

ENVIRONMENTAL ASSESSMENT
for Acquisition of the Middleburg Training Center (MTC) for
JOINT BASE MYER-HENDERSON HALL
ARLINGTON COUNTY, VIRGINIA

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January 2026

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**FINDING OF NO SIGNIFICANT IMPACT
ACQUISITION OF THE MIDDLEBURG TRAINING CENTER**

Joint Base Myer-Henderson Hall, Arlington County, Virginia

Name of Proposed Action: Acquisition of the Middleburg Training Center (MTC) for Joint Base Myer-Henderson Hall (JBM-HH), Arlington County, Virginia.

Purpose and Need of Proposed Action: The purpose of the Proposed Action is to acquire the 149-acre MTC property to meet the established requirements of the Caisson Detachment of the 3rd U.S. Infantry Regiment (The Old Guard [TOG]), a prestigious Army equine unit. The acquisition would provide adequate space to support the health, care, and training of the 100-horse herd and the land for equine facilities and land improvements essential to the Detachment's mission of providing ceremonial funerary support.

Acquisition of the parcel would also meet the directive by Congress contained in H. Rept. 118-301 (p. 1035-6), which accompanied the National Defense Authorization Act (NDAA) of 2024 (H.R. 2670). The directive instructed the Secretary of the Army to conduct a study to address the feasibility and advisability of establishing sufficient stabling, pasture, and training area for the equines in the Caisson Detachment.

The need for the Proposed Action is to address unsustainable and unsanitary living conditions for the equine herd at JBM-HH. In 2022, the deaths of two horses highlighted issues with poor equine care revealing that the herd-numbering around 60-suffered from health problems such as parasites and sand colic, largely due to overcrowded pastures and inadequate feeding practices. In response, the U.S. Army Commanding General for the Military District of Washington recommended a temporary suspension of ANC caisson operations for 60 to 90 days, a pause that was later extended to one year to allow for a comprehensive assessment of both the animals and the facilities.

Description of Proposed Action: The Proposed Action is the acquisition of the 149-acre MTC property, a privately owned horse farm in Loudoun County, Virginia, to support horse care, training, and therapy for the Caisson Detachment of the 3rd U.S. Infantry Regiment.

The MTC is partially enclosed by a combination of a wooden perimeter fence in some areas and a berm topped with a rock wall in others. The property also includes stables, tack rooms, a caretaker house, and pastures, meeting the Army's need for a suitable facility to meet the Congressional mandate. A recorded conservation easement prevents future development of the property for residential, industrial, or commercial uses, and preserves the open space and scenic character of the surrounding area. The conservation easement allows for the construction of new buildings, structures, improvements, roads, and utilities with prior written approval from the Grantee (Old Dominion Land Conservancy, Inc.). Approval from the Grantee is required to ensure the proposed activities are consistent with the restrictions in the conservation easement.

Although the MTC is a suitable facility, further improvements are required to facilitate full occupancy. TOG will conduct master planning activities and develop an Area Development Plan (ADP) once the unit is better able to assess what is needed to tailor the facility to the Caisson

Detachment's mission. The ADP will identify any deficiencies in existing facilities and develop a long-term strategy for prioritizing upgrades and additions. The following anticipated (potential) improvements to the MTC property are identified below, although the ADP process will not be formally initiated until the property is officially transferred to the Army. This list is subject to change per the analysis and development of the ADP. The property is to be acquired with the conservation easement left in place, which imposes restrictions on what can be constructed/changed on the parcel. Based on what is currently known about the property and the mission of TOG, the Proposed Action may include the following potential improvements to the facility:

- Increase the size of the stalls in Barns 2-11 from 100 square feet to 144 square feet.
- Grade, mill, and resurface Training Center Lane.
- Construct an indoor riding arena (150 feet x 250 feet) and a covered 8-horse hot walker.
- Remove and replace the sidewalks connecting the barns and the caretaker residence.
- Create additional parking spaces.
- Renovate the main house to provide for overnight occupancy (living quarters) for permanent staff.
- Renovate the caretaker's house or main house to provide administrative (office) space for day-to-day, on-site management responsibilities.
- Upgrade existing utilities for potable water, electricity, and natural gas, with associated tie-in work.
- Renovate barns for caisson equipment storage and maintenance.
- Improve stormwater management.
- Increase security to meet antiterrorism/force protection (AT/FP) requirements.

The Office of the Under Secretary of Defense provided certification to Congress that this acquisition is in the best interest of the government. The acquisition would be achieved through direct purchase and would be subject to Military Land Acquisition Proposal restrictions. The acquisition is expected to meet the 1 February 2026, deadline set by the Fiscal Year (FY) 25 NDAA for the application of funding for unspecified minor military projects under Title 10, U.S.C., Section 2805.

Alternatives Evaluated: Reasonably foreseeable effects of two alternatives were evaluated in the Environmental Assessment (EA): the Proposed Action and the No-Action Alternative. Three other alternatives were determined to be infeasible and were not carried forward for analysis.

Anticipated Effects: The real estate acquisition is expected to have long-term, minor adverse effects on aesthetics and visual resources, traffic, air quality, socioeconomics, and noise in the vicinity of the MTC property. However, these effects are not anticipated to be significant beyond those already present under the No-Action Alternative. Potential future improvements of the MTC property are expected to have a long-term, minor adverse effect to soils and may result in changes to stormwater runoff patterns. Improvements are also expected to have short-term, minor adverse effects on vegetation, fish and wildlife, aesthetics and visual resources, traffic, air quality, noise, and human health and safety. Assessment/surveys are needed to determine the effects to cultural

resources and hazardous, toxic, and radioactive waste. No effects are expected to floodplains or wetlands due to restrictions in the conservation easement.

Public Involvement: Coordination with federal agencies, federally-recognized Native American tribes, state agencies, and local agencies occurred concurrently with the public review period. Normally, JBM-HH provides requests for initial coordination to partner agencies at the start of the National Environmental Policy Act (NEPA) process. However, as outlined in the Deputy Secretary of Defense memorandum, *Land Acquisition and Leasing in the United States*, dated 22 February 2021, a proposed major land acquisition may not be made public without DUSD, Acquisition & Sustainment approval. Therefore, agency coordination occurred in conjunction with the initiation of the 30-day public comment period.

A Notice of Availability (NOA) was released on 19 November 2025. The NOA announced availability of the Draft EA for review and requested comments within 30 days of the date of the Public Notice and NOA. All comments received on the Draft EA have been considered in the Final EA.

Finding of No Significant Impact: After review of the Final EA, I have determined that the Proposed Action, the acquisition of the 149-acre MTC property, may be selected for implementation. I have concluded that implementation of the Proposed Action will have no significant effects on the human environment. Based upon the aforementioned, preparation of an Environmental Impact Statement is not required.

01/28/2026

Date

SANDOVAL.KEITH.PAUL
PAUL [REDACTED] Digitally signed by SANDOVAL.KEITH.PAUL [REDACTED]
Date: 2026.01.28 08:52:00 -05'00'

KEITH P. SANDOVAL
Colonel, U.S. Army
Commanding

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**Environmental Assessment for the
Proposed Acquisition of the Middleburg Training Center (MTC)
Joint Base Myer-Henderson Hall, Arlington County, Virginia**

Unique ID No. EAXX-007-21-001-1759230427



**Prepared for:
Environmental Management Division
Directorate of Public Works
Joint Base Myer-Henderson Hall
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January 2026

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- Appendix D: Draft Environmental Condition of Property Report

Acronyms and Abbreviations

AAWDT	Annual Average Weekday Daily Traffic
ADP	Area Development Plan
ANC	Arlington National Cemetery
APE	Area of Potential Effect
AQCR	Air Quality Control Region
AR	Army Regulation
ARPA	Archaeological Resources Protection Act
ASD	Assistant Secretary of Defense
AST	Above-Ground Storage Tank
AT/FP	Antiterrorism/Force Protection
BCC	Birds of Conservation Concern
BMP	Best Management Practices
CAA	Clean Air Act
CFR	Code of Federal Regulations
DA	Department of the Army
D.C.	District of Columbia
DEQ	Department of Environmental Quality
DHR	Department of Historic Resources
DoD	Department of Defense
DOT	Department of Transportation
DOW	Department of War
DUSD	Department of the Under Secretary of Defense
DWR	Department of Wildlife Resources
EA	Environmental Assessment
ECOS	Environmental Conservation Online System
EO	Executive Order
ESA	Endangered Species Act
FNSI	Finding of No Significant Impact
FY	Fiscal Year
GCR	General Conformity Rule
HTRW	Hazardous, Toxic, and Radioactive Waste
HUC	Hydrologic Unit Code
INRMP	Integrated Natural Resources Management Plan
IPaC	Information for Planning and Consultation
JBM-HH	Joint Base Myer-Henderson Hall
KIA	Killed in Action
MILCON	Military Construction
MLAP	Military Land Acquisition Proposal
MSL	Mean Sea Level
MTC	Middleburg Training Center
MWAQC	Metropolitan Washington Air Quality Committee
MWCOG	Metropolitan Washington Council of Governments
MWE	Military Working Equine
NAAQS	National Ambient Air Quality Standards

NCR	National Capital Region
NDAA	National Defense Authorization Act
NEC	Northern Virginia Equine Center
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOA	Notice of Availability
NOx	Nitrogen Oxide
NPS	National Park Service
NRHP	National Register of Historic Places
O ₃	Ozone
ODLC	Old Dominion Land Conservancy
OTR	Ozone Transport Region
PAH	Polycyclic Aromatic Hydrocarbons
PCBs	Polychlorinated Biphenyls
POW	Prisoner of War
ppb	Parts Per Billion
RONA	Record of Non-Applicability
SF	Square Feet
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
TOG	The Old Guard, 3 rd U.S. Infantry Regiment
TPY	Tons Per Year
USACE	U.S. Army Corps of Engineers
U.S.C.	United States Code
USD (A&S)	Under Secretary of Defense, Acquisition & Sustainment
USDA NRCS	U.S. Department of Agriculture, Natural Resources Conservation Service
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USAMDW	U.S. Army, Military District of Washington
USCB	U.S. Census Bureau
V-CRIS	Virginia Cultural Resources Information System
VOCs	Volatile Organic Compounds
WOTUS	Waters of the United States

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1 INTRODUCTION

1.1 Overview

Joint Base Myer-Henderson Hall (JBM-HH) is the administrative combination of Army installations Fort Myer and Fort McNair, and Marine Corps Service Center Henderson Hall. Located in Arlington, Virginia, Fort Myer and Henderson Hall are now a single, integrated 243-acre campus adjacent to Arlington National Cemetery (ANC) and bordered by the major thoroughfares of Arlington Boulevard/U.S. Route 50 and Washington Boulevard/State Route 27 (**Figure 1**).

The missions of JBM-HH include responding to crises, disasters, or security requirements in the National Capital Region (NCR) through implementation of various contingency plans; providing both base operations and a variety of specialized support to Army and other Department of War (DoW) organizations throughout the NCR; and conducting official national and international ceremonial, musical, and special events. Known as “America’s Post,” JBM-HH serves as the headquarters for service personnel working throughout the NCR.

Fort Myer serves as the home base for the 3rd U.S. Infantry Regiment (“The Old Guard” [TOG]), the U.S. Army Band “Pershing’s Own,” and Headquarters U.S. Army Garrison. TOG is responsible for first-response infantry support to the nation's capital. Additionally, they provide full military honors to funeral and burial ceremonies at ANC, a mission executed with horses and horse-drawn caissons. The TOG’s Caisson Detachment is responsible for executing this mission including the training, health, care, and management of the horses. This function has been a part of military funerals at ANC since 1948 (McCulloch et al., 2024), drawing from historical use of the caisson, an artillery wagon, in returning dead and wounded Soldiers from the front lines. The caisson is authorized for military funeral honors with escort for all Medal of Honor recipients, those who were prisoners of war (POWs) or who were killed in action (KIA), officers ranked O-4 and above, and service members who attained the most senior enlisted and warrant officer ranks. The caisson is also authorized for all state funerals. The iconic procession of the caisson drawn by a team of black horses is a solemn yet powerful symbol of our nation’s commitment to honoring the sacrifice of generations of Soldiers.

The horses necessary to support these functions are rotated between facilities at JBM-HH and a recently leased facility, the NOVA Equestrian Center, in Loudoun County, Virginia. A recent reorganization of the Caisson Detachment focused on improved and sustainable equine health and welfare. This included an increase in personnel and horses, as well as a commitment to improved living and training conditions. As a result, the previously used stables at Fort Belvoir (approximately 20 miles southwest in Fairfax County, Virginia) were decommissioned, and the Detachment now operates from the NOVA Equestrian Center.

The Army has determined that viable sites to support the current herd size should contain at least 100 acres of land suitable for grazing and exercise plus sufficient additional contiguous land to support equine facilities (stables, barns, indoor riding facility, staff housing, etc.) for up to 100 horses. The facility will also need to house one permanent resident serving as an operations overseer, enabling on-site management. The facility would be staffed by up to 35 rotational

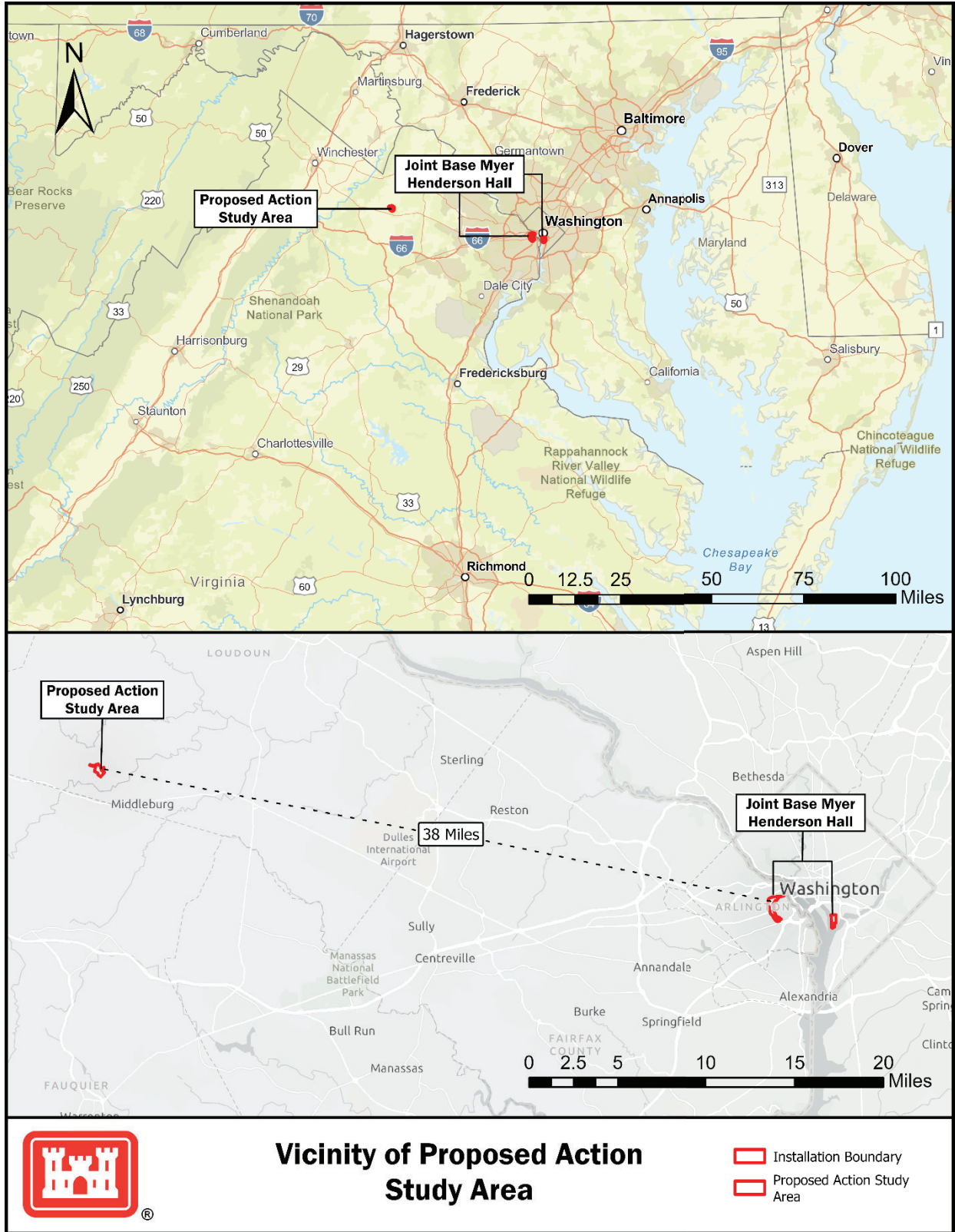


Figure 1. Vicinity Map

personnel consisting of Soldiers, farm staff, and trainers/leadership. Furthermore, the site would need to provide temporary field-style lodging accommodations for up to 30 personnel participating in horsemanship courses and other training events.

