Determination, or to request an extension under 15 CFR section 930.41(b). Maryland’s concurrence will be presumed if its response is not received by JBA on the 60th day from receipt of this determination. The State’s response should be sent to:

Steven Richards  
Chief of Environmental Management  
11 CES/CEIE  
3466 North Carolina Avenue  
Joint Base Andrews, Maryland 20762-4803