Through collaboration with the U.S. Army, Military District of Washington (USAMDW) and TOG leadership, the U.S. Army Corps of Engineers (USACE) conducted an extensive search and evaluation process for a facility that could meet the specialized needs of the herd, which is an integral part of the Caisson's ceremonial duties.

The preferred parcel that meets the Army's required property attributes is the Middleburg Training Center (MTC), located at 35396 Millville Road in Middleburg, Loudoun County, Virginia. The MTC property was chosen after a previous preferred property in Fauquier County was sold before the Army could complete its acquisition process. The loss of this property necessitated a renewed search, which ultimately led to the identification and selection of the MTC from a list of 25 potential sites.

The MTC is a 149-acre horse training venue complete with 11 barns, 220 stalls, 5 tack buildings, 40 paddocks, a 7/8-mile racetrack, and a caretaker residence (Johnson, 2018; Craig Jones, Inc. 2023). The MTC was established in 1956 by renowned racehorse breeder and philanthropist, Paul Mellon, and has served as a premier facility for racehorse training for decades since. After changing hands several times since Mr. Mellon sold the parcel in 1975, the facility was acquired by the most recent owner in 2017, who has invested in repairs and upgrades to the aging facility and placed its entirety under a conservation easement in 2018.

The MTC property has key attributes that align with the Army's requirements for a suitable site to house, train, and maintain the health and well-being of the equine herd. The MTC property not only meets but, in many aspects, exceeds these requirements.

- The Army required a minimum of 100 acres of open pastureland. The MTC property is approximately 149 acres, with over 100 acres of open pasture, as only about 1.47% of the parcel is impervious surface. This provides ample space for grazing and exercise for up to 100 horses.
- The requirement included contiguous land for stables, exercise equipment, barns, and staff housing. The MTC has 11 barns, 40 paddocks, and existing stables. It also includes two residences suitable for staff housing.
- The Army desired adequate infrastructure for fencing, quarantine areas, and training facilities. The MTC already has extensive fencing and paddocks. The property also has all-weather access roads and reliable utilities.
- The requirement specified suitable stables and barns with proper ventilation, lighting, and insulation. Although the Army will need to make updates to the existing facilities, the basic infrastructure is in place. The barns can be modified to create 120 (or 100) larger stalls to meet equestrian standards.
- Viable sites needed to be within 100 miles of JBMHH to facilitate the transportation of horses for ceremonial duties. The MTC, located in Loudoun County, is within this prescribed radius.

The MTC has been identified as the most suitable location for the Army's Caisson Detachment equine herd after a thorough evaluation process. Its substantial acreage, existing infrastructure, and strategic location within the National Capital Region align with the Army's critical requirements. While some renovations and modifications will be necessary, the MTC provides a solid foundation for the long-term housing, training, and care of the equine herd, ensuring the continued fulfillment of their vital ceremonial duties. The acquisition of this facility will allow the Caisson Detachment to have its own dedicated facility to support the complete Military Working Equine (MWE) herd.

The Old Dominion Land Conservancy, Inc. (ODLC) holds a conservation easement on the property, protecting its agricultural forest, natural habitat, scenic value, watershed, and open space. The easement also protects the integrity of adjacent conservation easements and prevents dense residential or industrial development, preserving the district's open space and scenic character. The conservation easement is provided in **Appendix A**.

Relevant features of the property are detailed in the Baseline Documentation Report that supports establishment of this easement (Johnson, 2018). Key restrictions include, but are not limited to:

- Collective footprint limitation (impervious surface cap): The ground area (in square feet [SF]) of all buildings, structures, and improvements on the property (excluding existing roads) shall not exceed 100,000 SF or 1.5 percent of the property. Existing impervious surface on the property, excluding existing roads, totals 95,753 SF, leaving 4,246 SF that can be converted from pervious to impervious surface (Johnson, 2018).
- Dwellings and structures: No more than nine dwellings (primary or accessory) shall be constructed or maintained. The property currently has nine dwellings. No permitted accessory dwelling shall be expanded beyond its existing footprint without prior written consent of the Grantee (ODLC). Accessory structures associated with residential buildings such as detached garages, tennis courts, patios and pools may be constructed provided that the accessory is no more than 2,000 SF.
- No new structures or improvements are permitted within a riparian buffer, within 100 feet of state roads accessing the property, or within fifty feet of a floodplain or a "very steep slope," as designated by Loudoun County.
- Existing paved roads may not be expanded unless authorized by the Grantee, and any new or reconstructed roads must comply with the impervious surface cap limits (1.5 percent).

1.2 Purpose and Need for the Proposed Action

The purpose of the Proposed Action is to acquire the 149-acre MTC property to meet the established requirements of the Caisson Detachment of the 3rd U.S. Infantry Regiment (TOG), a prestigious Army equine unit. The acquisition will provide adequate space to support the health, care, and training of the 100-horse herd and the land for equine facilities and land improvements essential to the Detachment's mission of providing ceremonial funerary support.

Acquisition of the parcel would also meet the directive by Congress contained in H. Rept. 118-301 (p. 1035-6), which accompanied the National Defense Authorization Act (NDAA) of 2024 (H.R. 2670). The directive instructed the Secretary of the Army to conduct a study to address the feasibility and advisability of establishing sufficient stabling, pasture, and training area for the equines in the Caisson Detachment.

The need for the Proposed Action is to address unsustainable and unsanitary living conditions for the equine herd at JBM-HH (ASD, 2024). In 2022, the deaths of two horses highlighted issues with poor equine care revealing that the herd, numbering around 60, suffered from health problems such as parasites and sand colic, largely due to overcrowded pastures and inadequate feeding practices (McCulloch et al., 2024). In response, the U.S. Army Commanding General for the USAMDW recommended a temporary suspension of ANC caisson operations for 60 to 90 days, a pause that was later extended to one year to allow for a comprehensive assessment of both the animals and the facilities.

1.3 Scope of the Environmental Assessment

The U.S. Army has prepared this Environmental Assessment (EA) in compliance with the National Environmental Policy Act (Title 42 United States Code (U.S.C.) § 4321 et seq.) (NEPA); U.S. Department of Defense (DoD) NEPA Implementing Procedures issued 30 June 2025; Army Regulation (AR) 200-1, *Environmental Protection and Enhancement*; and applicable Army NEPA guidance.

While certain real estate transactions may qualify for a DoD categorical exclusion listed in Appendix A of the DoD NEPA Implementing Procedures, JBM-HH made the decision to prepare an EA to ensure the potential effects resulting from acquisition of the 149-acre parcel are fully and carefully considered and to provide the opportunity for public involvement.

This EA analyzes the reasonably foreseeable effects to the human environment as a result of the Proposed Action, which involves the real property acquisition of the MTC in Loudoun County, Virginia, to the U.S. Army Garrison, JBM-HH, as well as potential future improvements to the property following the acquisition. A No-Action Alternative is also analyzed, and alternatives considered but eliminated from the analysis are identified.

This EA provides discussion and analysis for the proposed improvements predominantly at a conceptual level, and follow-on NEPA analysis will be necessary once an Area Development Plan (ADP) can be formally implemented through collaboration between the receiving installation (JBM-HH) and TOG.

1.4 Environmental Laws and Regulations

Compliance with federal statutes and executive orders (EOs) pertinent to the Proposed Action were considered during preparation of this EA (**Table 1**). Coordination with federal agencies, federally recognized Native American tribes, and state agencies are ongoing to ensure compliance with each federal statute and EO.

Table 1. Federal Statutes and Executive Orders

Federal Statute	Level of Compliance
Archaeological Resources Protection Act (ARPA) of 1979 (16 U.S.C. §470aa[b])	Pending
Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d)	Full
Clean Air Act, as amended (42 U.S.C. ch. 85, subch. I §7401 et seq.)	Full
Clean Water Act, as amended (33 U.S.C. ch. 23 §1151)	N/A
Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. §9601 et seq.)	Full
Coastal Zone Management Act of 1972, as amended through Pub. L. No. 109-58, the Energy Policy Act of 2005	N/A
Endangered Species Act of 1973, as amended (16 U.S.C. ch. 35 §1531 et seq.)	Full
Energy Independence and Security Act of 2007, Section 438	Full
Farmland Protection Policy Act (7 U.S.C 4201)	Pending
Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661-667e)	Pending
Migratory Bird Treaty Act (16 U.S.C §§703-712, et seq.)	Full
National Environmental Policy Act of 1969 (42 U.S.C. §4321 et seq.)	Full
National Historic Preservation Act of 1966, as amended (16 U.S.C. ch. 1A, subch.II §470 et seq.)	Pending
Noise Control Act of 1972, as amended (42 U.S.C. §§4901-4918, et seq.)	Full
North American Wetlands Conservation Act (16 U.S.C. 4401-4412)	Full
Resource Conservation and Recovery Act (42 U.S.C. ch. 82 §6901 et seq.)	Full
Solid Waste Disposal Act of 1965, as amended (42 U.S.C 6901 et seq.)	Full
Toxic Substances Control Act of 1976 (15 U.S.C. ch.53, subch. I §§2601-2629)	Full
Watershed Protection and Flood Prevention Act of 1954 (16 U.S.C. §1101, et seq.)	Full
Wild and Scenic Rivers Act (16 U.S.C. 1271, et seq.)	N/A

Executive Orders (EO)	Level of Compliance
Protection and Enhancement of Environmental Quality (EO 11514)	Full
Protection and Enhancement of the Cultural Environment (EO 11593)	Pending
Floodplain Management (EO 11988)	Full
Protection of Wetlands (EO 11990)	Full
Federal Compliance with Pollution Control Standards (EO 12088)	Full
Indian Sacred Sites (EO 13007)	Pending
Protection of Children from Environmental Health Risks and Safety Risks (EO 13045)	Full
Invasive Species (EO 13112)	Full

Consultation and Coordination with Indian Tribal Governments (EO 13175)	Full
Migratory Bird Conservation (EO 13186)	Full
Chesapeake Bay Protection and Restoration (EO 13508)	Full
Safeguarding the Nation from the Impacts of Invasive Species (EO 13751)	Full
Unleashing American Energy (EO 14154)	Full

1.5 Public Involvement

Coordination with federal agencies, federally recognized Native American tribes, state agencies, and local agencies will occur concurrently with the public review period. Normally, JBM-HH provides requests for initial coordination to partner agencies such as the U.S. Fish and Wildlife Service (USFWS), the State Historic Preservation Office (SHPO), and county planning departments at the start of the NEPA process. However, as outlined in the Deputy Secretary of Defense memorandum, *Land Acquisition and Leasing in the United States*, dated 22 February 2021, a proposed major land acquisition may not be made public without Department of the Undersecretary of Defense (DUSD), Acquisition & Sustainment (A&S) approval. Therefore, agency coordination will occur concurrently with the initiation of the 30-day public comment period described in Section 1.6.

The agencies to be contacted include the USFWS Virginia Ecological Services Field Office, U.S. Environmental Protection Agency (USEPA) Region 3, U.S. Department of Agriculture Natural Resources Conservation Service (USDA NRCS), Virginia Department of Historic Resources (DHR), Virginia Department of Environmental Quality (DEQ), Loudoun County Department of Planning and Zoning, and the Virginia Piedmont Heritage Area. The following federally recognized Native American tribes were invited to consult under Section 106 of the National Historic Preservation Act (NHPA): Delaware Nation, Delaware Tribe of Indians, Catawba Indian Nation, Eastern Shawnee Tribe of Oklahoma, Monacan Indian Nation, and the Pamunkey Indian Tribe. All correspondence between government agencies and federally recognized Native American tribes is included in **Appendix B**.

1.6 Public Review

A Notice of Availability (NOA) of the Draft EA, the Draft EA, and Draft Finding of No Significant Impact (FNSI) were provided on 19 November 2025 via USACE, Baltimore District's website: <https://www.nab.usace.army.mil/home/middleburg-training-center-acquisition-nepa/>.

Interested parties were invited to review the documents and submit written comments or questions. Submissions could be directed using one of the following methods:

- Online: <https://www.nab.usace.army.mil/home/middleburg-training-center-acquisition-nepa/> (using the provided comment response form)
- Email: MTC.EA@USACE.ARMY.MIL
- Mail: Directorate of Public Works - Environmental Division, 111 Stewart Road, Building 321, Fort Myer, VA 22211

All comments submitted during the public review of the Draft EA were reviewed and considered in the preparation of this Final EA. In response to this feedback, revisions have been made

throughout the document to enhance clarity and provide additional information. USACE received 19 comments (cataloged in Appendix B), which primarily addressed the following areas:

- **Historic and Cultural Preservation:** A significant number of comments expressed concern over a historic African American cemetery located on the property. Commenters recommended professional archaeological surveys to determine its boundaries, the installation of a protective fence, and continued public access. There are also recommendations for a broader cultural resource evaluation of the entire property and concerns about the potential impact on the historic village of St. Louis.
- **Economic Impact:** Several citizens and organizations were concerned that removing the horse training facility will harm the local economy, which is closely tied to the equestrian industry. They argued that the loss of the only public flat race training facility in the area would displace trainers and related businesses, negatively affecting Middleburg and Loudoun County.
- **Loss of Equestrian Community Use:** Commenters highlighted the facility's importance to the thoroughbred racing community. They stated that its loss would be detrimental to an established industry, forcing the dispersal of hundreds of racehorses and potentially driving business to other states.
- **Environmental and Quality of Life Concerns:** Residents were concerned that the acquisition will disrupt the quiet, rural character of the area. Specific issues raised included the potential for increased traffic, light pollution, and noise. Several comments called for a more comprehensive Environmental Impact Statement (EIS) to be conducted instead of the current EA.
- **Facility Suitability:** One detailed comment questioned whether the existing facility is suitable for the Army's Caisson Detachment, suggesting that significant and expensive renovations would be required to meet their needs for stalls, storage, drainage, and security.

The Army affirms its commitment to public engagement and will conduct a separate 30-day public comment period for future NEPA documentation related to the development of the ADP.

All comments received on the Draft EA have been considered in the Final EA. Any additional NEPA, conducted to support development of an ADP, would also include a 30-day public comment period.

2 DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES

In accordance with Part 1.5(b)(2) of the DoD NEPA Implementing Procedures, the purpose of this chapter is to define the differences between the alternatives. This chapter provides the details of the Proposed Action and the No-Action Alternative. This chapter also briefly describes other alternatives that were determined to be infeasible and therefore were not carried forward for analysis in this EA.

2.1 Proposed Action

The Proposed Action is the acquisition of the 149-acre MTC property, a privately owned horse farm in Loudoun County, Virginia, to support horse care, training, and therapy for the Caisson Detachment of the 3rd U.S. Infantry Regiment (TOG) (**Figure 2**).

The property includes stables, tack rooms, a caretaker house, and pastures, meeting the Army's need for a suitable facility to meet the Congressional mandate. The Army's proposal, which includes one permanent resident, a maximum of 100 horses, and approximately 35 rotational personnel, falls well within the property's existing capacity. The site would also provide temporary field-style lodging accommodations for up to 30 personnel participating in horsemanship courses and other training events. No permanent barracks would be constructed on the MTC property.

As discussed in Section 1.1, a recorded conservation easement prevents future dense residential and industrial development of the property and preserves the open space and scenic character of the surrounding area. The conservation easement allows for the construction of new buildings, structures, improvements, roads, and utilities with prior written approval from the Grantee (ODLC). Approval from the Grantee is required to ensure the proposed activities are consistent with the restrictions in the conservation easement.

Acquisition of the MTC will provide a permanent solution to the current use of the interim stables and leased facilities at the NOVA Equestrian Center in Loudoun County, Virginia. The MTC will support the work-train-rest cycle, with larger pastures where horses can roam and graze in a more natural setting.

Although the MTC is a mostly suitable facility, further improvements are required before full occupancy. TOG will conduct master planning activities and develop an ADP once the unit is better able to assess what is needed for the facility to support full mission capability. The ADP will identify any deficiencies in existing facilities and develop a long-term strategy for prioritizing upgrades and additions. **It is important to note that although the Army is proposing to acquire the facility, all improvements to the facility will be equine-focused. No defense-related structures are planned.** The following anticipated (potential) improvements to the MTC property are identified below, although the ADP process will not be formally initiated until the property is officially transferred to the Army. This list is subject to change per the analysis and development of the ADP. **The property is to be acquired with the conservation easement left in place, which imposes restrictions on what can be constructed/changed on the parcel.** Based on what is currently known about the property and the mission of the TOG, the Proposed Action may include the following potential improvements to the facility:



Figure 2. Proposed Action Study Area

- Increase the size of the stalls in Barns 2-11 from 100 SF to 144 SF.
- Grade, mill, and resurface Training Center Lane.
- Construct an indoor riding arena (150 feet x 250 feet) and a covered 8-horse hot walker.
- Remove and replace the sidewalks connecting the barns and the caretaker residence.
- Create additional parking spaces.
- Renovate the main house to provide for overnight occupancy (living quarters) for permanent staff.
- Renovate the caretaker's house or main house to provide administrative (office) space for day-to-day, on-site management responsibilities.
- Upgrade existing utilities for potable water, electricity, and natural gas, with associated tie-in work.
- Renovate barns for caisson equipment storage and maintenance.
- Improve stormwater management.
- Increase security to meet antiterrorism/force protection (AT/FP) requirements.

The DUSD provided certification to Congress that this acquisition is in the best interest of the government. The acquisition would be achieved through direct purchase and would be subject to Military Land Acquisition Proposal restrictions. The acquisition is expected to meet the 1 February 2026, deadline set by the FY25 NDAA for the application of funding for unspecified minor military projects under Title 10, U.S.C., Section 2805.

2.2 No-Action Alternative

Under the No-Action Alternative, the Proposed Action would not be implemented. The Army would not acquire the MTC property, and no improvements would be made to the property to meet the Caisson's mission. Under the No-Action Alternative, the property would continue to be operated as a horse training venue.

The No-Action Alternative does not provide a permanent solution to address unsanitary conditions with inadequate or not-to-code space configurations. Under the No-Action Alternative, maintaining herd health would be increasingly difficult as the Army addresses unsanitary and substandard facilities. Maintaining temporary facilities and leased spaces indefinitely would not only be extremely costly, but establishing temporary spaces takes useable space away from other needs of JBM-HH, and the unit would be subject to the decisions of the leasing entities and would run the risk of losing access to a leased site should market conditions change.

In the interim, stables and facilities are being leased at the NOVA Equestrian Center in Loudoun County, Virginia. The Army is also establishing temporary stabling for two squads on JBM-HH. A current renovation of the barns on JBM-HH will increase stall size from 100 SF to 196 SF, with rubber mats to provide cushion for the horses' feet and sloping to facilitate drainage.

2.3 Alternatives Eliminated from Detailed Study

2.3.1 Expand Operations/Facilities at Fort Belvoir

Due to limited land availability, any potential site at Fort Belvoir would require high-cost unexploded ordnance clearance and extensive grading to prepare the land for construction of the necessary facilities. Additionally, the Army would face up to \$73 million in military construction (MILCON) costs to build new stables, an outdoor riding arena, corrals, a training trail, and other

support facilities. This alternative would not eliminate the need for continued contracted services at the NOVA Equestrian Center.

This alternative was eliminated from further consideration primarily due to cost, which would likely be orders of magnitude more than purchasing a facility that is largely ready for occupancy, as well as the extended amount of time TOG would remain without a permanent, mission-compliant facility while construction is underway.

2.3.2 Meadowood Special Recreation Management Area

The Office of Management and Budget directed the Army to submit a legislative proposal to withdraw 52 acres of public lands for caisson stabling and training from the Bureau of Land Management at the Meadowood Special Recreation Management Area in Lorton, Virginia. Due to public opposition to the Army's use of the public lands, the initiative did not move forward. This option would have also required at least \$50 million in MILCON but was removed from further consideration for other factors.

2.3.3 Other Private Properties

The Army identified 25 other private properties that could meet its requirements. The preferred property was sold during the course of the Military Land Acquisition Proposal (MLAP) Phase I process and is no longer available. The MTC property provided the next best opportunity to meet the Army's requirements.

3 AFFECTED ENVIRONMENT AND REASONABLY FORSEEABLE EFFECTS

This chapter describes the existing environmental, cultural, and socioeconomic resources located within and surrounding the MTC property that may be affected by the Proposed Action and the No-Action Alternative. This information was derived from a review of existing data and a comprehensive desktop analysis. This chapter also analyzes the potential effects on those resources from the Proposed Action and the No-Action Alternative.

Effects are analyzed for both the real estate transaction (acquisition of the MTC property), and the proposed improvements that may occur following acquisition of the property. The Army determined that the real estate transaction will have no effect on topography, soils, or geology; water resources; cultural resources; land use; utilities; hazardous, toxic, and radioactive waste; or human health and safety. There may be a long-term, minor, adverse socioeconomic impact due to the local displacement of the horse racing community.

Effects from potential improvements following acquisition of the MTC property have been assessed for all resources outlined below. This assessment is based on a conceptual understanding of the proposed improvements. Since specific details of the improvements are not yet available, measures to avoid, minimize and potentially mitigate for adverse effects are preliminary. A more detailed development of these measures will be addressed in future NEPA analyses during/following the ADP process. Recommendations for future NEPA analyses are outlined in Section 4.

3.1 Topography, Soils, and Geology

The MTC property is located in Loudoun County, Virginia and lies within the Northern Piedmont Physiographic Province. The Northern Piedmont is divided into western (inner) and eastern (outer) zones based on topographic features. The MTC property is located entirely within the Inner Piedmont. The Inner Piedmont is part of the geological Blue Ridge Anticlinorium - a vast, upward-arching structure characterized by numerous complexly folded rock layers. This region includes a steeply rolling to hilly belt just east of the Blue Ridge, featuring numerous isolated monadnocks - visually prominent hills or small mountains formed from erosion-resistant rock - as well as scattered foothill ranges. These landforms typically rise between 1000 feet to more than 2000 feet, adding dramatic relief to the landscape (Johnson, 2018).

3.1.1 Topography

The MTC property exhibits generally low topographic relief, averaging approximately 500 feet above mean sea level (MSL). As depicted in **Figure 3**, the 7/8-mile racetrack occupies the majority of the elevated terrain within the project area. The site generally slopes downward from west to east. Steep slopes, ranging from moderately sloped (15-25% grade) to very steep (greater than 25% grade), as defined by Loudoun County, approach the unnamed stream running north-south along the eastern edge of the property. The maximum topographic relief within the site is approximately 40 feet, found between the stream bottom and the horse track surface (Johnson, 2018; USACE, 2025).

Areas containing steep slopes are more susceptible to erosion, particularly when disturbed through construction activities. The Steep Slope Standards of the Loudoun County Zoning Ordinance apply

to all very steep and moderately steep slopes in the county. Development standards in these sensitive areas help mitigate improper land use and disturbance, which reduces potential for increased erosion, sedimentation, and surface runoff, as well as the resulting adverse effects on water quality.

Specific to the MTC property, Section C (i)(d) of the conservation easement prohibits new construction of dwellings, buildings, structures or improvements within these county-designated areas.

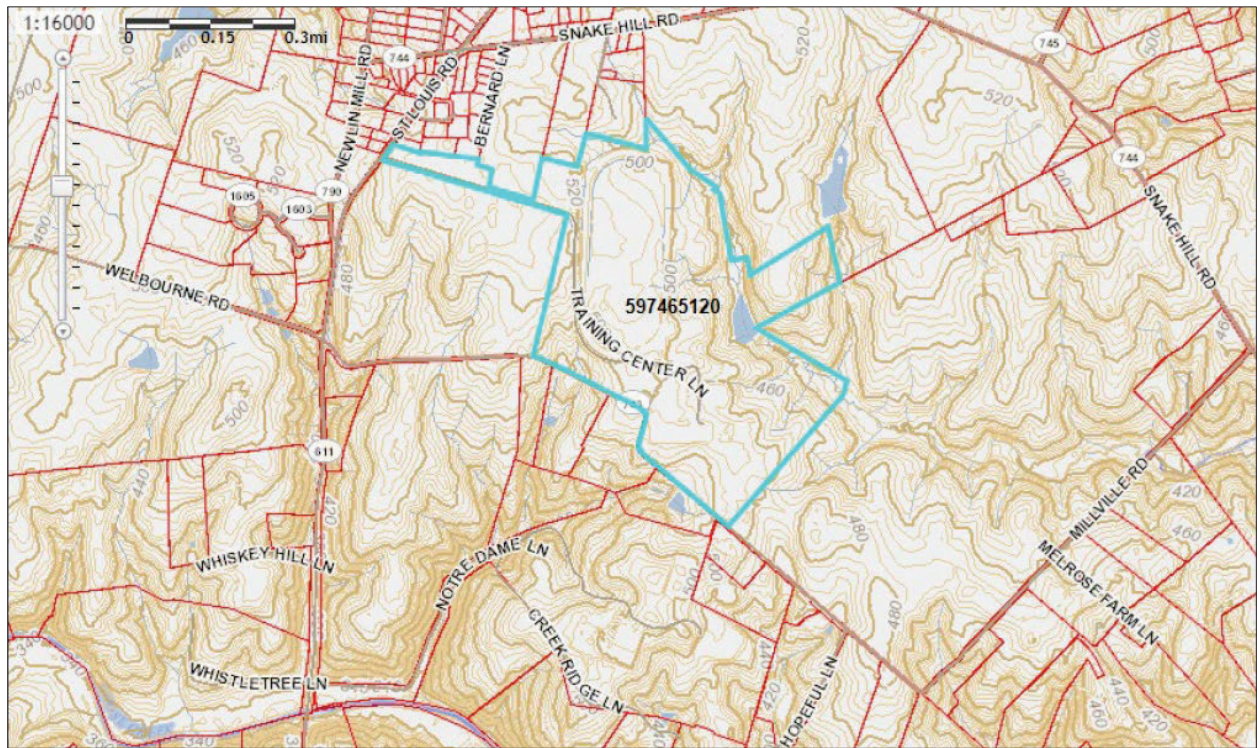


Figure 3. Topography of the Middleburg Training Center property (Johnson, 2018).

3.1.2 Soils

Soils of the property are shown in **Figure 4** and described in **Table 2**. Approximately 91.3 acres of U.S. Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) designated Prime Farmland, and 43.4 acres of Farmland of Statewide Importance occur on the MTC Property (NRCS, n.d.).

The designation of lands as Prime Farmland or Farmland of Statewide Importance is a critical mechanism for the protection of the nation's agricultural resources. These designations identify lands possessing optimal characteristics for agricultural production, thereby helping to prevent or minimize their conversion to non-agricultural uses and ensuring the long-term availability of domestic food resources.

Table 2. Soils on the Middleburg Training Center property (NRCS, n.d.)

Map Unit Symbol	Map Unit Name	Acres on MTC Property	Percent of MTC Property	Prime Farmland/Farmland of Statewide Importance
10B	Mongle silt loam, 0 to 7% slopes, frequently flooded	12.3	8.3 %	No
17B	Middleburg silt loam, 2 to 7% slopes	7.6	5.1%	Prime Farmland
20C	Purcellville and Tankerville soils, 7 to 15% slopes	1.2	0.8%	Farmland of Statewide Importance
22B	Purcellville-Swampoodle complex, 2 to 7% slopes	35.3	23.7%	Prime Farmland
23B	Purcellville silt loam, 2 to 7% slopes	0.1	0.1%	Prime Farmland
28B	Eubanks loam, 2 to 7% slopes	44.1	29.6%	Prime Farmland
28C	Eubanks loam, 7 to 15% slopes	7.8	5.3%	Farmland of Statewide Importance
29C	Eubanks loam, 7 to 15% slopes, stony	1.3	0.9%	Farmland of Statewide Importance
29D	Eubanks loam, 15 to 25% slopes, stony	1.4	0.9%	Farmland of Statewide Importance
30C	Tankerville and Philomont soils, 7 to 15% slopes	17.1	11.5%	Farmland of Statewide Importance
30D	Tankerville and Philomont soils, 15 to 25% slopes	2.0	1.4%	Farmland of Statewide Importance
31B	Philomont and Tankerville soils, 2 to 7% slopes	4.2	2.8%	Prime Farmland
38B	Swampoodle silt loam, 2 to 7% slopes, occasionally ponded	12.6	8.5%	Farmland of Statewide Importance
W	Water	1.7	1.2%	No
Total		149.0	100.0%	



Figure 4. Soils on the Middleburg Training Center property (NRCS, n.d.)

3.1.3 Geology

The MTC Property is underlain by leucocratic metagranite, classified as a Proterozoic Y granite (Johnson, 2018). Leucocratic metagranite is a light-colored, metamorphosed granite – originally formed as igneous granite, but later altered by heat and pressure, which changed its texture and mineral composition (Natural Atlas, 2025). A Proterozoic Y designation indicates that the rock formed during the late Proterozoic Eon, approximately 1.0 to 0.9 billion years ago. Granites from this period are commonly associated with continental rifting or anorogenic (non-mountain-building) tectonic events (NPS, 2023).

3.1.4 Reasonably Foreseeable Effects of the Alternatives on Topography, Soils, and Geology

3.1.4.1 Proposed Action

No effects will occur to topography, soils, and geology from the real estate acquisition.

No effects to geology and topography are anticipated from the proposed improvements as they would not be extensive enough to alter the existing landform or geological features.

Minor, long-term adverse effects to soil on the MTC property may occur due to grading, construction activities, and the staging and operation of heavy equipment. However, the improvements will not result in substantial soil loss or a permanent reduction in soil productivity, provided they will not convert more than 1.5 percent of the site from pervious to impervious

surface, cumulatively with existing pervious surface area, as stipulated in the conservation easement.

The addition of an approximately 150 foot x 250 foot (37,500 SF, or 0.86 acre) covered arena and a covered 8-horse hot walker (approximately 4,070 SF) would likely be the most notable potential cause of soil disturbance, because grading and the establishment of a sub-floor base would be necessary for installation. A potential site improvement of this scale would require collaboration between the Army and ODLC to ensure compliance with the restrictions of the conservation easement.

The most likely location for these features would be the infield of the existing racetrack; however, the soils even within the infield have Prime Farmland and Farmland of Statewide Importance designations. Because the project has the potential to convert farmland soils to non-agricultural use, the Army will complete Section AD-1006 of the USDA Farmland Conversion Impact Rating Form and will coordinate with USDA NRCS as necessary.

3.1.4.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects to topography, soils, or geology because no construction activities would take place.

3.2 Water Resources

The MTC property is situated within the Upper Goose Creek Watershed and partially within the North Fork Goose Creek Watershed. Most of the property is within the Wancopin Creek-Goose Creek hydrologic unit code (HUC) 12 (Johnson, 2018).

3.2.1 Groundwater

Groundwater availability across Loudoun County varies significantly, largely due to the complex underlying geology. Bedrock is present throughout the county at various depths beneath layers of soil and unconsolidated sediment. Below the water table, fractures and cracks in the bedrock serve as pathways and storage for groundwater, though their size, number and distribution can vary greatly depending on the type of rock and other geological factors. In many parts of the county, most groundwater is found in saturated soil and weathered rock close to the surface, while only limited amounts are stored in the smaller fractures within the deeper crystalline bedrock (Loudoun County Government, n.d.-a). The MTC property is equipped with two groundwater wells that supply drinking water. One of the wells serves as a backup water source in the event of a power outage (Craig Jones, Inc., 2023; USACE, 2025).

3.2.2 Surface Water

The MTC property has approximately 2,156 linear feet of frontage on an unnamed stream that runs along the east side of the property. The unnamed stream is a direct tributary to Goose Creek (Johnson, 2018) (**Figure 5**). Goose Creek and its tributaries are part of the Potomac River Basin that flows into the Chesapeake Bay (Loudoun Watershed Watch, 2005). The unnamed stream is classified as 'seasonally flooded,' by the National Wetlands Inventory, indicating that surface water is typically present for extended periods, particularly early in the growing season, but usually recedes by the end of the season in most years (USFWS, n.d.). However, observations made during

a site visit by USACE biologists in September 2025 indicated the unnamed tributary is perennial, or “permanently flooded” based on the presence of high flood marks, channel sinuosity, lack of leaf litter within the stream bed, and bank-full benchmarks. The unnamed stream flows directly into a 1.6-acre pond located on the property, which is a small impoundment created by a dam across the stream (Johnson, 2018). The pond serves as a water source for the fire hydrants and is also used for irrigating the horse track (**Figure 6**) (USACE, 2025).



Figure 5. Unnamed stream on the east side of the Middleburg Training Center property (USACE, 2025)



Figure 6. South facing view of the pond on the Middleburg Training Facility property (USACE, 2025)

Based on the indicators of perennial flow observed during the 2025 site visit, the unnamed stream may qualify as ‘Waters of the United States’ (WOTUS) if it is conclusively determined to be connected to other WOTUS, such as Goose Creek. According to the WOTUS definition in 33 Code of Federal Regulations (CFR) Part 328, the unnamed stream would meet the WOTUS criteria because it is a relatively permanent waterway, either standing or flowing continuously (33 CFR 328.3[a]3). Similarly, the pond would also meet the WOTUS definition due to its continuous surface connection to other WOTUS. An official determination of WOTUS will need to be made by USACE Regulatory to verify the findings from the site visit.

3.2.3 Stormwater

Site runoff generally flows towards the irrigation pond or towards the wetlands on the east side of the property. A series of small drainage channels guides runoff toward the unnamed stream and pond (USACE, 2025) (**Figure 7**). There are no recorded stormwater permits associated with the property (VADEQ, 2024).



Figure 7. Small drainage channels on the east side of the Middleburg Training Center property (USACE, 2025)

3.2.4 Floodplains

The unnamed stream that borders the east side of the property is classified as having a ‘minor floodplain.’ This designation typically applies to streams with a drainage area between 100 acres and one square mile (640 acres), or where the stream intersects a major floodplain (Loudoun County Government, n.d.-b). **Figure 8** shows the extent of the 0.2 percent annual chance flood hazard associated with the unnamed stream (FEMA, 2025). The floodplain is characterized by forested land with some wetlands present, and it contains no existing structures (USFWS, n.d.).

3.2.5 Wetlands

A 0.50-acre portion of the unnamed stream is classified as a freshwater forested/shrub wetland. Its presence was determined through interpretation of 1980 color infrared imagery (USFWS, n.d.-a).

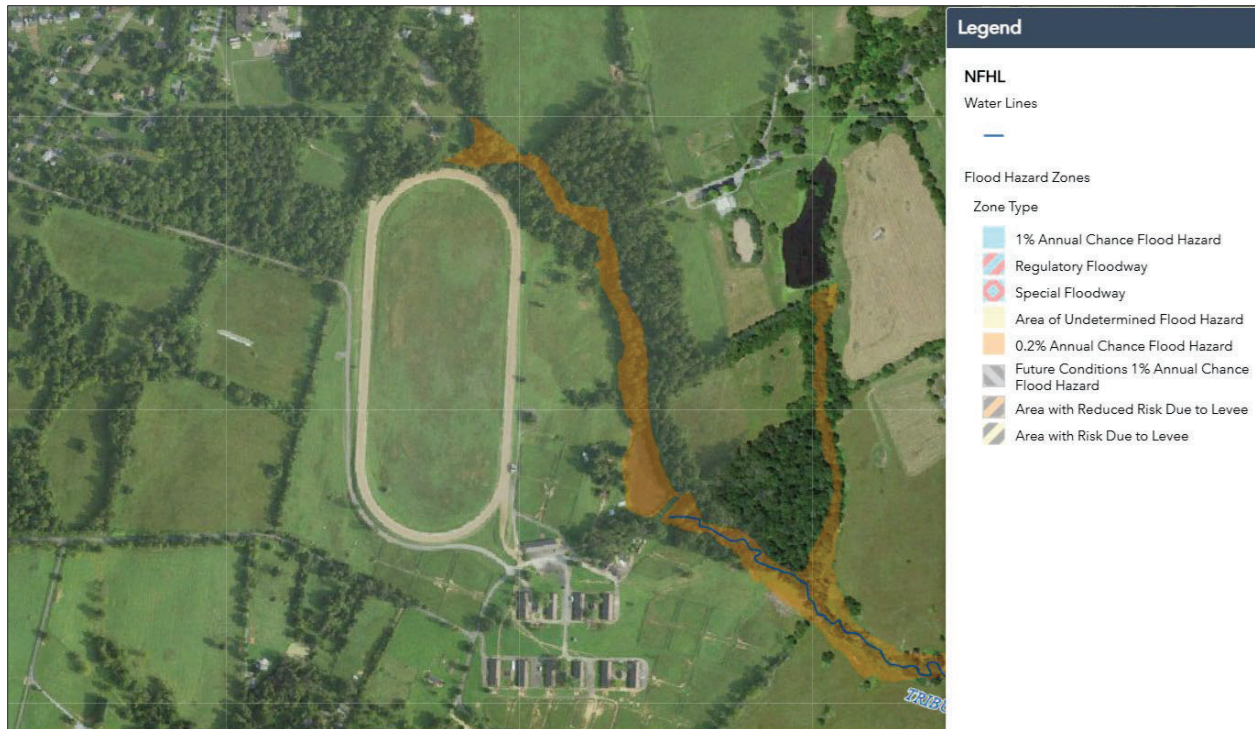


Figure 8. Flood hazard areas at the Middleburg Training Facility property (FEMA, 2025)

A USACE site visit in September 2025 identified four distinct wetlands on the MTC property. Two of these wetlands (Wetlands 1 and 2) are located within the horse track and do not appear to have a visible connection to WOTUS. Both are scrub-shrub wetlands, primarily influenced by surface water flow. Wetland 1, situated in the southwest corner of the track, drains southward through a culvert and covers approximately 0.17 acres. Wetland 2, located in the central-western portion of the track, drains eastward and covers approximately 0.1 acres.

In addition to the two wetlands within the horse track, there are two other wetlands on the property (Wetlands 3 and 4). Wetland 3 is a small, depressional wetland located in the northwestern portion of the property on the outskirts of a field, which was previously used for extracting clay. This wetland, also classified as scrub-shrub, is approximately 0.03 acres. It is an isolated wetland that, like the others, is surface water driven and lacks a visible connection to any WOTUS. Lastly, Wetland 4 is a scrub-shrub wetland located on the eastern portion of the property, just south of a forested area. This wetland connects to the unnamed tributary that flows from the pond into Goose Creek. Wetland 4, which covers approximately 0.18 acres, likely meets the definition of WOTUS since it connects to a perennial stream. An official determination of WOTUS will need to be made by USACE Regulatory to verify the findings from the site visit. The wetland delineation report is located in **Appendix C**.

3.2.6 Reasonably Foreseeable Effects of the Alternatives on Water Resources

3.2.6.1 Proposed Action

No effects will occur to water resources from the real estate acquisition. Short-term minor and long-term negligible adverse effects could occur from future improvements.

Potable water utility upgrades could potentially cause long-term negligible adverse effects to groundwater storage through possible increased consumption.

An increase in impervious surface area resulting from the construction of an indoor riding arena, a new covered hot walker, new parking areas, or other conversions of pervious to impervious surfaces would increase the overall impervious surface area, which in turn is expected to alter stormwater runoff patterns on the property. The addition of an approximately 150-foot x 250-foot (37,500 SF, or 0.86 acre) covered arena and a covered, 8-horse hot walker (approximately 4,070 SF) would likely be the most sizeable contributions to increased impervious area of any of the potential future improvement projects. The property's conservation easement caps the cumulative impervious surface area to 1.5 percent of the entire 149-acre site, or 95,753 SF, of which all but 4,246 SF is already deemed impervious. Any potential site improvements of this scale would require collaboration between the Army and ODLC to ensure compliance with the restrictions of the conservation easement.

Any changes to stormwater runoff patterns on the MTC property are anticipated to be minimal, as the proposed improvements would not significantly increase the volume or flow of stormwater to surrounding areas or downstream to the unnamed tributary of Goose Creek, because these facilities would be designed to appropriate local, state, and federal stormwater management standards.

All required federal, state, and local permits, including those pertaining to erosion and sediment control and stormwater management, as outlined in Chapter 1096, *Erosion and Stormwater Management*, of the Loudoun County Code of Ordinances, will be obtained prior to the commencement of any land-disturbing activities on the property. Erosion and sediment control must comply with requirements set forth under the Virginia Erosion and Stormwater Management Act, as administered by the DEQ under its Virginia Stormwater Management Program, and as implemented and enforced by the Loudoun County Ordinance. Therefore, adverse effects to surface water resources from construction would be short-term and minor. Efforts will be made to avoid or minimize adverse effects to water resources to the maximum extent practicable. Where such effects are unavoidable, mitigation strategies will be developed as needed during preparation of the ADP and the associated NEPA process.

Potential improvements to the property are not expected to affect floodplains or wetlands. The conservation easement requires a 100-foot riparian buffer be maintained from the unnamed stream and the pond on the property. Grazing of livestock, new buildings or structures, storage, tree removal, and other earth-disturbing activities are prohibited within the buffer.

3.2.6.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects to water resources because no construction activities would take place. The property would continue operating with the conservation easement in place, which limits the amount of impervious surface to 1.5 percent of the property.

3.3 Biological Resources

3.3.1 Vegetation

Most of the property consists of mowed and maintained open space, pastures, and maintained lawn as well as cropland. Approximately 25 acres of the property are forested (Johnson, 2018) mainly within the riparian buffer along the unnamed stream. This region (Piedmont) is dominated by pine and mixed southern hardwoods (NABCI, 2021). A site visit by USACE biologists in September 2025 determined there are two mid-successional forest stands on the site: a bottomland hardwood stand in the stream's floodplain, and an oak/hickory stand covering a majority of the forested area.

More than 30 invasive plants have been found in Virginia's piedmont region. Some of the most common invasive plants in Loudoun County are the autumn olive (*Elaeagnus umbellata*), Bradford pear (*Pyrus calleryana*), Chinese privet (*Ligustrum sinense*), English ivy (*Hedera helix*), garlic mustard (*Alliaria petiolate*), Japanese barberry (*Berberis thunbergii*), Japanese honeysuckle (*Lonicera japonica*), Japanese stiltgrass (*Microstegium vimineum*), tree-of-heaven (*Ailanthus altissima*), and a perennial legume, sericea lespedeza (*Lespedeza cuneata*) (Loudoun County Government, 2025a). Plants documented during the September 2025 USACE field visit include Japanese stiltgrass, Chinese privet, wineberry (*Rubus phoenicolasius*), multiflora rose (*Rosa multiflora*), Asiatic bittersweet (*Celastrus orbiculatus*), Amur honeysuckle (*Lonicera maackii*), Japanese honeysuckle, garlic mustard, autumn olive, Japanese barberry, trifoliolate orange (*Poncirus trifoliata*), tree-of-heaven, lady's thumb (*Persicaria maculosa*), and winter creeper (*Euonymus fortunei*).

3.3.2 Fish and Wildlife Resources

There is various wildlife present in the rural areas of Loudoun County. Commonly found wildlife includes eastern gray squirrels (*Sciurus carolinensis*), rabbits (*Oryctolagus sp.*), raccoons (*Procyon lotor*), chipmunks (*Tamias sp.*), opossum (order *Didelphimorphia*), snakes (*Serpentes sp.*), birds (*Aves sp.*), red foxes (*Vulpes vulpes*), and white-tailed deer (*Odocoileus virginianus*) (Loudoun Wildlife Conservancy, 2025).

Common birds in Loudoun County include the turkey vulture (*Cathartes aura*), red-bellied woodpecker (*Melanerpes carolinus*), downy woodpecker (*Dryobates pubescens*), great crested flycatcher (*Myiarchus crinitus*), blue jay (*Cyanocitta cristata*), Carolina chickadee (*Poecile carolinensis*), tufted titmouse (*Baeolophus bicolor*), Carolina wren (*Thryothorus ludovicianus*), gray catbird (*Dumetella carolinensis*), cedar waxwing (*Bombycilla cedrorum*), Eastern towhee (*Pipilo erythrophthalmus*), chipping sparrow (*Spizella passerina*), Northern cardinal (*Cardinalis cardinalis*), and American goldfinch (*Spinus tristis*) (Loudoun Wildlife Conservancy, 2014).

Migratory birds that may occur on the MTC property include the black-billed cuckoo (*Coccyzus erythrophthalmus*), cerulean warbler (*Setophaga cerulea*), chimney swift (*Chaetura pelagica*), grasshopper sparrow (*Ammodramus savannarum perpallidus*), Kentucky warbler (*Geothlypis formosa*), prairie warbler (*Setophaga discolor*), red-headed woodpecker (*Melanerpes erythrocephalus*), rusty blackbird (*Euphagus carolinus*), and wood thrush (*Hylocichla mustelina*). All of these birds are considered birds of conservation concern (BCC) (USFWS, 2025a). A BCC designation can be assigned for any of the following reasons: documented or apparent population declines; small or restricted populations; dependence on restricted or vulnerable habitats; or

overabundant to the point of causing ecological and economic damage. Birds are given the BCC designation within certain Bird Conservation Regions. The MTC property falls within the Piedmont Bird Conservation Region (NABCI, 2021).

Bald eagles (*Haliaeetus leucocephalus*) also have the potential to be present on the MTC property. While they are not BCC in this area, they are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668d). Although there are no recorded sightings of bald eagles on the MTC property, bald eagles have been observed in nearby locations including the Goose Creek Bridge Historic Park, along Saint Louis Road, and on the Foxcroft campus (Cornell University, 2025; iNaturalist, 2025).

Goose Creek received an ‘acceptable’ ecological condition rating score in Spring 2024, based on findings from benthic macroinvertebrate surveys (Loudoun Wildlife Conservancy, 2025). Macroinvertebrates that may be found in Goose Creek and its tributaries include the larvae of stoneflies (*Plecoptera*), mayflies (*Ephemeroptera*), and dobsonflies (*Megaloptera*), as well as water-penny beetles (*Psephenidae*) (Loudoun Wildlife Conservancy, 2025). Top fish species in Goose Creek and its tributaries include smallmouth bass (*Micropterus dolomieu*), largemouth bass (*Micropterus nigricans*), and channel catfish (*Ictalurus punctatus*) (FISHBRAIN, n.d.).

3.3.3 Threatened and Endangered Species

The Endangered Species Act (ESA) was passed by Congress in 1973 with the purpose to protect and recover imperiled species and the ecosystems upon which they depend. Under the ESA, an “endangered species” is defined as any species in danger of extinction throughout all or a significant portion of its range. A “threatened species” is defined as any species likely to become an endangered species in the foreseeable future. The ESA also provides the development of recovery plans describing the steps needed to restore a species population and their habitat. Section 7(a)(2) of the ESA requires that for actions authorized, funded, or carried out by a Federal agency, that the agency shall, in consultation with USFWS, ensure that the action is not likely to jeopardize the continued existence of any endangered or threatened species or result in the destruction or adverse modification of the critical habitat of the endangered or threatened species.

The USFWS Information for Planning and Consultation (IPaC) online tool was used to generate an official species list for the MTC property to facilitate compliance with Section 7 of the ESA. Based on the findings of the IPaC, no federally-listed species are anticipated to occur on the MTC property. The following species that are proposed for listing under the Endangered Species Act (ESA) have the potential to occur on the property: proposed endangered tri-colored bat (*Perimyotis subflavus*), proposed threatened green floater clam (*Lasmigona subviridis*), and the proposed threatened monarch butterfly (*Danaus plexippus*) (**Appendix B**) (USFWS, 2025a).

Tri-colored Bat. During the warmer months, tri-colored bats primarily roost among live and dead leaf clusters of deciduous hardwood trees. Tri-colored bats forage in treetops, in partly open space with large trees, over water, and at the edges of forests. They avoid deep woods and open fields (USFWS, 2024). When not hibernating, these bats are solitary but are sometimes found in small colonies in hollow trees (VADWR, 2024). Tri-colored bats hibernate in limestone caves and abandoned mines in the winter (USFWS, 2024). The tri-colored bat is commonly found in caves throughout Virginia, yet it is considered a state-endangered species (VADWR, 2024). Tri-colored

bats have been documented in Loudoun County (Loudoun Wildlife Conservancy, 2023). The MTC property provides suitable habitat for the tri-colored bat during the warmer months, with open wooded areas serving as potential roosting sites.

Green Floater. This small freshwater clam is found in small to medium-sized streams throughout the eastern U.S. Favoring areas with low current and good water quality, these clams are typically found in small pools or calm areas of streams. They prefer sand or small gravel substrates where they can establish a foothold and bury themselves (USFWS, 2025b). The green floater has been documented in Goose Creek, which is located approximately 1.5 miles downstream of the MTC property (Loudoun County Government, 2021). The green floater has a state conservation status of imperiled (VADCR, 2025). Despite the presence of suitable habitat, agricultural and urban runoff likely preclude the green floater from inhabiting the unnamed stream, as it is highly sensitive to these disturbances.

Monarch Butterfly. Monarch butterflies are expected to be on the MTC property from May through September. The peak period to see monarchs in Northern Virginia is when they migrate through the area in large numbers from mid to late September (Fairfax County Government, n.d.). The monarch has a specific host plant, milkweed, which provides the butterfly's larvae and caterpillars with food. Although not documented at the site, several species of milkweed could occur on the property, which are frequently found along sunny roadsides, fence lines, and in fields, prairies, and pastures (Bird Watching HQ, 2024).

3.3.4 Reasonably Foreseeable Effects of the Alternatives on Fish and Wildlife Resources

3.3.4.1 Proposed Action

The natural resources found within the MTC have received protection through the conservation easement recorded in 2018. In addition, the Army plays a key role in stewarding the nation's natural resources through compliance with the Sikes Act, which directs the Secretary of Defense, in partnership with USFWS and state fish and wildlife agencies, to carry out a program for the conservation and rehabilitation of natural resources on military installations. The Sikes Act allows for the sustainable, multipurpose use of natural resources subject to military security and safety requirements. Installations primarily accomplish this through development of an Integrated Natural Resources Management Plan (INRMP). Once the MTC is acquired by the Army, the provisions of the Sikes Act would apply and JBM-HH would likely work to develop an INRMP, in conjunction with the ADP, to protect and manage the natural resources found on this property while also ensuring the Caisson Detachment can meet its mission.

Vegetation. It is expected that the open space, pastures, and landscaped lawn will continue to be mowed and maintained following acquisition of the MTC property. The cropland may also be mowed and maintained or left untouched until the Army completes the ADP process to determine future use of the cropland. No trees will be removed from the riparian buffer as this activity is prohibited under the conservation easement except as necessary for: (a) the removal of invasive species, (b) removal of dead, diseased or dying trees, or (c) removal of trees that pose a threat to human health or safety. Individual trees and shrubs outside of the riparian buffer could be removed for the proposed improvements and/or for security purposes. Therefore, the proposed action may

result in minor adverse effects to vegetation on the property outside of the riparian buffer. As required by EO 13112, Invasive Species, the Army will not introduce invasive species and will control the spread of invasive species on the property.

Fish and Wildlife. The acquisition of the MTC property could lead to an uptick in the daily operations of the facility, although the current usage by tenants training racehorses, particularly in the mornings, constitutes the current baseline against which this potential increase in noise and human activity would be gauged. Caisson training and routine day-to-day operations may result in increased noise and disturbances from vehicles, equipment, and personnel, which may affect any wildlife in the vicinity. However, these effects are expected to be minor in nature.

There would be minor and short-term adverse effects to wildlife due to construction noise and disturbance from equipment and construction personnel for those projects needed to accommodate the facility to the caisson mission. Wildlife including any migratory birds that may be present may temporarily avoid the property during construction and for a short period of time following construction. Once construction has ceased, wildlife would be able to return to that location. Construction noise and disturbance should not adversely affect squirrels, chipmunks, opossum, and racoon because these animals thrive and are accustomed to the noise and activity typical of urban environments. Potential effects to fish and macroinvertebrates include degraded water quality resulting from runoff associated with further development of the MTC property, potentially threatening their habitat. However, as stated in Section 3.2.6.1, changes in stormwater runoff are anticipated to be minimal, as the proposed improvements will not significantly increase the volume or flow of stormwater. Therefore, any adverse effects to fish and macroinvertebrates will be minor.

Tri-Colored Bat. The MTC property provides suitable habitat for the tri-colored bat during the warmer months, with open wooded areas serving as potential roosting sites. Using the USFWS *Northern Long-eared Bat and Tri-Colored Bat Range-wide Determination Key (Dkey)*, the Army determined that the proposed action may affect but is not likely to adversely affect the tri-colored bat (**Appendix B**). The proposed action will not result in the destruction or alteration of suitable forested habitat in ways that would kill or injure bats. Additionally, trees that may be used as roost sites by the tri-colored bat will not be removed or destroyed. However, the proposed action may involve the modification and/or removal of manmade structures being used as roost sites. Construction activities generate noise, which could disturb bats, potentially leading to roost abandonment, avoidance of foraging areas, or hearing damage. Furthermore, excessive noise could interfere with the bats' echolocation and communication, impairing their ability to navigate and find food.

The MTC property is located in the tri-colored bat 'consultation range' (VADWR, 2025). The consultation range represents areas in Virginia, as identified by the USFWS Environmental Conservation Online System (ECOS), where consultation is required for this species under the ESA (VADWR, 2025; USFWS, n.d.-b). USACE submitted a Self-Certification Letter and review package to USFWS on 7 January 2026 (Appendix B). If the proposed action is determined to have potential adverse effects on the tri-colored bat, JBM-HH will work with USFWS to identify appropriate mitigation measures during follow-on NEPA analyses.

Green Floater. Potential effects to the green floater include degraded water quality resulting from runoff associated with further development of the MTC property, potentially threatening their habitat. As conditions change, green floaters in most places are unlikely to be able to disperse to new habitats (USFWS, 2023). However, as stated in Section 3.2.6.1, changes in stormwater runoff are anticipated to be minimal, as the proposed improvements will not significantly increase the volume or flow of stormwater. Using the USFWS *Northeast Endangered Species Dkey*, USACE determined that the proposed action will have no effect on the green floater. The USFWS determination letter, dated 7 January 2026, is included in Appendix B. No further consultation/coordination with USFWS for the proposed action is required for the green floater.

Monarch Butterfly. The monarch is expected to be present at the MTC property from May to September and may be in large numbers in mid to late September. Milkweed could be present along roadsides, fence lines, and in pastures. The Army has determined that the proposed action may affect but is not likely to adversely affect the monarch butterfly. Potential improvements to the property, including new security fencing around the property and roadwork, may result in the temporary loss of milkweed. USACE submitted a Self-Certification Letter and review package to USFWS on 7 January 2026 (Appendix B). If the proposed action is determined to have potential adverse effects on the monarch butterfly, JBM-HH will work with USFWS to identify appropriate mitigation measures during follow-on NEPA analyses.

3.3.4.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. It is expected that the open space, pastures, and landscaped lawn will continue to be regularly mowed and maintained. Vegetation would continue to be managed in accordance with the stipulations of the conservation easement. Minor disturbances to wildlife will continue as a result of ongoing day-to-day activities on the MTC property. No effects are expected to threatened and endangered species because no improvements would be made on the property.

3.4 Cultural Resources

This section describes cultural resources within the project's area of potential effects (APE) and describes the potential effects that could occur to cultural resources that are either eligible for or listed in the National Register of Historic Places (NRHP).

Cultural resources are expressions of human activity, use, or occupation. They can be defined as manifestations of human culture and history in the physical environment such as precontact or historic period archaeological sites, buildings, structures, objects, districts, sacred sites, landscapes, among others. Cultural resources may also include aspects of natural features, plants, and animals that are deemed important or significant to a group or community. It is important to note that historic properties, as defined in 36 Code of Federal Regulations (CFR) Part 800, the implementing regulations of Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, are cultural resources that are eligible for or listed in the NRHP. Additionally, to be considered a historic property, the resource must meet at least one of the following significance criteria:

- Criterion A – Association with events that have made a substantial contribution to the broad patterns of our history; or,

- Criterion B – Association with the lives of persons substantial in our past; or,
- Criterion C – Embodiment of the distinctive characteristics of a type, period, or method of construction, or that represents the work of a master, or that possess high artistic value, or that represent a substantial or distinguishable entity whose components may lack individual distinction; or,
- Criterion D – Have yielded, or may be likely to yield, information important in prehistory or history.

A historic property must also possess enough integrity to portray its significance. A resource that retains integrity will embody several, and usually most, of the seven aspects of integrity. These aspects include location, design, setting, materials, workmanship, feeling, and association.

Section 106 of the NHPA requires consultation with the SHPO, federally-recognized Native American tribes, and other interested consulting parties for proposed federal actions that may affect historic properties. The Virginia DHR is designated as the SHPO for Virginia. JBM-HH initiated consultation via letter dated 20 November 2025, with the Virginia DHR, Delaware Nation, Delaware Tribe of Indians, Catawba Indian Nation, Monacan Indian Nation, Eastern Shawnee Tribe of Oklahoma, Pamunkey Indian Tribe, Loudoun County, and the Virginia Piedmont Heritage Area. Consultation letters and responses are included in **Appendix B**.

As part of this assessment, an APE was defined to identify any potential historic properties that could be affected by the proposed action. The APE includes those areas where direct effects are proposed and areas within which the undertaking may directly or indirectly cause alterations in the character or use of historic properties, including visual effects. For this project, the APE includes the MTC boundary to be acquired by the Army.

Previously identified cultural resources and surveys within the APE were assessed using the Virginia Cultural Resources Information System (V-CRIS), DHR’s online cultural resources information system. The assessment also included previously identified resources and surveys within 0.5 miles of the APE to further inform about local and regional context.

A review of V-CRIS indicates that 38 above-ground resources and 9 archaeological sites have been previously identified within or within 0.5 miles of the APE (**Table 3**). Seven of these, all above-ground resources, are within the APE boundary. Of the seven resources within the APE boundary, three are eligible for the NRHP and four have not been formally evaluated. Additionally, no National Historic Landmarks are located within the APE, in accordance with Section 110(k) of the NHPA.

Three cultural resources investigations have been conducted within 0.5 miles of the APE (**Table 4**), primarily consisting of compliance work for rezoning and development projects. Only one survey (Smith et al., 2004) has been conducted within the APE, focusing on recording historic African American architectural resources in Loudoun County; however, no resources were identified as part of that effort.

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Table 3. Above-Ground Resources and Archaeological Sites within 5 miles of the Area of Potential Effect

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
Upperville Battlefield (030-5440)	Eligible	Above-ground	<p>June 1863 battle site associated with Union attempts to pierce Confederate cavalry screens. The site is currently comprised of monuments and plaques, roadbeds, buildings, structures, and stone walls. It is eligible for the NRHP under Criteria A, B, and D.</p> <p>The majority of the APE is within this battlefield site; however, acquisition would not affect its integrity or character-defining features since property function and use would remain the same. Any future proposed developments would need to be evaluated for their effects on this historic resource.</p>	Yes
Huntland (053-0487)	Listed	Above-ground	<p>A 400-acre estate historically associated with foxhunting during the early twentieth century, Huntland is listed on the NRHP under Criterion A in the areas of Entertainment/Recreation and Agriculture, and under Criterion C for its quality of Colonial Revival elements and style and designed landscape. The resource's significance extends to 1962 when the property was used for international negotiations between Indonesia and the Netherlands.</p> <p>Huntland is over 2,000 feet northeast of the APE and visibly obscured by a wooded buffer. The proposed project would not affect this resource.</p>	No
J. Carter House (053-1032)	Not evaluated	Above-ground	<p>Early nineteenth century stone dwelling with an associated springhouse and outbuilding. This resource is outside of the APE and won't be affected by the proposed project.</p>	No
Wilma Warburg Tenant House (053-1033)	Not evaluated	Above-ground	<p>Early nineteenth century brick dwelling showcasing vernacular architecture in the region. According to V-CRIS, a 2002 aerial view of the building shows it as longer extant. This resource is outside of the APE and won't be affected by the proposed project.</p>	No
St. Louis New School Baptist Church (053-1049)	Not evaluated	Above-ground	<p>Late nineteenth century rural Gothic Revival stone church associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.</p>	No

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
Alphabet Soup (053-1050)	Not evaluated	Above-ground	Early twentieth century dwelling of the Colonial Revival style. The resource boundary as shown in V-CRIS abuts the northeastern extent of the project area; however, proposed acquisition would not affect this resource.	No
Windover Farm (053-5047)	Not evaluated	Above-ground	Early twentieth century horse boarding complex featuring a main dwelling, stables, outbuildings, and gardens, among others. This resource is outside of the APE and won't be affected by the proposed project.	No
Battle of Middleburg (053-5057)	Potentially eligible	Above-ground	1863 Cavalry encounter associated with the American Civil War. This resource is outside of the APE and won't be affected by the proposed project.	No
Middleburg Vineyards (053-5059)	Eligible	Above-ground	Early nineteenth to twentieth century landscape of stone buildings and structures eligible for the NRHP under Criterion C for its architectural significance. This resource abuts the southern extent of the APE; however, proposed acquisition would not affect this resource. Any future proposed development would need to be evaluated to assess effects on this resource.	No
St. Louis Historic District (053-5099)	Eligible	Above-ground	A 91-acre community founded by formerly enslaved African Americans significant under Criterion A for its association with African American heritage, and under Criterion C for its architecture. Portions of this resource are within the APE along Training Center Lane; however, proposed acquisition would not affect this resource. Any future proposed developments would need to be evaluated to assess effects on this resource.	Yes
Irene H. Trammel House (053-5099-0002)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0003)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0004)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0005)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
Addie Hamlin House (053-5099-0006)	Not evaluated	Above-ground	School house associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
M. Louise Grant House (053-5099-0007)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Dwight Strickland House (053-5099-0008)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Store (053-5099-0009)	Not evaluated	Above-ground	Commercial store associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Banneker School (053-5099-0010)	Potentially eligible	Above-ground	School associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Madison House (053-5099-0011)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Don E. Mattingly, Jr. House (053-5099-0012)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0013)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0014)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Willie Smith and Grace Jackson House (053-5099-0015)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
Charles and Armeata Basil House (053-5099-0016)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-5099-0017)	Not evaluated	Above-ground	Dwelling associated with the St. Louis Historic District. This resource is within the APE; however, V-CRIS indicates that it has been demolished. The proposed project will not affect this resource.	Yes

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
House (053-5872)	Not evaluated	Above-ground	Mid-twentieth century traditional cottage dwelling. This resource is within the APE. Any future proposed developments would need to be evaluated to assess effects on this resource.	Yes
Millville School (053-5873)	Not evaluated	Above-ground	Early twentieth century wood frame school building. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-6017)	Not evaluated	Above-ground	Mid-twentieth century wood frame dwelling. This resource is outside of the APE and won't be affected by the project.	No
Unison Battlefield Historic District (053-6087)	Listed	Above-ground	November 1862 battlefield associated with the American Civil War featuring farmsteads, roads, fences, and buildings. It is listed on the NRHP under Criterion A for its association with military history and under Criterion D for its intact archaeological integrity. This resource is outside of the APE and won't be affected by the proposed project	No
Faygate (053-6243)	Not eligible	Above-ground	1830s stone farmhouse with numerous renovations and additions. The resource was recommended not eligible for the NRHP due to significant alterations that have affected its historical integrity. This resource is not within the APE.	No
Elizabeth Alexander Farm (053-6245)	Eligible	Above-ground	Late nineteenth to mid-twentieth century eclectic stone farm dwelling with Colonial Revival elements. It is eligible for the NRHP under Criterion A for agricultural significance and Criterion C for its representation of the hygienic dairy farming era in Virginia. This resource abuts the eastern extent of the APE; however, proposed acquisition would not affect the resource. Any future proposed development would need to be evaluated to assess effects on this resource.	No
Van Wie Farm (053-6309)	Not evaluated	Above-ground	Contributing resource to both the Upperville Battlefield and Unison Battlefield Historic Districts. The Van Wie property was situated between Union and Confederate troops and contributes to the continuity of preservation of open-space and landscape. This resource also contributes to the historic, cultural, and scenic features of the Journey Through Hallowed Ground National Heritage Area. This resource is outside of the APE and won't be affected by the proposed project.	No
House (053-6472)	Not evaluated	Above-ground	Mid-twentieth century frame dwelling. V-CRIS indicates that this resource has been demolished since 2017. This resource is not within the APE.	No

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
Southwest Loudoun Rural Road Network (053-6564)	Eligible	Above-ground	Mid-eighteenth to mid-twentieth century road network eligible for the NRHP under Criterion A for its association with the development of Northern Virginia and Loudoun County, and under Criterion C for its preservation of layout and road materials. Since this is a county-wide resource, it encompasses the entire APE; however, the proposed project would not adversely affect this resource since there would be no change in use or function of the property or its roads. Any future proposed developments, especially of roadways, would need to be evaluated to assess effects to the historic road network.	Yes
44LD1197	Not evaluated	Archaeological	Late nineteenth to early twentieth century African American domestic site. This resource is outside of the APE and would not be affected by the proposed project.	No
44LD1278	Not evaluated	Archaeological	Mid-nineteenth to mid-twentieth century domestic site. This resource is outside of the APE and would not be affected by the proposed project.	No
44LD1400	Not evaluated	Archaeological	Precontact lithic scatter documented by surface finds along a modern road. This resource is outside of the APE and won't be affected by the proposed project.	No
44LD1401	Not evaluated	Archaeological	Precontact (Middle Archaic) lithic scatter overlooking Beaverdam Creek. This resource is outside of the APE and won't be affected by the proposed project.	No
44LD1409	Not evaluated	Archaeological	Precontact lithic scatter documented around a drainage of Beaverdam Creek. This resource is outside of the APE and won't be affected by the proposed project.	No
Middleburg Preserve I (44LD1883)	Not evaluated	Archaeological	Late nineteenth to mid-twentieth century domestic scatter associated with a former farmhouse. This resource is outside of the APE and won't be affected by the project.	No
Middleburg Preserve 2 (44LD1884)	Not evaluated	Archaeological	Late nineteenth to mid-twentieth century domestic scatter associated with the African American community of St. Louis. This resource is outside of the APE and won't be affected by the proposed project.	No
Robinson-Howard Cemetery (44LD1945)	Not evaluated	Archaeological	Late nineteenth to mid-twentieth century African American cemetery. This resource is outside of the APE and won't be affected by the proposed project.	No

Resource Name (VDHR ID No.)	NRHP Eligibility	Resource Type	Description	Within APE
44LD2038	Not evaluated	Archaeological	Late nineteenth to mid-twentieth century domestic site associated with the African American community of St. Louis. This resource is outside of the APE, immediately north of Training Center Lane, and won't be affected by the proposed project.	No
Journey Through Hallowed Ground National Heritage Area	Not evaluated	Above-ground	A multi-state area that tells the history of the American Civil War through battlefields, historic sites, landscape, viewsheds, and other cultural features and elements. While the APE is within this resource, the proposed project will not affect the characteristics that qualify it as a National Heritage Area; it would not alter historic routes; it would not affect any of the historical themes that contribute to its national significance; and it would not alter or affect its use as a recreational resource.	Yes
Virginia Piedmont Heritage Area	Not evaluated	Above-ground	A historical region comprising Loudoun, Clarke, Warren, Fauquier, and Prince William Counties, the heritage area highlights the broad history of the Virginia Piedmont from thousands of years ago to today. While the APE is within this resource, the proposed project will not affect the characteristics that qualify it as a heritage area; it would not alter historic routes; it would not affect any of the historical themes that contribute to its regional significance; and it would not alter or affect its use as a recreational resource.	Yes
Mount Zion Memorial Park	Not evaluated	Above-ground	An early twentieth century to present cemetery located within the St. Louis Historic District. This resource is outside of the APE approximately 500 feet north of Training Center Lane and separated by a vegetated buffer. It won't be affected by the proposed project.	No

Table 4. Cultural Resource Investigations

Survey Title (Report No.)	Author (Organization); Year	Survey Type	Description
Loudoun County African-American Historic Architectural Resources Survey (LD-162)	Kathryn G. Smith et al., 2004	Above-ground	Architectural investigation and inventory of historic African American resources within Loudoun County. No resources were identified within the APE.
Phase I Archaeological Survey and Cemetery Delineation at the Proposed Middleburg Preserve Residential Development, Snake Hill Road, Middleburg, Loudoun County, Virginia (SBPR-2019-004) (LD-524)	Karl Franz and Lyle Torp (The Ottery Group); 2019	Archaeological	<p>Phase I archaeological survey and cemetery delineation for a proposed 19.4-acre residential development along Snake Hill Road, approximately 1,050 feet north of the APE. Franz and Torp excavated 356 shovel test pits, identifying two mid-twentieth century domestic sites; however, these were recommended insignificant due to low artifact density and disturbed contexts. Franz and Torp delineated the Robinson-Howard Cemetery based on historic property records and mechanical stripping of topsoil. 23 grave shafts were identified during the survey.</p> <p>It should be noted that the VDHR has not formally evaluated this report since the identified archaeological sites have not been recorded in the VDHR database.</p>

Survey Title (Report No.)	Author (Organization); Year	Survey Type	Description
Phase IB Cultural Resource Survey of the Banneker Elementary School Project in Loudoun County, Virginia (LD-662)	Colleen Betti and Samantha Mathias (Dovetail Cultural Resource Group); 2023	Above-ground and archaeological	<p>Phase I archaeological and above-ground survey of the 19.3-acre Banneker Elementary School property for potential rezoning and development. Betti and Mathias documented the Banneker Elementary School and recommended it potentially eligible for the NRHP. Additionally, the school is a contributing resource to the NRHP-eligible St. Louis Historic District.</p> <p>Betti and Mathias' archaeological survey consisted of pedestrian reconnaissance and the excavation of 112 shovel test pits in the southern wooded portion of the project area (north of Training Center Lane). The authors contributed further documentation to Site 44LD2038, a late nineteenth to mid-twentieth century domestic site associated with the African American St. Louis community.</p>

No archaeological investigations have been conducted within the APE, so there may be the potential for archaeological sites within areas that have not been previously disturbed.

Correspondence received from the Loudoun County Department of Planning and Zoning on 4 December 2025 indicates the county's records note the presence of the Alfred Hooe cemetery on the property line between the MTC and the Mt. Zion Baptist Church. On 12 December 2025, JBM-HH received a letter from Ms. Donna Bohanon, Chair of the Black History Committee of the Friends of the Thomas Balch Library stating, "a historic Black cemetery is situated between Training Center Lane and the Mt. Zion Baptist Church parcel" and recommending, "the cemetery be delineated by professional archaeologists approved by the county's Department of Planning and Zoning, the boundaries marked, and a barrier of some sort, such as a fence, erected to protect the cemetery from accidental or deliberate intrusion." JBM-HH recognizes that additional desktop and archival research, along with potential archaeological investigations, may be needed to confirm that gravesites belonging to African American residents of the historic Middleburg and St. Louis communities are located in a previously unrecorded and un-delineated portion of the Robinson-Howard Cemetery that extends into the MTC APE.

Army Regulation (AR) 290-5, Army Cemeteries, outlines how the Army manages cemeteries, including private cemeteries on Army property, as well as cemeteries not otherwise defined. Any action regarding the potential unmarked burials on MTC would fall under the authority of this regulation once the property is under Army management.

3.4.1 Reasonably Foreseeable Effects of the Alternatives on Cultural Resources

3.4.1.1 Proposed Action

Acquisition of the property would have no effects on cultural resources because the use, function, integrity, and character of the property would remain the same. With regard to long-term planning, Army acquisition would require compliance with Section 110 of the NHPA, Section 6-4 of AR 200-1, and AR 290-5. Section 110 stipulates that federal agencies identify and evaluate historic properties under their jurisdiction. Section 6-4 states that an Army historic preservation program should treat all resources 50 years old or older as eligible for the NRHP until determined otherwise. It also specifies that the identification, evaluation, and treatment of historic properties should be included as part of the overall program. AR 290-5 states, "The Army has certain responsibilities for those interred in private cemeteries that are now on Army land. These responsibilities include accommodating existing rights of access, visitation, and interment."

Construction of proposed improvements would require various surveys and additional consultation under Section 106 of the NHPA to assess their potential effects on cultural resources. These include, but are not limited to:

- A formal determination of eligibility and architectural resources survey of the MTC to assess effects of proposed developments given the region's equestrian and agricultural history.
- Archaeological investigations in areas not previously disturbed due to the region's military history and previously identified archaeological sites.
- One of the specific purposes of the conservation easement on the MTC property is to preserve its scenic character. Located within the viewshed of the Journey Through

Hallowed Ground National Heritage Area, a 75-mile corridor through Virginia's countryside, the property offers the public continued opportunities to enjoy and appreciate its aesthetic value. As such, a viewshed analysis is needed to assess potential effects to the Journey Through Hallowed Ground National Heritage Area.

- In addition, viewshed analyses will be necessary to assess effects to the Upperville Battlefield, Alphabet Soup, Middleburg Vineyards, St. Louis Historic District, Elizabeth Alexander Farm, and the Virginia Piedmont Heritage Area.

By letter dated 16 December 2025, the Virginia DHR concurred that the Army's proposed undertaking, the acquisition of the MTC, is not likely to adversely affect properties that are listed or eligible for listing in the NRHP, but affirmed that indirect, long-term, and cumulative effects of the undertaking should be considered by the Army and that early consultation during the master planning process is strongly encouraged.

3.4.1.2 No-Action Alternative

Under the No-Action Alternative, there would be no effects to cultural resources.

3.5 Socioeconomics

Loudoun County, in which the MTC is located, is directly west of Fairfax County and approximately 25 miles from Washington, D.C. Loudoun County is known as "Data Center Alley" and contains the largest concentration of data centers in the world (Loudoun, 2025). The Information and Communications Technology cluster is the largest industry in the county, employing over 23,000 people. Loudoun County is home to a highly educated workforce, with over 60% of residents holding a bachelor's degree or higher and a median home price of \$701,000 (USCB, 2024).

While the technology sector and proximity to Dulles International Airport and Washington, D.C. heavily influences the eastern portions of the county, Loudoun also has a strong agricultural sector with nearly 1,400 farms. This has also helped it become a major tourist destination, with over \$1.7 billion in annual economic impact from domestic tourism (Loudoun, 2025).

Loudoun County, Virginia is known as the heart of Virginia's horse country, supporting equine sports of various kinds, including steeplechase, fox hunting, eventing, polo, dressage, and "flat track" racing, to name a few. Loudoun County Equine Alliance states that the equine industry is Loudoun County's largest agricultural employer, providing approximately \$180 million in annual revenue and thousands of jobs directly connected to the care and training of equines and the operation of stables and equine sport facilities, as well as to the associated agrotourism business generated from through the overall agricultural ambiance of the area (Loudoun County Equine Alliance, n.d.).

According to the Virginia Equine Alliance, a 2021 economic impact study conducted by Chmura Consulting showed new growth and vitality of the horse racing industry (all racing types). The Alliance also states that the Virginia Thoroughbred Association's Certified Residency program attracts approximately 700 young horses a year to participating Commonwealth farms and training centers located around the state. The certified residency program provides financial incentives to owners and breeders to stable their young horses in Virginia, which in turn generates nearly six dollars of economic impact for every dollar invested (The Racing Biz, 2024). Incentive programs

like this bring money into the region, contributing to local spending in vet care, farriers, feed, and taxes, and allow businesses to hire employees and invest in facility improvements.

Northern Virginia's renowned "Horse Country," centered in Middleburg, attracts the horse industry with key training grounds like the MTC and farms such as Centennial Farms, Morningside Training Farm, and Rokeby Stables. MTC serves as a training ground for the nearby 65-acre Centennial Farms, a prestigious national racing and breeding partnership founded in 1982. The MTC also leases its barns to numerous top-tier trainers, such as Neil Morris.

In addition to the MTC, Cooney Racing Stables is a racing and training facility at Walnut Hall Farm in Boyce, VA, approximately 23 miles (40 minutes) away with a 5/8-mile track. Morningside also features a 5/8-mile track in The Plains, approximately 18 miles (30 minutes) south of Middleburg. Braeburn Training Center is a Virginia Certified Farm (Virginia Residency Program), located in Crozet, approximately 110 miles (2 ½ hours) from MTC with a 11/16-mile track. The MTC is near the world-class Marion duPont Scott Equine Medical Center in Leesburg, a leading equine veterinary hospital and research facility affiliated with Virginia Tech.

Although the Northern Virginia region contains a limited number of traditional racetracks, it serves a crucial function in the lifecycle of thoroughbred horses. This function primarily involves the raising and preparation of horses for their eventual entry into official racing events at established racing track venues, such as Colonial Downs, located in New Kent, Virginia, southeast of Richmond, approximately 138 miles from MTC.

The property is located outside of the town of Middleburg, Virginia, whose total population is 793 and the median age is 55. Approximately 16 percent of households have one or more people that are 18 years old and under. Households with one or more people 60 years old and over is 63% (American Community Survey Data, 2024).

3.5.1 Reasonably Foreseeable Effects of the Alternatives on Socioeconomics

3.5.1.1 Proposed Action

Under the Proposed Action, the subject property would be repurposed to support the U.S. Army Caisson Platoon's equine operations, which include the daily care, specialized training, and pasturing of the caisson herd. This change in use would result in a long-term, minor, adverse socioeconomic impact. The primary adverse effect stems from the displacement of commercial trainers and support staff associated with the property's current use as a flat-track racehorse training facility supporting a number of well-established stables in the region.

However, the Proposed Action would also ensure a degree of economic continuity. The fundamental requirements for equine care would persist, sustaining the demand for local support services such as veterinary care, farrier services, and the regular delivery of agricultural goods like feed, hay, and bedding. This would maintain a segment of the secondary economic activity currently associated with the property.

Furthermore, the proposed land use would be consistent with the established, highly-valued rural and equestrian character of the region. The area is a well-known center for diverse equestrian disciplines beyond flat-track racing, including a prominent steeplechase racing sector. Major regional events like the Middleburg Spring Races at Glenwood Park, Middleburg, and the Virginia Gold Cup races at the Great Meadow in The Plains highlight the strength of this alternative equestrian economy, which would be unaffected by the Proposed Action. Further, no additional military units outside of the Caisson Detachment would be stationed at the facility, limiting the scope of the federal presence to the specialized caisson mission.

3.5.1.2 No-Action Alternative

Under the No-Action Alternative, there would be no effects to socioeconomics; however, the risk of losing the facility as a training asset for the local racing community would remain if the current owner decides to pursue sale to another entity besides the Army.

3.6 Land Use

The MTC property is in the unincorporated community of St. Louis, Loudoun County, Virginia. It remains largely undeveloped with impervious surfaces covering only 1.47 percent of the land. The site is primarily used for forestry and agricultural purposes and includes natural features such as forests, riparian zones, cropland and pastureland (Johnson, 2018). According to county land use classifications, the majority of the property is classified primarily as “rural south,” while a long, narrow portion in the northwest is designated as “rural historic village.” Zoning for the property is primarily AR-2 (Agricultural Rural–2), with the exception of the northwest section which includes areas zoned CR-3 (Countryside Residential–3), CR-1 (Countryside Residential–1), and A-3 (Agricultural/Residential). Additionally, the protruding northern extension of the property boundary is also classified as A-3 (Loudoun County Government, 2025b).

A conservation easement on the entire 149-acre property is in place. The conservation easement is implemented in the form of a ‘deed of gift easement’ between the current property owner and ODLC. The conservation easement is intended to preserve and protect the agricultural, forest, watershed protection, natural habitat, and scenic uses at the property (Johnson, 2018).

3.6.1 Reasonably Foreseeable Effects of the Alternatives on Land Use

3.6.1.1 Proposed Action

The real estate acquisition of the property will have no effect on land use. The use of the land will be consistent with the No-Action Alternative. Construction of the proposed improvements will result in minor, short-term adverse effects from staging of heavy equipment and active construction on land that is classified as agricultural/residential.

3.6.1.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects on land use as no remediation, construction, or operation of the facility would take place.

3.7 Aesthetics and Visual Resources

Middleburg, Virginia is situated in a gently rolling countryside at the foothills of the Blue Ridge Mountains (**Figure 9**). The MTC property and surrounding lands are predominantly dedicated to agriculture and forestry uses, reflecting the region’s rural land use and natural character.

The MTC Property is used primarily for forestry and agricultural purposes, with features such as forests, riparian areas, cropland and pastures. A conservation easement places restrictions on impervious surface area and construction activities, ensuring the conservation values of the property are maintained. Furthermore, the MTC property adjoins two other conservation easements, which together with adjacent properties form a contiguous block of 1,166 acres of preserved land (Johnson, 2018). The open space and natural features provide an aesthetic value.



Figure 9. Middleburg Training Center property and surrounding land

3.7.1 Reasonably Foreseeable Effects of the Alternatives on Aesthetics and Visual Resources

3.7.1.1 Proposed Action

Long-term, minor adverse effects to aesthetics and visual resources on the MTC property may occur from the real estate acquisition due to the uptick in activity and the presence of additional vehicles, equipment, and personnel. Short-term, minor adverse effects to aesthetics and visual resources are anticipated from construction activities and the presence of large equipment. Under the conservation easement, no more than nine dwellings shall be constructed or maintained. The property currently has nine dwellings, so no further structures will be built.

3.7.1.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. The property would

continue to be operated as a horse training facility and there would be no additional effects to aesthetics and visual resources above the status quo.

3.8 Traffic

The MTC is located within the unincorporated community of St. Louis, Loudoun County, Virginia, and is mainly accessible through the major highway U.S. Route 50 East (US-50E) and St. Louis Road. US-50E has an annual average weekday daily traffic (AAWDT) of 8,000 vehicles in proximity to the property, and St. Louis Road carries an AAWDT of 3,300 (VDOT, 2023). The property is approximately 38 miles away from the ANC.

The parcel is bounded by Snake Hill Road to the north, Millville Road to the south, St. Louis Road to the east, and both Snake Hill Road and Millville Road to the west. All roads permit two-way traffic. Both Training Center Lane and Millville Road serve as the two main access points into the MTC.

Loudoun County Fire/Rescue Station 3 is located approximately 5.2 miles from the MTC. The nearest police station is situated in Middleburg, Virginia, which is approximately 5.1 miles from the MTC.

The MTC facility currently supports a racehorse training function. Traffic associated with day-to-day activities includes arrival/departure of horse owners, trainers, riders, and coaches for up to 220 equines, as that is the capacity of the eleven barns on the facility. These personnel result in privately owned vehicle (i.e., passenger cars/trucks) traffic, likely with only one to two occupants per vehicle. Activities also associated w/equine facilities involve horse transport vehicles that can range from 2-horse trailers to larger, semi-truck sized rigs that accommodate 8-10 horses. Delivery trucks for hay, feed, and bedding, along with other miscellaneous supplies, also travel to/from the site on a regular basis.

3.8.1 Reasonably Foreseeable Effects of the Alternatives on Traffic

3.8.1.1 Proposed Action

The Proposed Action would continue use of the property as an equine facility. The associated traffic patterns for operation of the Proposed Action would be largely consistent with the existing pattern of passenger vehicles, heavy duty trucks, delivery vehicles, and horse transport vehicles. The maximum herd size would be approximately 100 horses, less than half the existing maximum capacity. To support the caisson operations, two 11-horse squads would rotate to the interim stables at JBM-HH for ceremonial duties every two weeks. Daily personnel traveling to/from the facility would be limited to approximately 35 under most circumstances, and include approximately 15 Soldiers, 15 farm staff, and 5 Army trainers/leadership once the detachment is fully staffed. Periodic training events would bring up to 30 additional personnel to the site who would set up bivouac areas during the temporary training operations rather than result in an uptick in commuting traffic. Thus, while under most instances the Proposed Action has the potential to result in quieter conditions and less day-to-day traffic, periodic spikes in traffic may occur during quarterly training sessions, but these will be short-lived and planned. Therefore, the Proposed Action is expected to result in minor, long-term adverse effects to traffic; however, these effects are not anticipated to be significant beyond those already present under the No-Action Alternative.

The proposed improvements are expected to have short-term, minor adverse effects to traffic on local roads due to the increased number of vehicles. Slower and heavier construction vehicles may delay local traffic.

3.8.1.2 No-Action Alternative

Under the No-Action Alternative, no changes to existing use of the property and associated traffic patterns would occur.

3.9 Utilities

In the MTC, each building is equipped with either water, electricity, or both. There are 11 barns, 10 equipped with LED lighting, and the 11th having extra amenities, including an office and a laundry area. Each of the five tack buildings have electric and plumbing, with four exterior wash areas, air-conditioning and heat, and a tankless water heater. A shop building is also located within the study area, with water/sewage and electric. The residential building is also equipped with water/sewage, gas, and electricity (Craig Jones, 2023).

Water and Sewage

There are two functioning private wells located on the property. A well pressure tank building is available on site to store and regulate water pressure. A 480-volt three-phase power system is set up to pump water from the pond to the well pressure tank building, and then back to the well. Along the eastern boundary of the property, an approximate 2-acre pond supplies water to irrigate the track, and a fire hydrant system.

A private septic system to manage waste in residential buildings is also located on the property. Two septic systems are observed through Loudoun County's GIS database. The southern residential building has a conventional gravity septic system with a max flow of 400 gallons per day (Loudoun County Government. 2025b).

Gas

Natural gas is supplied to the MTC through Columbia Gas via an underground pipeline south of the property. The pipe runs east to west near the southern row of barns.

The Columbia Gas Pipeline is a key natural gas conduit stretching from the Gulf of America to New York, passing directly through the property. According to a 2006 boundary survey of the MTC property, the pipeline runs through the south side of the property between the two sets of barns to the southeast fence line to Millville Road. A small shed on the property houses equipment for the pipeline (**Figure 10**). While a minor leak was previously identified, it has since been addressed through the replacement of faulty components. Since that repair, no further issues have been reported. Additionally, the Columbia Gas Company conducts monthly inspections and maintenance at the site to ensure the pipeline remain in optimal condition (USACE, 2025).

Electricity

Dominion Energy supplies electricity to the MTC to meet electric demand. The residential building is equipped with a 200-amp electric panel.



Figure 10. Columbia Gas Pipeline shed on the Middleburg Training Center property.

3.9.1 Reasonably Foreseeable Effects of the Alternatives on Utilities

3.9.1.1 Proposed Action

While utility upgrades are not initially expected as part of the real estate acquisition, the ADP process will assess the need for potential improvements to the existing potable water, electricity, and natural gas systems. The ADP's recommendations, and any subsequent tie-in work, will be contingent upon a detailed evaluation of factors such as age, condition, and functionality of the current utilities, identified safety concerns, anticipated changes in demand, and adherence to local building codes. Importantly, any potential upgrades and tie-in work are not expected to result in more than minor adverse effects to biological resources, as most of the areas subject to disturbance from utility tie-in activities would already be part of the developed portions of the facility. Construction Best Management Practices (BMPs) to minimize the potential for erosion from ground disturbance for trenching or directional drilling would be employed. Any potential new lines would be placed to avoid traversing the forested areas to preclude clearing or other disturbance, as well as to avoid the floodplain, stream, and farm pond to the maximum extent practicable.

3.9.1.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects on utilities or utility infrastructure.

3.10 Hazardous, Toxic, and Radioactive Waste (HTRW)

Hazardous substances have not historically been stored or used at this property, and there are no records of releases of hazardous substances at the property. One 55-gallon drum of fence paint is stored in the maintenance building, and four 55-gallon drums of fence paint are stored in the Conex storage shed. Also stored in the maintenance building is a 55-gallon drum of motor oil. There are two above-ground storage tanks (ASTs) that store fuel for the farm equipment. Both ASTs were replaced in 2024 and are double-walled tanks and stored on a concrete pad. One AST has a 500-gallon capacity and stores gasoline, and the other has a 1,000-gallon capacity and stores diesel. Both ASTs are in good condition with no signs of leaks. An abandoned vehicle is present on the

property, and it is unknown if fuel or oil may have leaked out of the vehicle onto the soil. The USACE *Draft Environmental Condition of Property (ECP) Report* in **Appendix D** provides more details on the potential hazardous substances and materials that may be present prior to property acquisition (USACE, 2025).

3.10.1 Reasonably Foreseeable Effects of the Alternatives on HTRW

3.10.1.1 Proposed Action

To determine if there will be an affect from improvements on the property on HTRW, the USACE draft ECP report recommended an assessment of the materials (i.e., windows, tires, truck, utility poles, etc.) observed within the staging areas to determine if they contain polychlorinated biphenyls (PCBs) or polycyclic aromatic hydrocarbons (PAHs) or other contaminants that may have resulted in any contamination within the staging areas and in the downgradient irrigation pond. Active groundwater wells are recommended for sampling if continued potable use is anticipated. Additionally, surveys for asbestos-containing materials and lead-based paint are recommended for the buildings that will be utilized for housing and workspaces before any construction or renovations are performed.

3.10.1.2 No-Action Alternative

If the materials in the staging areas are found to contain contaminants, these contaminants could potentially pollute both the staging area itself and the downstream irrigation pond. No other effects are anticipated if no construction or renovations are performed on the property.



Figure 11. One of the staging areas at the Middleburg Training Center property

3.11 Air Quality

The Washington, DC-MD-VA region, which includes Loudoun County, is designated by the U.S. Environmental Protection Agency (USEPA) as the National Capital Interstate Air Quality Control Region (AQCR), which encompasses all of the District of Columbia and the adjoining Maryland and Virginia counties. This AQCR is currently designated by the USEPA as “moderate” nonattainment for the 2015 ozone (O₃) National Ambient Air Quality Standards (NAAQ). The National Capital Interstate AQCR is in attainment for all other NAAQS (USEPA, 2025). The 8-

hour ozone pollutant 2015 standard is 70 parts per billion (ppb) over an 8-hour period. ‘Moderate’ nonattainment for the 8-hour ozone 2015 standard means that the area has a design value of 81 ppb up to but not including 93 ppb (USEPA, 2025). The region is also designated as a maintenance area for the 8-hour ozone pollutant (2008 standard). ‘Maintenance’ means that the region attained the former 8-hour ozone (2008 standard) NAAQS of 75 ppb and is currently in maintenance to ensure the region stays below the standard (USEPA, 2025). The region is an urban environment with little industry; therefore, air quality issues are primarily due to vehicle emissions and air pollution transferred from other states (MWCOG, n.d.).

States 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 which demonstrate air that exceeds the NAAQS. The 1990 amendments to the Clean Air Act (CAA) require federal agencies to ensure that their actions conform to the SIP in a nonattainment area, and do not contribute to new violations of ambient air quality standards, an increase in the frequency or severity of existing violations, or a delay in timely state and/or regional attainment of the standards. Virginia’s State Implementation Plan (SIP) demonstrates how the state’s air pollution will be reduced to levels at or below the NAAQS. Elements of the SIP are developed in conjunction with local governments and planning organizations to meet local air quality needs (VADEQ, 2021a).

The Washington, DC-MD-VA Region SIP and its various revisions are prepared by the Metropolitan Washington Air Quality Committee (MWAQC), an entity that is certified by the mayor of the District of Columbia and the governors of Maryland and Virginia. The MWAQC submits the SIP and its various revisions to the USEPA for approval.

As previously state above, federal agencies must ensure that their actions conform to the SIP in a nonattainment area. This is known as the General Conformity Rule (GCR). The GCR specifies *de minimis* threshold emissions levels by pollutant to determine the applicability of conformity requirements for a project. The purpose of the GCR is to:

- Ensure that federal activities do not interfere with the budgets in the SIPs;
- Ensure the attainment and maintenance of NAAQS; or,
- Ensure that actions do not cause or contribute to new violations of NAAQS.

USEPA developed two distinct 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 Part 93). The Proposed Action is a non-transportation project within a nonattainment area. Therefore, a general conformity analysis is required with respect to the 8-hour ozone NAAQS.

Loudoun County is also located in the Ozone Transport Region (OTR), specifically the Consolidated Metropolitan Statistical Area, as designated in 40 CFR Part 81.457(a). For the OTR, the applicable *de minimis* emission threshold for maintenance and nonattainment is 50 tons per year (tpy) for volatile organic compounds (VOCs) and 100 tpy of nitrogen oxide (NO_x). Because ozone formation is driven by other direct emissions, the GCR air quality analyses include ozone precursor gases—VOCs and NO_x. For an area in moderate nonattainment for the 8-hour O₃ NAAQ within the OTR, the general conformity *de minimis* threshold emission rates are 100 tpy for NO_x

and 50 tpy for VOCs (40 CFR 93.153). Therefore, if a project/action were to exceed the 100 tpy for NOx and/or 50 tpy for VOCs, then a formal, full conformity determination analysis and document would be required in accordance with the GCR.

3.11.1 Reasonably Foreseeable Effects of the Alternatives on Air Quality

3.11.1.1 Proposed Action

The real estate acquisition would result in long-term air emissions associated with the continued operation of vehicles and equipment at the facility, trading one type of equine activity for another. As discussed in Section 3.8.1.1, in the context of daily operations, these emissions are not anticipated to exceed those generated under the No-Action Alternative.

A back-up power/generator of a size consistent with other larger horse farms, likely in the 25–100 kW range, would ensure an uninterrupted power supply needed for security and lighting systems, well water pumps, ventilation systems, office and tack room electrical supply, appliances (like veterinary refrigerators), water heaters, etc. Any existing generators may need to be reevaluated for capacity and efficiency in order to be able to fully support the Caisson mission. Construction needed to modify the existing facility to fully support the Caisson Detachment's mission could result in minor and short-term adverse effects to air quality and could include utility tie-ins, renovation of barns to increase stall size, grading and re-surfacing roads, construction of a covered arena and/or hot walker, and other minor construction or renovations to be fully determined once the ADP process is initiated. These projects would require site preparation (clearing and grading), transport of materials and construction personnel to/from the facility, and operation of heavy machinery during the construction phase. The construction activities will result in more air emissions above the No-Action Alternative.

Construction and vehicle emissions would result in adverse, minor, short-term impacts to air quality as a result of fugitive dust and vehicle emissions. Coordination with DEQ prior to project initiation would determine the applicability of permits required. Projects would be initiated only after the environmental review has been completed and the appropriate state permits are acquired.

During construction, contractors would use standard BMPs for air quality protection. Construction vehicles transporting excavated and fill material would be minimized through site design as movement of a large amount of dirt would be prohibitively expensive for these projects. Air quality impacts from emissions could be mitigated with emission control devices and keeping vehicles and construction equipment in good working order. Emissions from operational equipment (such as a generator) would be regulated under Installation air permits issued to JBM-HH pursuant to 80, Article 6, Permits for New and Modified Sources, although the MTC facility would be regulated under a permit separate from the main installation because of its geographic separation.

U.S. Army guidance dictates that a Record of Non-Applicability (RONA) be prepared for federal actions in which proposed emissions are clearly *de minimis*. An air conformity assessment would need to be conducted in association with the ADP to determine if the future improvements are exempt from the GCRs in Section 176c of the CAA and to determine if the future improvements fall below *de minimis* emissions thresholds for maintenance and attainment of 50 tpy for VOCs and 100 tpy of NOx.

3.11.1.2 No-Action Alternative

Day-to-day operations of the horse facility would continue to have minor and long-term adverse effects to air quality. Daily operations include vehicles, trucks pulling horse trailers, operation of farm equipment and trackers, electricity for the pump house and residential dwellings, etc.

3.12 Noise

The major sources of noise at the MTC property include traffic within the MTC and on adjacent streets, and noise associated with the daily operations and upkeep of the horse training venue. In general, noise generated around the MTC is minimal due to the surrounding agricultural and low-density residential land use, as well as restrictions on site development per the conservation easement.

3.12.1 Reasonably Foreseeable Effects of the Alternatives on Noise

3.12.1.1 Proposed Action

The real estate acquisition would continue use of the property as an equine training facility and would ultimately reduce the available number of stalls, thereby limiting the overall capacity of the site for horses. The effects of the acquisition on noise would be negligible, and operational noise levels would be expected to be similar to that of the existing use and presence of vehicles, equipment, and personnel.

Periodic training activities could result in short-term increases in noise levels due to increased personnel activity. The Caisson would conduct desensitization training for ceremonial salutes at MTC, however, based on current strategies employed at the NOVA Equestrian Center (NEC), this will have extremely low impact to those in proximity to MTC. Periodically, the Caisson uses a simple noise simulator at NEC, which is not significantly louder than a tractor backfiring or singular small arms discharge and has not generated any negative feedback from those neighboring NEC. Currently all training that employs the use of cannon fire or full gun salute lines to familiarize the horses with these ceremonial features takes place exclusively on JBM-HH. Most of the training at MTC will focus on physical conditioning and ridden or driven work.

Proposed facility modifications and improvements would have short-term, minor adverse effects on noise in the immediate area of the proposed improvements. Potential activities could involve upgrades to structures, roads, sidewalks, and utilities. Construction equipment is expected to include gas and/or diesel-powered equipment such as backhoe-loaders, pavers/paving equipment, and rollers. Once mobilized to the site, most of the equipment would remain within the proposed boundary of the potential renovations until the phase of construction for which the equipment was needed is complete. Noise from construction would be managed in accordance with applicable Loudon County noise ordinances.

3.12.1.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects to the local noise levels because no construction activities would take place, and the daily traffic would generally remain the same.

3.13 Human Health and Safety/Protection of Children

There are no major risks to human health and safety or the protection of children on the MTC property. A large portion is undeveloped, and there are no industrial or production-oriented activities that occur on the property.

3.13.1 Reasonably Foreseeable Effects of the Alternatives on Human Health and Safety/Protection of Children

3.13.1.1 Proposed Action

Under the Proposed Action there would be negligible, adverse effects to human health and safety to the workers completing the proposed renovations at the MTC. Workers would use personal protective equipment to minimize risk. There would be negligible, adverse effects to protection of children under the Proposed Action associated with the potential for increased traffic volume and pollutants during the renovation period.

Permanent operation of the MTC would result in beneficial effects to human health and safety and the protection of children due to improved utilities and safety features of the structures on the property. In addition, the MTC will support the work-train-rest cycle, along with improved stable conditions including vet suites and quarantine areas to protect the health of the herd. This focus on horse health reduces the risk of accidents for riders or other personnel.

3.13.1.2 No-Action Alternative

Under the No-Action Alternative, the Army would not acquire the MTC property and as a result no improvements would be made to accommodate the Caisson Detachment. There would be no effects to human health and safety or the protection of children because no construction activities would take place.

3.13.2 Summary of Reasonably Foreseeable Effects

Table 5 provides a summary of the reasonably foreseeable effects from the Proposed Action (the real estate acquisition and the proposed improvements), and from the No-Action Alternative.

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Table 5. Summary of Reasonably Foreseeable Effects from the Alternatives.

Resource	Proposed Action		No-Action
	Acquisition	Potential Future Improvement	
Topography, Soils, and Geology	No effect.	No effect to topography and geology. Long-term, minor adverse effects to soils.	No effect.
Water Resources	No effect.	Short-term minor and long-term negligible adverse effects. Potable water utility upgrades could potentially affect groundwater conditions. Minor changes to stormwater runoff patterns. No effects to floodplains or wetlands.	No effect.
Biological Resources	No effect.	Short-term, minor adverse effects to vegetation and fish and wildlife. A “not likely to adversely affect” determination was made for the tri-colored bat and the monarch butterfly, and a “no effect” determination was made for the green floater clam.	Minor adverse effects to vegetation and fish and wildlife. No effect to species proposed for listing under the ESA.
Cultural Resources	No effect.	Assessments/surveys required to determine effects.	No effect.
Socioeconomics	Long-term, minor adverse effects.	No effect.	No effect.
Land Use	No effect.	No effect.	No effect.
Aesthetics and Visual Resources	Long-term, minor adverse effects.	Short-term, minor adverse effects.	No effect.
Traffic	Long-term, minor adverse effects.	Short-term, minor adverse effects.	Long-term, minor adverse effect.
Utilities	No effect.	Expected utility upgrades as part of the improvements.	No effect.
HTRW	No effect.	Assessment recommended to determine effects.	Assessment recommended to determine effects.
Air Quality	Long-term, negligible adverse effects.	Short-term, minor adverse effects. Air conformity analysis will be required.	Long-term, minor adverse effects.
Noise	Long-term, negligible adverse effects.	Short-term, minor adverse effects.	Long-term, minor adverse effects.
Human Health and Safety	No effect.	Short-term, minor adverse effects.	No effect.

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4 CONCLUSION

The real estate acquisition is expected to have long-term, minor adverse effects on aesthetics and visual resources, traffic, air quality, socioeconomics, and noise in the vicinity of the MTC property. However, these effects are not anticipated to be significant beyond those already present under the No-Action Alternative. Potential future improvements of the MTC property are expected to have a long-term, minor effects to soils and may result in changes to stormwater runoff patterns. Improvements are also expected to have short-term, minor adverse effects on vegetation, fish and wildlife, aesthetics and visual resources, traffic, air quality, noise, and human health and safety. Assessment/surveys are needed to determine the effects to cultural resources and hazardous, toxic, and radioactive waste. No effects are expected to floodplains or wetlands due to restrictions in the conservation easement.

The following recommendations are intended to guide future NEPA analyses for potential improvements to the MTC property:

- Complete Section AD-1006 of the USDA Farmland Conversion Impact Rating Form and coordinate with USDA NRCS as necessary.
- All required federal, state, and local permits listed in Chapter 1096, *Erosion and Stormwater Management*, of the Loudoun County, Virginia Code of Ordinances, will be obtained prior to any land-disturbing activities on the property. Efforts will be made to avoid or minimize adverse effects to water resources to the maximum extent practicable. Where such effects are unavoidable, mitigation strategies will be developed.
- Confer with the USFWS, Virginia Ecological Service Field Office to determine potential adverse effects to species proposed for listing/species listed under the ESA. If the proposed improvements are determined to have potential adverse effects on the species proposed for listing/listed species, coordinate with USFWS to identify appropriate mitigation measures. Species surveys may be required.
- A formal determination of eligibility and architectural resources survey of the MTC to assess effects of proposed developments given the region's equestrian and agricultural history.
- Archaeological investigations in areas not previously disturbed due to the region's military history and previously identified archaeological sites.
- Viewshed analyses to assess effects to the Upperville Battlefield, Alphabet Soup, Middleburg Vineyards, St. Louis Historic District, Elizabeth Alexander Farm, Journey Through Hallowed Ground National Heritage Area, and the Virginia Piedmont Heritage Area.
- An assessment of the materials (i.e., windows, tires, truck, utility poles, etc.) observed within the staging areas to determine if they contain polychlorinated biphenyls (PCBs) or polycyclic aromatic hydrocarbons (PAHs) or other contaminants that may have resulted in any contamination within the staging areas and in the downgradient irrigation pond. Active groundwater wells are recommended for sampling if continued potable use is anticipated. Additionally, surveys for asbestos-containing materials and lead-based paint are recommended for the buildings that will be utilized for housing and workspaces before any construction or renovations are performed.
- An air conformity assessment would need to accompany the ADP process to determine if the future improvements are exempt from the General Conformity Rules in Section 176c

of the Clean Air Act and to determine if the future improvements fall below *de minimis* emissions thresholds for maintenance and attainment of 50 tpy for VOCs and 100 tpy of NO_x.

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